



The 23rd World
Congress of Soil Science



International Union of Soil Sciences®



The 23rd World Congress of Soil Science Programme (DRAFT)

JUNE 7–12, 2026 Nanjing · China

Contents



Programme Schedule	1
Welcome	2
Organization	3
Congress Information	5
Sponsors	11
Venue Map	12
Meeting Rooms Plan	13
Information for Oral Presenters	18
Information for Poster Presenters	20
Sessions Schedule	23
Plenary Sessions	32
Featured Talks	34
Panel Discussions	36
Panel Discussion 01: Bridging the Soil Science Divide: Empowering Developing Nations through Global Collaboration of National Soil Science Societies	37
Panel Discussion 02: Women in Soil Science: Closing Gaps and Strengthening Collaboration	38
Panel Discussion 03: Fostering International Collaboration in Soil Science	39
Panel Discussion 04: A 35-Year Journey of Pedosphere: Promoting Soil Sciences across the World	40
Panel Discussion 05: Climate-friendly and sustainable agricultural practices with plateau-specific characteristics and multi-dimensional symbiosis in Yunnan under climate change	41
Panel Discussion 06: Open discussion session on observed phenomena in soils and their underlying pedogenic processes: bring and share photos of your macro- and micromorphological observations and join the discussion on debated phenomena!	42
Panel Discussion 07: Opportunities and challenges for the development of soil science journals	43
Panel Discussion 08: China-Spain Summer School on Soil Health and Sustainability	44
Panel Discussion 09: Elsevier Journal Editors Symposium	45
Entrepreneur Sessions	46
Workshops	50
Workshop 01: Author Workshop & Editorial Q&A: How to Publish Successfully in Soil Science Journals	51

Contents



Workshop 02: The Soil Lexicon - Co-shaping Memory, Culture, and Future	52
Workshop 03: Advancing Research Integrity: Best Practices in Peer Review and Artificial Intelligence	53
Workshop 04: Soil Profile Simulation Workshop with Recyclable Cartons	54
Workshop 05: Chinese Community-Supported Agriculture Networks and Participatory Guarantee Systems	55
Parallel Sessions	56
101 Soil Morphology and Micromorphology	56
Session 101001: Advances in Soil Morphology and Micromorphology: Unveiling the Earth's Hidden Resource	56
Session 101002: Micromorphology as a Tool for Understanding the Evolution of Soils and Environments in Natural and Human-Impacted Landscapes	58
102 Soil Geography/Soil Genetic Classification and Soil Geography	60
Session 102001: Magnetic Enhancement of the Soils in Urban/Industrial Areas: Sources and Properties of Anthropogenic Magnetic Particles and Its Influences on Soil Genesis ...	60
Session 102003: Soil Structure and Ecosystem Functioning in Earth's Critical Zone	62
Session 102005: Soil Survey Technology and Spectral Database	65
104 Soil Classification	67
Session 104002: Classification Systems for the Anthropocene and Human-Made Soils ...	67
105 Pedometrics	69
Session 105001: Advancing pedometrics	69
106 Paleopedology	70
Session 106003: Reading Soil Memory Across Geological Timescales: Traditional Insights and Novel Approaches	70
107 Permafrost Affected Soils	72
Session 107001: Permafrost-Affected Soils of the Changing High-Latitude and High-Altitude Environments	72
108 Digital Soil Mapping	76
Session 108001: Advances in Remote Sensing for Soil Property Mapping	76
Session 108002: Democratizing Digital Soil Mapping: Innovative Technologies for Global Soil Services and Solutions	79
Session 108003: Leveraging Site and Spatial Data for Soil Monitoring	81

Session 108004: Operational Digital Soil Mapping: Fitness for Use of DSM Products: Pitfalls to Avoid and Way Forward	83
Session 108005: Digital Soil Mapping and Assessment: Advances, Applications, and Future Directions	85
110 Proximal Soil Sensing/Soil Remote Sensing and Information	88
Session 110001: Advances in Soil Health Monitoring with Proximal Sensing	88
Session 110003: Soil Spectroscopy: A Global Solution for Sustainable Soil Management and Food Security	92
112 Universal Soil Classification	94
Session 112001: Advances in Numerical Soil Classification	94
201 Soil Physics	94
Session 201001: Beyond Plant Available Water - New Insights on Soil Water Accessibility	94
Session 201002: Linking Physical and Hydrological Processes with Soil Health and Functionality in Terrestrial Ecosystems	100
202 Soil Chemistry	104
Session 202001: Physicochemical and Biological Processes of Chemicals in Soils	104
Session 202002: Advances in Soil Carbon Dynamics Across Scales: From Molecules to Ecosystems	109
203 Soil Biology/Soil Biology and Biochemistry/Soil Virus	113
Session 203001: Diversity and Function of Soil Viromes	113
Session 203002: Roles of Extracellular Polymeric Substances in Biogeochemical Cycling and Soil Health	114
Session 203003: Soil Biodiversity and Soil Health: Interactions, Indicators, and Innovative Approaches	117
Session 203004: Soil Biogeochemistry in Wetlands: Foundations for Restoration and Climate Resilience	122
Session 203005: Soil Microbiomes - Importance for Climate Resilient Future, Degraded Lands Restoration and Plant Health Control	124
Session 203007: Diversity Dynamics and Ecosystem Functions in Soil Microbial Ecology	130
204 Soil Mineralogy	133
Session 204003: Disciplinary Development and Interdisciplinary Frontiers in Soil Mineralogy	133
206 Hydropedology	134

Session 206001: Hydropedology: Addressing Real-World Problems Through Interdisciplinary Science	134
207 International Soil Modeling Consortium	136
Session 207001: Modelling Soil Processes from Ped to Global Scale	136
Session 207002: Soil Erosion Modelling: Global Alliance	139
301 Soil Evaluation and Land Use Planning	141
Session 301001: Better Management of Organic Agro-Waste in Response to Various Global Environmental Issues	141
Session 301002: Soil Evaluation and Land Use Planning for Sustaining Productivity	143
302 Soil and Water Conservation/Soil Erosion and Soil-Water Conservation	145
Session 302004: Rethinking the Planning of Soil and Water Management Under Climate Change	145
Session 302005: Soil Erosion and Conservation	147
Session 302007: Soil-Water Interactions: From Saturation to Repellency, From Processes to Management	155
303 Soil Fertility and Plant Nutrition/Soil-Plant Nutrition/Soil Fertility and Fertilizer	158
Session 303001: Advances in Soil Fertility Management Through the Utilization of Organic Waste	158
Session 303002: Global and Regional Trends in Cropland Nutrient Balance and Use Efficiency	165
Session 303003: Global Phosphorus Stewardship: Innovations and Strategies for Sustainable Soil Systems and Food Security	167
Session 303004: Novel Fertilizer Research and Industrial Development	171
Session 303005: Plant Nitrogen Utilization: From Cell to Field	175
Session 303006: Rhizobiont for High Nutrient Use Efficiency	179
Session 303007: Sustainable Phosphorus Use in Agroecosystems: New Approaches to Optimizing Nutrient Management and Ecosystem Functionality	181
304 Soil Engineering and Technology/Soil Engineering/Soil Analysis Technique	185
Session 304003: Can Enhanced Rock Weathering Capture and Store Atmospheric CO ₂ ? Its Expectations and Limitations	185
Session 304004: Engineering Technology System for Efficient Quality Improvement of Obstructed Soil	187
Session 304007: Frontier Technologies for Soil Analysis: From Single-Cell to Nanosensors	189

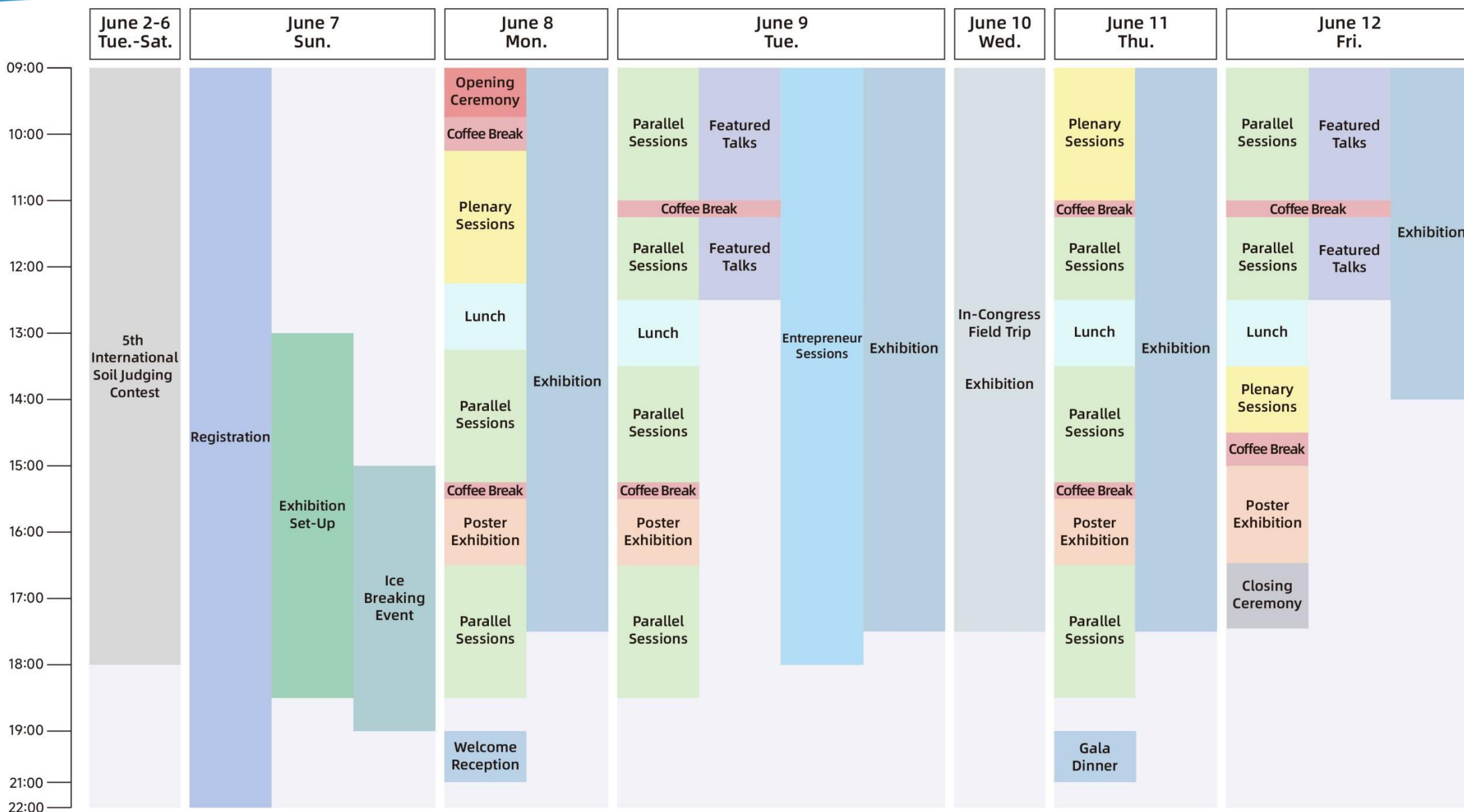
305 Soil Degradation Control, Remediation and Reclamation/Soil Remediation/Environmental Micro-Plastics	192
Session 305001: Deciphering the Soil-Pollutant Nexus: Biogeochemical Frontiers for Soil Health and Sustainable Ecosystems	192
Session 305002: Enhanced In Situ Bioremediation for Contaminated Sites	197
Session 305003: Integrated Remediation and Utilization Strategies for Degraded Soils in Mined Lands	200
Session 305005: Micro-and Nano-Plastics in the Soil: From Pollution to Solution	202
Session 305006: New Pollutants in Soils & Agro-Environmental Health	208
Session 305007: Organohalide Biogeochemical Cycling and Remediation in Soil	213
Session 305009: Soil Pollution by Heavy Metals and Risk Control	216
Session 305011: Novel Techniques in Molecular Environmental Soil Science	223
Session 305012: Soil Pollution and Remediation: Investigation, Mechanisms, and Remediation	225
306 Salt-Affected Soils	228
Session 306003: Understanding, Managing, and Innovating for Salt-Affected Soils	228
307 Soils of Urban, Industrial, Traffic, Mining and Military Areas (SUITMA)	234
Session 307001: Past, Present, and Future of SUITMA (Soils of Urban, Industrial, Traffic, Mining and Military Areas)	234
308 Acid Sulphate Soils	236
Session 308001: Health Maintenance and Sustainable Management of Acidified Soils ...	236
Session 308002: Wetland Soils, Acid Sulfate Soils and Sulfidic Materials	238
309 Forest Soils	240
Session 309001: Forest and Grassland Soil Functions and Sustainable Utilization under Global Change	240
Session 309002: Forest Soil Management: Processes, Challenges, and Sustainable Production	242
Session 309004: Soil Microbial Diversity and Functions in Carbon and Nitrogen Cycling in Response to Tree Diversity, Wildfires and Climate Change	245
Session 309005: Soil Organic Matter Dynamics and Nutrient Cycling in Global Forests under Climate Change	247
310 Paddy soils	249

Session 310002: Soil Health-Water-GHG Nexus for Sustainable Crop Production in Paddy Soils	249
Session 310004: Understanding Paddy Soil Microbiomes for Food and Climate Security	252
Session 310005: Multiple Paths to Soil Health: From Technology to Policy, From Paddy Fields to the Globe	255
401 Soils and the Environment / Soil Environment / Soil Ecology	258
Session 401001: Peatlands in a Changing World	258
Session 401002: Soil Food Web Structure and Function under Global Change	260
Session 401003: Unveiling the Hidden World: Biodiversity and Ecological Function of Soil Fauna	262
402 Soils, Food Security, and Human Health	263
Session 402001: Conservation and Restoration of Black Soils in Agro-Ecosystems	263
Session 402004: Sustainable Management and Restoration of Black Soils: Global Experiences and Actions	268
Session 402005: Soil Security and Policy: Foundations for a Sustainable Future	270
Session 402006: Soil, Agriculture, and Human Futures: From Cold Frontiers to Global Challenges	272
403 Soils and Land Use Change	275
Session 403002: Land Use and Management Effects on Soil Health and Environmental Quality	275
404 Soil Education and Public Awareness / Soil Science Education	281
Session 404002: Share Our Standpoints of Soil Teaching and Learning at School, University and Civil Society for the Future Development of Better Soil Education System	281
406 Young and Early Career Scientists / Youth	285
Session 406003: Soil and People: Culture, Education, and Intergenerational Connections	285
407 Nitrogen	291
Session 407001: Soil Nitrogen Processes, Consequences, and Regulations	291
408 Soil Health	296
Session 408001: Harmonization of Soil Health Monitoring: Scientific, Institutional, and Societal Perspectives	296
Session 408002: Nature-Based Solutions for Soil Health and Sustainable Crop Production	298
Session 408003: Soil Management Practices on Soil Health in Plastic Greenhouses	303

Session 408004: Soil & Environmental Health: Advancing Science for Human & Ecosystem Resilience	305
409 Carbon Neutrality and Global Change	309
Session 409001: Advances in Best Management Practices for Achieving Climate-Smart Agriculture	309
Session 409002: Advancing Soil Organic Carbon Science for Sustainable Land Management	313
Session 409003: Climate Change and Soil Microbial Control Carbon Sequestration	316
Session 409004: Evolution of Soil Organic Matter: Impacts of Climate Change and Land Use Change	320
Session 409006: One Carbon Metabolism in Terrestrial Ecosystems	323
Session 409007: Physical, Chemical, and Biological Drivers for Soil Greenhouse Gas Fluxes	325
Session 409008: Soil Carbon Dynamics and Impacts of Land Use and Management	330
Session 409009: Soil Carbon Fluxes for Climate and Soil Health	335
Session 409010: Soil Microbial Life and Death: Impacts on Soil Organic Carbon Dynamics Under Global Change	337
Session 409011: Soil Organic Matter Transformation, Stabilization and Storage	342
Session 409012: The Challenge and Opportunity for Precise Assessment and Prediction of Soil Carbon Sequestration and Storage Across Spatial and Temporal Scales	348
Session 409014: Soil Organic Carbon: Accounting, Mechanisms, and Sustainable Management	353
502 Cultural Patterns of Soil Understanding/Soil Science Popularization	356
Session 502002: From Dirt to Destiny: Communicating Soil Science for Global Sustainability and Cultural Understanding	356
503 AI	357
Session 503005: The Digital Transformation of Soil Science	358
Soil Feeds Life	361
Poster Sessions	368
Poster Session 1	368
Poster Session 2	448



Programme Schedule





Jiabao Zhang Academician
Vice President of IUSS,
and President of SSSC



Victor Okechukwu Chude
President of IUSS

Dear Colleagues,

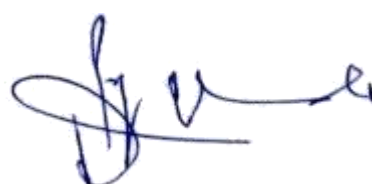
On behalf of the organizing committee, I am delighted to extend an invitation to you for the 23rd World Congress of Soil Science (WCSS 2026), which will be held in Nanjing, China, from June 7 to June 12, 2026. We eagerly anticipate your participation in this prestigious international gathering.

Since its inauguration in 1927, the World Congress of Soil Science has been convened every four years, serving as a pivotal scientific forum in the realm of soil sciences. In 2018, the Soil Science Society of China successfully won the bid to host WCSS 2026 in Nanjing. This marks a significant milestone, as it is the first time the congress will be held in China, and we are honored to undertake the organization of the event in Nanjing.

Nanjing, a sub-provincial city situated in the Yangtze River delta in the southwestern part of Jiangsu province, is the provincial capital and one of China's four great ancient capitals. It is also a vital center for education, culture, economy, industry, politics, and tourism, offering a unique blend of history and modernity for all attendees.

We expect WCSS 2026 to attract a diverse group of participants, including research scientists, soil practitioners, industry representatives, policymakers, regulators, students, and all individuals interested in the sustainable management of soils. This congress will provide an exceptional platform for soil scientists worldwide to exchange ideas, strengthen cooperation, and jointly address the various challenges faced by both developed and developing regions in soil management.

We look forward to welcoming you to WCSS 2026 in Nanjing!



Organization

Organizers:



Hosting Institution:



Organizing Committee:



Scientific Committee:

Jiabao Zhang (China) - IUSS Vice President Congress (2022-2026)

Victor Okechukwu Chude (Nigeria) - IUSS President

Edoardo A.C. Costantini (Italy) - IUSS Past President (2023-2024)

Bruce Lascelles (UK)- IUSS President elect

Yongguan Zhu (China) - IUSS Division 4, 1st Vice Chair

Renfang Shen (China) - Chair of IUSS Division 3

Xiaoyuan Yan (China) - IUSS Division 2, 1st Vice Chair



Organization

Xin Song (China) - IUSS Division 4, 2nd Vice Chair

Andreas Baumgarten (Austria) - IUSS Treasurer

Cristine Morgan (USA) - IUSS Committee on prizes and awards

Kye-Hoon 'John' Kim (South Korea) - IUSS Committee on budget and finance

Cornie Van Huyssteen (South Africa) - IUSS Committee on statutes and structure

Rainer Horn (Germany) - IUSS Committee on presidential elections

Richard Heck (Canada) - Chair of IUSS Division 1

Giuseppe Corti (Italy) - Chair of IUSS Division 2

Claudio Zaccone (Italy) - Chair of IUSS Division 4

Ganlin Zhang (China)- IUSS Division 1, 1st Vice Chair

Ying Zhang (China)- IUSS Division 1, 2nd Vice Chair

Jianming Xu (China) - IUSS Division 2, 2nd Vice Chair

Fusuo Zhang (China) - IUSS Division 3, Vice Chair

Michael L. Thompson (USA) - SSSA Past President

Advisory Committee:

D.L. Sparks (USA) - IUSS Past President (2002-2006)

R.S. Swift (Australia) - IUSS Past President (2006-2010)

Jae Yang (Korea) - IUSS Past President (2010-2014)

Rainer Horn (Germany) - IUSS Past President (2015-2016)

Rattan Lal (USA) - IUSS Past President (2017-2018)

Takashi Kosaki (Japan) - IUSS Past President (2019-2020)

Laura Bertha Reyes Sánchez (Mexico) - IUSS Past President (2021-2022)

James M. Tiedje (USA) - SSSC Foreign Fellow

Jianmin Zhou (China) - SSSC Fellow

Taolin Zhang (China) - SSSC Fellow

Executive Committee:

Wei Hua, Xiaoyuan Yan, Xin Song, Irene Fabbri, Xiaopeng Li, Jiangtao Qin,

Jianbo Fan, Ruijuan Sun, Jing Song, Mao Ye, Xun Li, Linzhou Liang, Changlong Wei,

Rong Li, Weidong Yan, Jinlong Dong

Congress Information

Basic Information

The 23rd World Congress of Soil Science

Date: June 7-12, 2026

Registration: June 7

Congress Sessions: June 8-12

Location:

Nanjing International Expo Center & Nanjing International Expo Convention Center

南京国际博览中心 & 南京国际博览会议中心

Address: No.300 Jiangdong Middle Road, Jianye District, Nanjing, China

江苏省南京市建邺区江东中路 300 号

H5 Websites

The Congress H5 platform provides a mobile-optimized experience for convenient access to Congress information on your smartphone. Scan the QR code to view the Congress Program, General Information, Keynote Speakers, Parallel Sessions, Field Trips & Events, Service Guide, and other event details directly on your mobile device.



Congress Information

Registration

We are delighted to welcome you to the 23rd World Congress of Soil Science (WCSS 2026), taking place from June 7 to 12 at Nanjing International Expo Center (NIEC).

Upon arrival at NIEC, all registered delegates are requested to follow the on-site signage to the registration desk and present your Platform ID to complete your check-in and collect your congress materials efficiently.

A confirmation email with your check-in QR code will be sent ten days before the congress. Please download and save the QR code in advance. Present it at the registration desk for fast and efficient check-in.

In addition, **an Ice-Breaking Event** will be held in the check-in area on June 7 from 15:00 to 19:00. **All delegates are welcome to join and interact.**



Registration desk opening hours are as follows:

Date	Time
June 7 (Sunday)	09:00-22:00
June 8 (Monday)	08:00-18:30
June 9 (Tuesday)	08:30-18:30
June 10 (Wednesday)	
June 11 (Thursday)	
June 12 (Friday)	08:30-14:00

Please note that only registered delegates are permitted to enter the congress rooms and exhibition areas. Companions may only access the Welcome Reception and the exhibition hall. They may not access scientific sessions or academic program areas.



Congress Information

Name Badges

Please collect your congress badge at 3B Entrance Hall from June 7, 2026, by presenting your registration QR code. Badge holders may attend all scientific sessions, receive printed congress materials, attend the Welcome Reception and social events, access the exhibition area, and enjoy coffee breaks as scheduled.

Accompanying persons (registered family members of delegates only) may attend the Welcome Reception and visit the exhibition hall. However, they may not access scientific sessions or academic program areas.

IUSS Medals and Awards

Dokuchaev Medal

Von Liebig Medal

Emma Marie Antonie Täuber Award

IUSS Communication Award

IUSS Innovation Award

Jeju Medal

IUSS Honorary Members

Ayoade Olayiwola Ogunkunle (Nigeria)

Deli Chen (Australia)

Erika Michéli (Hungary)

Peter Schad (Germany)

Rattan Lal (USA)

Sviatoslav Baliuk (Ukraine)

Takashi Kosaki (Japan)

Wolfgang Burghardt (Germany)

Awards Ceremony Schedule		
Awards and Honors	Ceremony Setting	Date
Winners for Soil Judging Contest	Opening Ceremony	June 8 (Monday)
Dokuchaev Award	Gala Dinner	June 11 (Thursday)
Von Liebig Award		
Jeju Award		
Tauber Award		
IUSS Innovation Award		
IUSS Communication Award		
IUSS Honorary Members	Closing Ceremony	June 12 (Friday)

Congress Information

Major Events

Ice-Breaking Event

Sunday, June 7, 2026 | 15:00-19:00 | 3B Entrance Hall, Nanjing International Expo Center

Opening Ceremony

Monday, June 8, 2026 | 09:00-09:50 | Zhonghua Hall, Nanjing International Expo Convention Center

Welcome Reception

Monday, June 8, 2026 | 19:00-21:00 | Zhonghua Hall, Nanjing International Expo Convention Center

Gala Dinner

Thursday, June 11, 2026 | 19:00-21:00 | Nanjing Eye Tourist Area-Joy Lawn

In the event of inclement weather, the venue will be relocated indoors.

Ticket: 100 USD

Closing Ceremony

Friday, June 12, 2026 | 16:30-17:30 | Zhonghua Hall, Nanjing International Expo Convention Center

Exhibition

The exhibition area will be located in Hall 4 and open from June 8 to 12, 2026.

Professional visitors may visit the exhibition throughout the event. All conference delegates are cordially invited to attend the Exhibition Day on June 10.

Operating hours are as follows:

Date	Time
June 8 (Monday)	09:00-17:30
June 9 (Tuesday)	
June 10 (Wednesday) Exhibition Day	
June 11 (Thursday)	
June 12 (Friday)	09:00-14:00

Congress Information

Venue Information

1. Congress Catering

• Coffee Break

June 8 | 09:45-10:15 & 15:15-15:30

June 9 | 11:00-11:15 & 15:15-15:30

June 11 | 11:00-11:15 & 15:15-15:30

June 12 | 11:00-11:15 & 14:30-15:00

Location: **Corridors outside the conference rooms**

Coffee breaks will be held in conjunction with poster exhibitions, enabling participants to interact with presenters and view the latest research.

• Lunch

June 8 | 12:15-13:15

June 9-12 | 12:30-13:30

Location: **Hall 4 Dining Area, NIEC**

Note:



1. **Vegetarian** and **Halal** food options will be available during meal services.
2. If you have any **food allergies**, please carry a card to inform the staff.

2. Parking

Please park at **Parking Lot P1** of Nanjing International Expo Center (NIEC).

3. Toilets

Toilets are available on **every floor of NIEC and the Convention Center**. Please follow directional signs.



Congress Information

4. Nursing Room

A nursing Room is available on **the east side of the 1st floor of the Convention Center, adjacent to River View Café.**

5. Medical Services

Emergency medical assistance will be available to registered participants during the Congress. Two medical service points are available on site.

Location: **Inside Hall 4 Service Center, NIEC & 1st floor of the Convention Center**

6. Foreign Currency Exchange & SIM Card Services

A service point for international attendees might be available inside NIEC, offering the following services (not finalized):

- Foreign currency exchange (to CNY cash);
- Local SIM card purchase (**passport required for registration**).

Location: **Convention Center, 1st Floor**

Staff at the service point provide basic English support.

7. Smoking Policy

Please note that **smoking is not permitted anywhere indoors at the venue.**

Designated Smoking Areas in **the Convention Center:**

- **1st floor: Outdoor smoking area**
- **2nd-4th floors: Small terraces for smoking**

8. Photography

Photographers will be on site during part of the event. Images taken may be used for promotional purposes. If you have any questions or concerns, please contact the Registration Desk.

Sponsors



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ONGOING UPDATES...

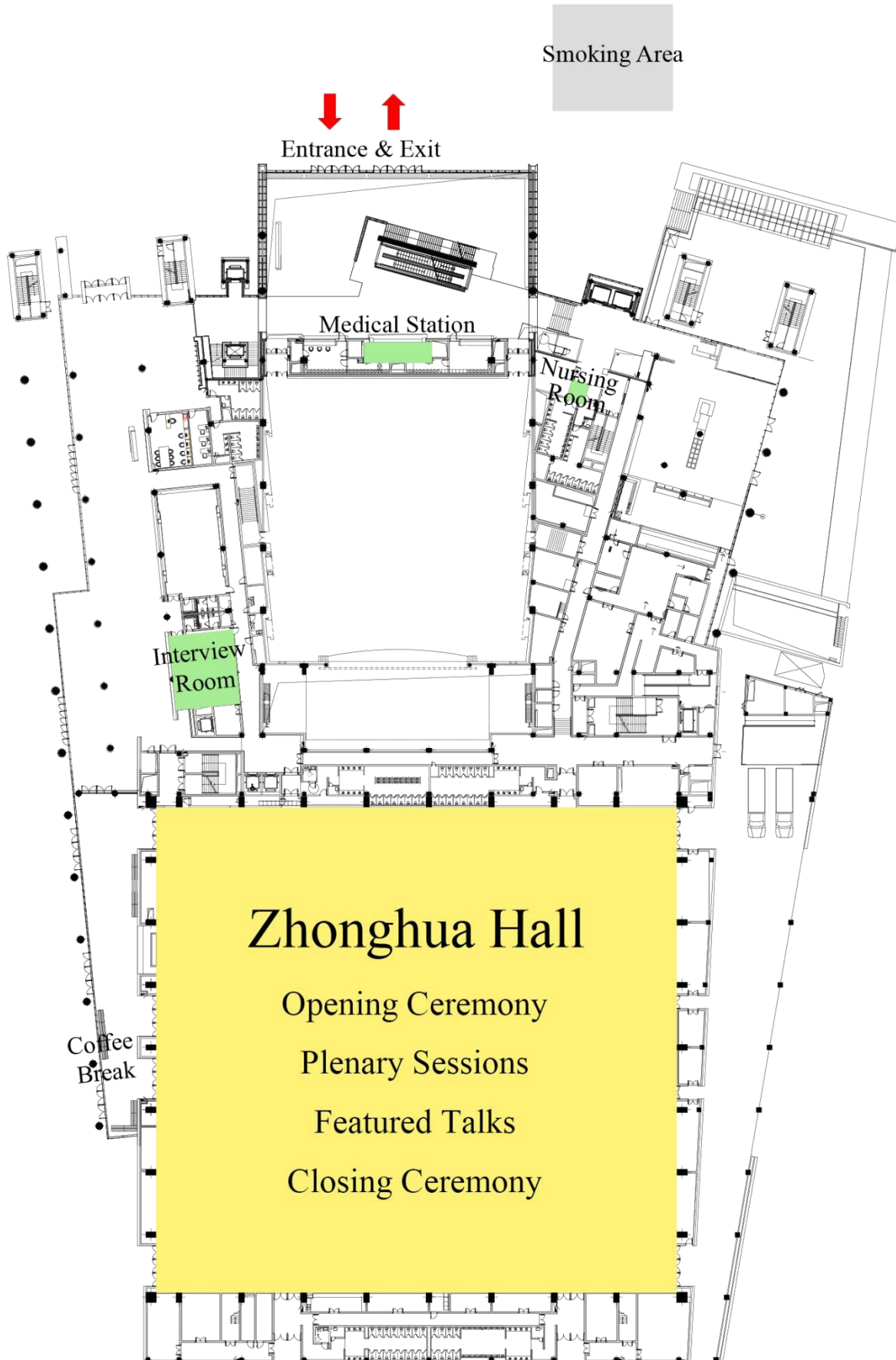
Venue Map



- i** Information Desk
- R** Registration Desk
- Information Sign
- +** Nursing Room
- ☺** Smoking Area
- +** Medical Station
- 🚇** Metro
- 4** Gate
- Dining Area
- Conference Area
- Exhibition Area
- Poster Area
- Entrepreneur Area
- Foreign Currency Exchange & SIM Card Services

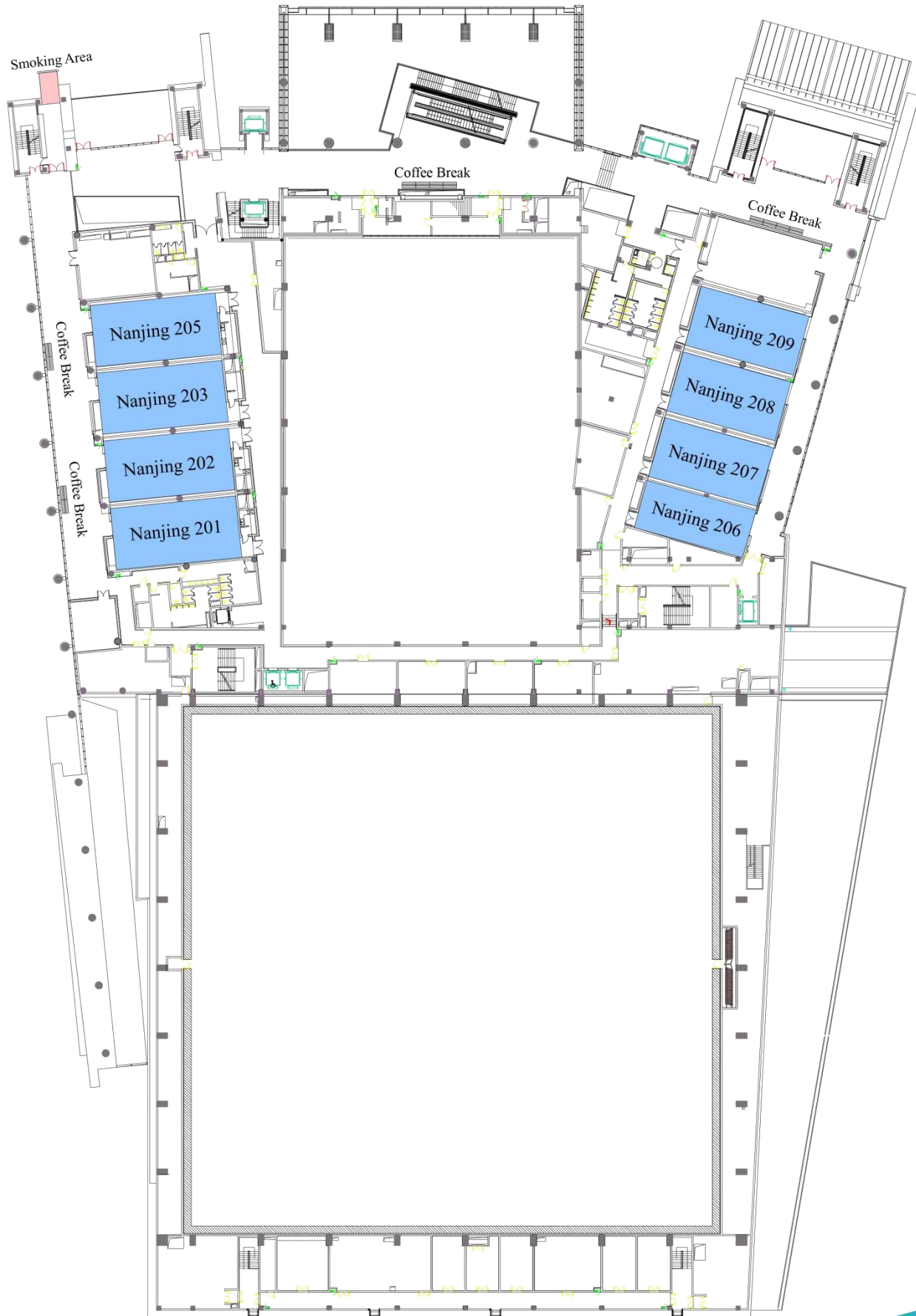
Meeting Rooms Plan

Convention Center, 1st level



Meeting Rooms Plan

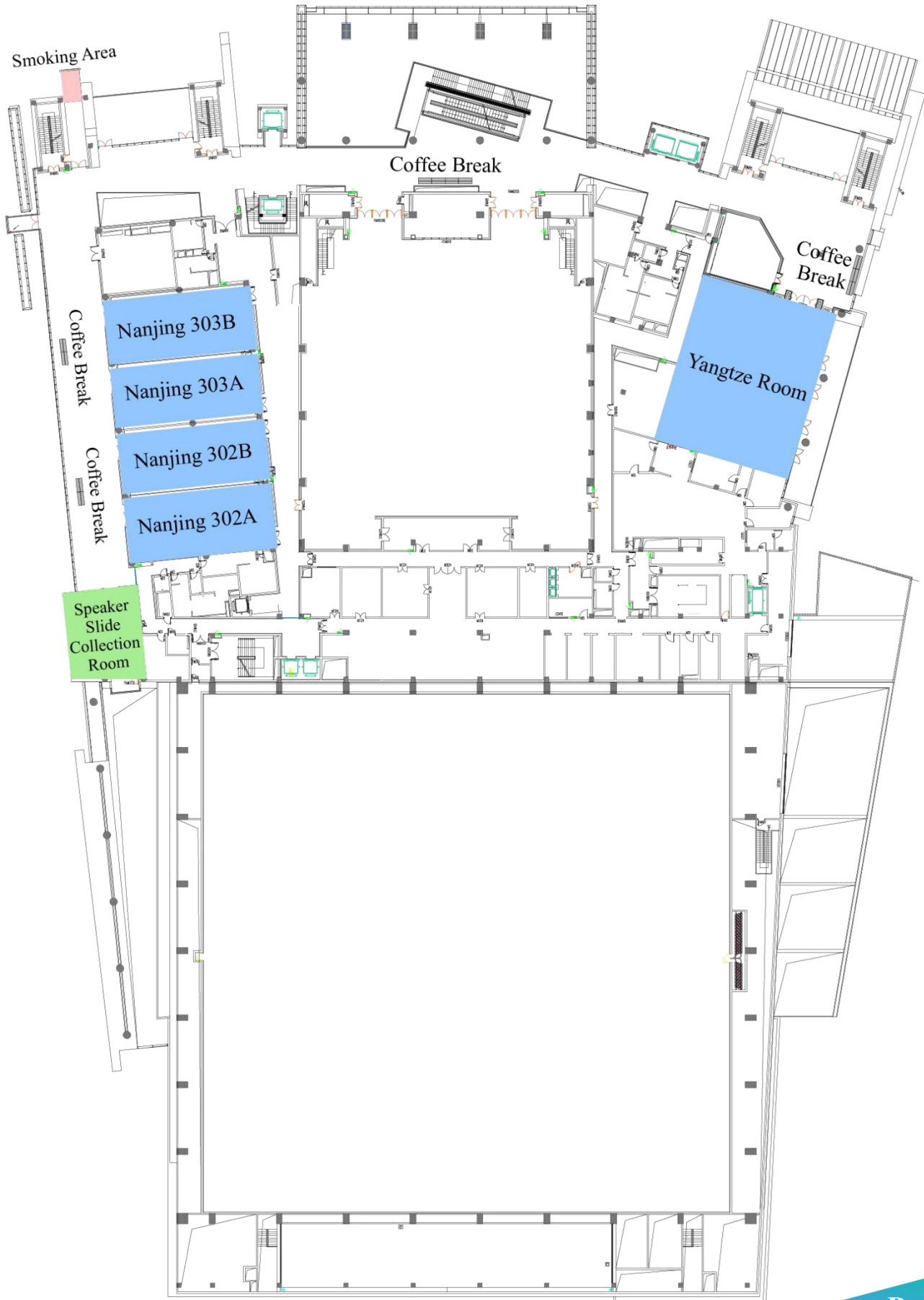
Convention Center, 2nd level



Meeting Rooms Plan

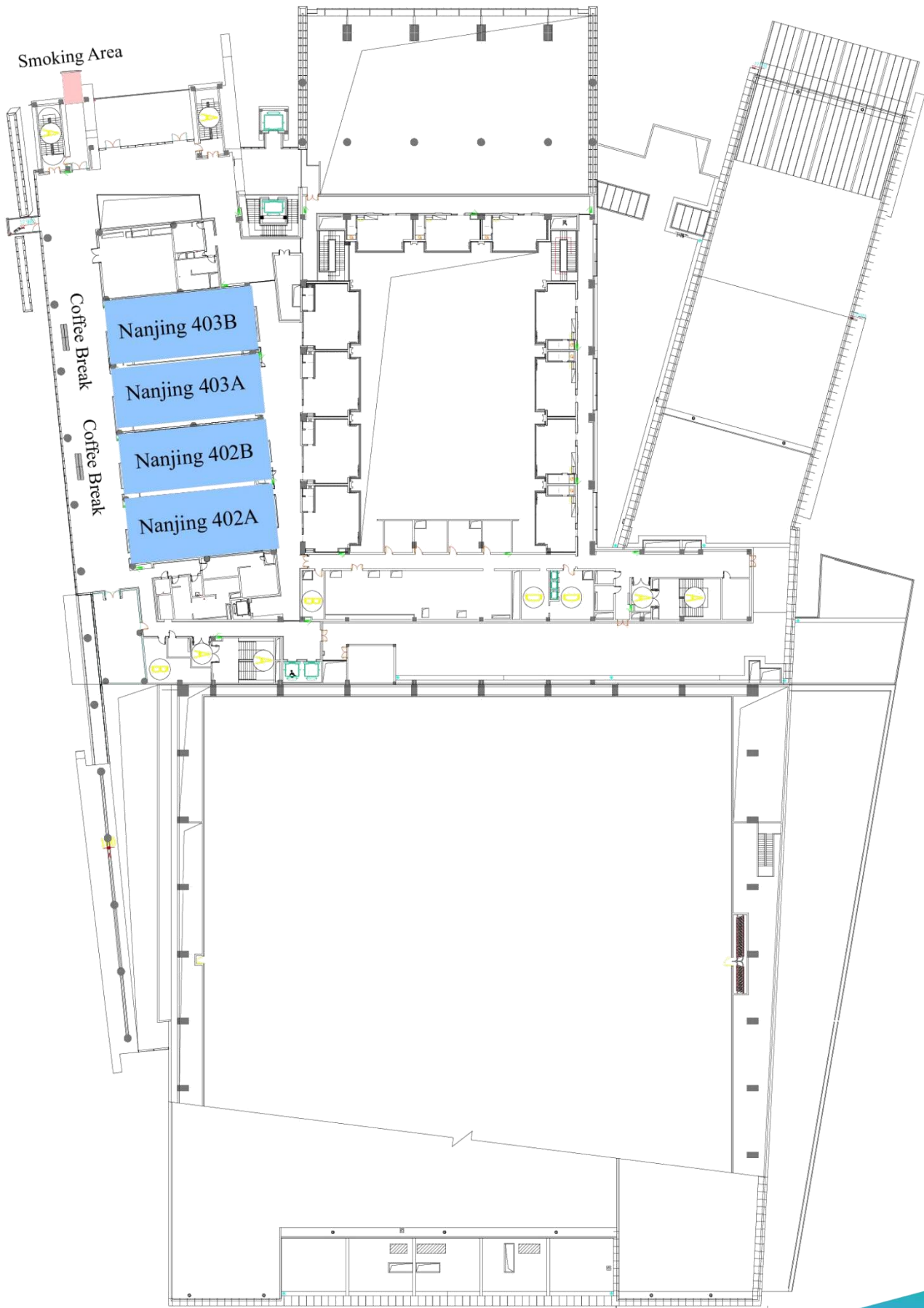
Convention Center, 3rd level

Speaker Slide Collection Room is located here.



Meeting Rooms Plan

Convention Center, 4th level

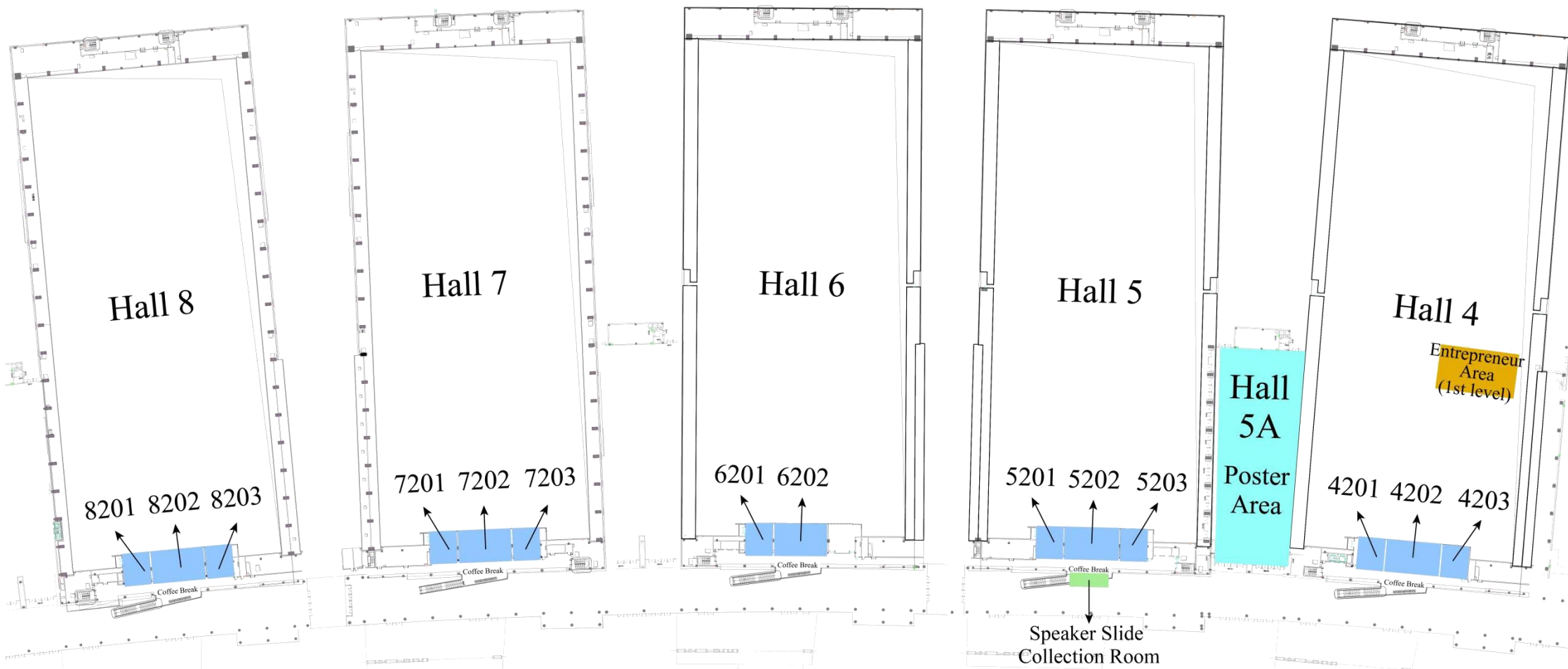


Meeting Rooms & Poster Plan

Meeting Rooms: Expo Center, Hall 4-8, 2nd level

Poster Area: Expo Center, Hall 5A, 1st level

Speaker Slide Collection Room: Expo Center, Hall 5, 1st level Lobby





Information for Oral Presenters

I. Requirements for Presentation Files

1. File Format

The Congress accepts presentation files in the following formats (the slide template is attached to this email):

- Standard Microsoft PowerPoint format, preferably .pptx;
- PDF format.

Other file formats are not supported by the on-site presentation system. To avoid any issues during your presentation, please make sure your file format meets the above requirements in advance.

2. Video Playback

During the presentation, the on-site system only supports playback of standalone PowerPoint or PDF files. It does not support external links that redirect to browsers, webpages, online video platforms, or other independent media players.

If your presentation includes video content, please embed the video into your PowerPoint file in advance and play it using PowerPoint's built-in video controls.

The slide Management system supports the following video playback methods:

- Videos embedded directly in the PowerPoint file;
- Local video files linked within the PowerPoint file.

We recommend using common mainstream video formats such as MP4 or WMV. If you are unsure whether your video format is supported, please visit the Slide Collection Room as early as possible, where professional on-site staff will assist you with testing and troubleshooting.

3. Presenter View

The on-site presentation system does not support PowerPoint Presenter View.

During your presentation, the display on the computer and the projection screen will be the same. If you need speaker notes, prompts, or a presentation script, please print a hard copy in advance and bring it with you.

4. Aspect Ratio



Information for Oral Presenters

All session rooms are equipped with display and projection devices using a **16:9** aspect ratio. Please prepare your presentation file in 16:9 format whenever possible. If your file is prepared in another aspect ratio, black bars may appear on the sides or at the top and bottom during playback. However, the content will not be stretched or distorted.

II. How to Bring Your Presentation File

After preparing your final presentation file, please save and bring it to the venue using one or more of the following methods:

- USB flash drive, portable hard drive, or other storage device;
- Cloud storage download;
- Email attachment or downloadable link.

We recommend preparing at least one backup method in case of file damage, device recognition issues, or unstable network access.

III. Slide Testing and Upload Requirements

The Congress will use a unified slide Management system to manage all presentation files. To ensure smooth playback, please make sure to arrive at the Slide Collection Room corresponding to your session room area **at least 2 hours before your scheduled presentation** to complete file upload and playback testing.

Please check the exact time, session room, and area of your presentation in advance. Then, according to the official room-area layout map provided by the Congress, proceed to the corresponding Slide Collection Room.

The venue is divided into two session room areas, and each area will have one Slide Collection Room. Please go to the Slide Collection Room assigned to the area where your session room is located, so as to avoid delays caused by going to the wrong area.

Location:

Speaker Slide Collection Room 1: Conference Center, 3rd Floor

Speaker Slide Collection Room 2: Expo Center, Hall 5, 1st level Lobby



Information for Poster Presenters

Please be informed that posters will be printed and exhibited by the committee - please refrain from printing them on your own. You may go to the designated area at the scheduled time and locate your poster by its number.

Location:

Expo Center, Hall 5A, 1st level

Time:

Poster sessions will be divided into two phases:

Poster session 1: June 8&9, 15:30-16:30

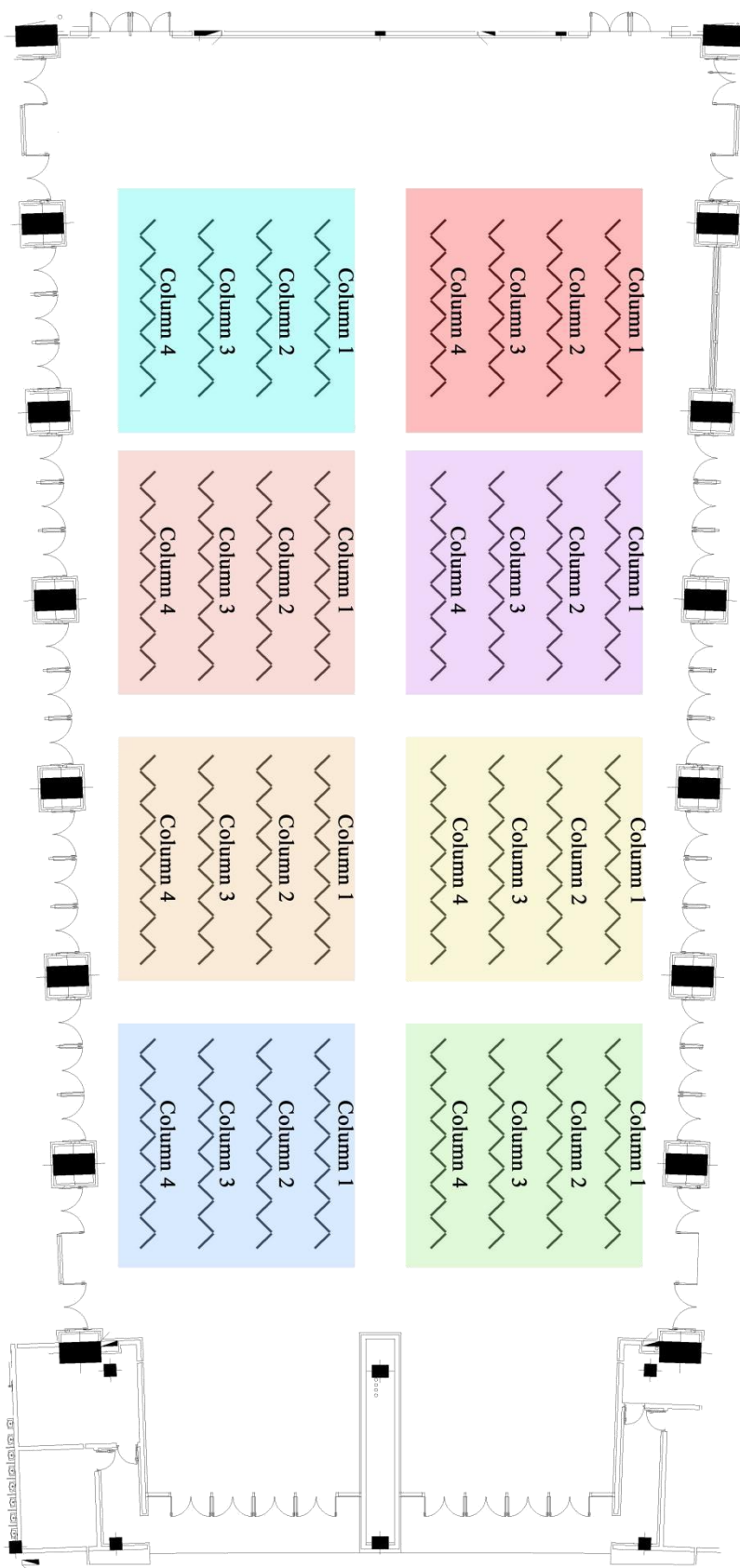
Poster session 2: June 11 15:30-16:30, June 12 15:00-16:30

Here is the floor plan of the Poster Area. Please locate your poster by its number.

You may check your poster number in the poster session section on pages 343-474.

Information for Poster Presenters

Expo Center, Hall 5A, 1st level



Column 1	No.001-026
Column 2	No.027-052
Column 3	No.053-078
Column 4	No.079-104
Column 1	No.105-130
Column 2	No.131-156
Column 3	No.157-182
Column 4	No.183-208
Column 1	No.209-234
Column 2	No.235-260
Column 3	No.261-286
Column 4	No.287-312
Column 1	No.313-338
Column 2	No.339-364
Column 3	No.365-390
Column 4	No.391-416
Column 1	No.417-442
Column 2	No.443-468
Column 3	No.469-494
Column 4	No.495-520
Column 1	No.521-546
Column 2	No.547-572
Column 3	No.573-598
Column 4	No.599-624
Column 1	No.625-646
Column 2	No.647-668
Column 3	No.669-690
Column 4	No.691-712
Column 1	No.713-734
Column 2	No.735-756
Column 3	No.757-778
Column 4	No.779-800



Sessions Overview

The congress will feature 10 Plenary Speeches and 16 Featured Talks.

Over 2,000 oral presentations to be delivered by scientists from 62 countries, along with more than 1,200 poster presentations.

These will comprehensively showcase the latest research achievements and cutting-edge developments in soil science.

Plenary Speeches will be held during three time slots:

- June 8 | 10:15-12:15
- June 11 | 09:00-11:00
- June 12 | 13:30-14:30

Poster sessions will be divided into two phases:

- Poster session 1: June 8 & 9, 15:30-16:30
- Poster session 2: June 11 15:30-16:30, June 12 15:00-16:30

To encourage active participation and enhance the quality of poster presentations, and to elevate their significance in academic communication, the congress will introduce a Best Poster Award, with a total of 120 awards. The list of winners will be announced at the closing ceremony, and electronic certificates will be sent via email to the awardees after the event.

Sessions Schedule



Convention Center (Monday, June 8)

09:00-09:50	Opening Ceremony (Zhonghua Hall, 1 st Floor)																
09:50-10:15	Coffee Break																
10:15-12:15	Plenary Sessions (Zhonghua Hall, 1 st Floor)																
12:15-13:15	Lunch (Expo Center Hall 4 Dining Area)																
	2 nd Floor								3 rd Floor					4 th Floor			
	Nanjing 201	Nanjing 202	Nanjing 203	Nanjing 205	Nanjing 206	Nanjing 207	Nanjing 208	Nanjing 209	Nanjing 302A	Nanjing 302B	Nanjing 303A	Nanjing 303B	Yangtze Room	Nanjing 402A	Nanjing 402B	Nanjing 403A	Nanjing 403B
13:15-15:15	Session 407001	Session 409011	Session 403002	Session 409006	Workshop 01	Panel Discussion 01			Session 305009	Session 305006	Session 305005	Session 303001	Soil Feeds Life		Session 203005	Session 203003	Session 308001
15:15-15:30	Coffee Break																
16:30-18:30	Session 407001	Session 409011	Session 403002	Session 409008	Workshop 03	Session 301002			Session 305009	Session 305006	Session 305005	Session 303001	Soil Feeds Life	Session 202001	Session 203005	Session 203003	Session 204003

*Subject to change

Sessions Schedule



Expo Center (Monday, June 8)															
	Hall 4				Hall 5			Hall 6		Hall 7			Hall 8		
	Entrepreneur Area	4201	4202	4203	5201	5202	5203	6201	6202	7201	7202	7203	8201	8202	8203
13:15-15:15	13:30-15:00 Entrepreneur Sessions	Session 102005	Session 102001	Session 106003	Session 402005	Session 408001	Session 110003	Session 310005	Session 306003	Session 203002	Session 201001	Session 302007	Session 309001	Session 307001	Session 302004
15:15-15:30		Coffee Break													
15:30-16:30	15:30-17:00 Workshop 02	Poster Session 1 (Hall 5A)													
16:30-18:30		Session 102005		Session 106003	Session 402005	Session 408001	Session 110003	Session 310005	Session 306003	Session 203002	Session 201001	Session 302007	Session 309001	Session 307001	Session 302004



Sessions Schedule

Convention Center (Tuesday, June 9)																		
	1 st Floor	2 nd Floor								3 rd Floor					4 th Floor			
	Zhonghua Hall	Nanjing 201	Nanjing 202	Nanjing 203	Nanjing 205	Nanjing 206	Nanjing 207	Nanjing 208	Nanjing 209	Nanjing 302A	Nanjing 302B	Nanjing 303A	Nanjing 303B	Yangtze Room	Nanjing 402A	Nanjing 402B	Nanjing 403A	Nanjing 403B
09:00-11:00	Featured Talks	Session 407001	Session 409011	Session 403002	Session 409008	Session 305007	Session 303002	Session 309004	Session 310002	Session 305009	Session 305006	Session 305005	Session 303001	Soil Feeds Life	Session 202001	Session 203005	Session 203003	Session 202002
11:00-11:15	Coffee Break																	
11:15-12:30	Featured Talks	Session 407001	Session 409011	Session 403002	Session 409008	Session 305007	Session 303002	Session 309004	Session 310002	Session 305009	Session 305006	Session 305005	Session 303001	Soil Feeds Life		Session 203005	Session 203003	Session 202002
12:30-13:30	Lunch (Expo Center Hall 4 Dining Area)																	
13:30-15:15		Session 407001	Session 409011	Session 403002	Session 409008	Session 305007	Panel Discussion 04	Session 304003	Session 308002	Session 305009	Session 305006	Session 305005	Session 303001	Soil Feeds Life	Session 202001	Session 203005	Session 203003	Session 202002
15:15-15:30		Coffee Break																
16:30-18:30		Session 407001	Session 409011	Session 403002	Session 409008	Session 305007		Session 304003	Session 308002	Session 305009	Session 305006	Panel Discussion 05	Session 303001	Soil Feeds Life	Session 202001	Session 203005	Session 203003	Session 202002

*Subject to change



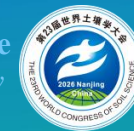
Sessions Schedule

Expo Center (Tuesday, June 9)

	Hall 4				Hall 5			Hall 6		Hall 7			Hall 8		
	Entrepreneur Area	4201	4202	4203	5201	5202	5203	6201	6202	7201	7202	7203	8201	8202	8203
09:00-11:00	Entrepreneur Sessions	Session 108002	Session 107001		Session 409002	Panel Discussion 02	Session 101001	Session 503005		Session 203007	Session 201001	Session 402006	Session 305002	Session 302005	
11:00-11:15		Coffee Break													
11:15-12:30		Session 108002	Session 107001		Session 409002	Panel Discussion 03	Session 104002	Session 503005		Session 203007	Session 201001	Session 402006	Session 305002	Session 302005	
12:30-13:30	Lunch (Expo Center Hall 4 Dining Area)														
13:30-15:15	Entrepreneur Sessions	Session 108001	Session 107001	Session 108003	Session 409002	Session 401002	Session 104002	Session 310004	Session 306003	Session 203007	Session 201001	Session 402006	Session 305002	Session 302005	Session 304007
15:15-15:30		Coffee Break													
15:30-16:30		Poster Session 1 (Hall 5A)													
16:30-18:30		Session 108001	Session 107001	Session 108003	Session 409002	Session 401002	Session 104002	Session 310004	Session 306003	Session 203007	Session 203001	Session 402006	Session 305002	Session 302005	Session 304007

*Subject to change

Sessions Schedule



Expo Center (Wednesday, June 10)		
	Hall 4	
	Entrepreneur Area	Exhibition Area
09:00-10:30		Exhibition
10:30-12:00	Workshop 04	
12:00-13:30	Lunch (Expo Center Hall 4 Dining Area)	
13:30-17:30		Exhibition



Sessions Schedule

Convention Center (Thursday, June 11)

9:00-11:00	Plenary Sessions (Zhonghua Hall, 1 st Floor)																
	2 nd Floor								3 rd Floor					4 th Floor			
	Nanjing 201	Nanjing 202	Nanjing 203	Nanjing 205	Nanjing 206	Nanjing 207	Nanjing 208	Nanjing 209	Nanjing 302A	Nanjing 302B	Nanjing 303A	Nanjing 303B	Yangtze Room	Nanjing 402A	Nanjing 402B	Nanjing 403A	Nanjing 403B
11:00-11:15	Coffee Break																
11:15-12:30		Session 408004	Session 409003		Session 305012	Session 305001	Session 309005	Session 301001	Session 303004	Session 303007	Session 303005	Session 303003	Session 302005	Session 409010	Session 409012	Session 409001	
12:30-13:30	Lunch (Expo Center Hall 4 Dining Area)																
13:30-15:15	Session 402001	Session 408004	Session 409003	Session 409007	Session 305012	Session 305001	Session 309005	Session 301001	Session 303004	Session 303007	Session 303005	Session 303003	Session 302005	Session 409010	Session 409012	Session 409001	Session 408002
15:15-15:30	Coffee Break																
16:30-18:30	Session 402001	Session 408004	Session 409003	Session 409007	Session 305012	Session 305001	Session 309005	Session 301001	Session 303004	Session 303007	Session 408003	Session 303003	Session 302005	Session 409010	Session 409012	Session 409001	Session 408002

Sessions Schedule



Expo Center (Thursday, June 11)

	Hall 4				Hall 5			Hall 6		Hall 7			Hall 8		
	Entrepreneur Area	4201	4202	4203	5201	5202	5203	6201	6202	7201	7202	7203	8201	8202	8203
10:30-11:00	Entrepreneur Sessions														
11:00-11:15		Coffee Break													
11:15-12:30		Session 102003	Session 110001	Session 108005	Session 404002	Session 409004	Session 409014	Session 502002	Session 406003	Session 203004	Session 201002	Session 207001	Session 309002	Panel Discussion 06	
12:30-13:30	Lunch (Expo Center Hall 4 Dining Area)														
13:30-15:15		Session 102003	Session 110001	Session 108005	Session 404002	Session 409004	Session 409014	Session 502002	Session 406003	Session 203004	Session 201002	Session 207001	Session 309002	Panel Discussion 06	Session 305003
15:15-15:30		Coffee Break													
15:30-16:30	15:30-17:00	Poster Session 2 (Hall 5A)													
16:30-18:30	Entrepreneur Sessions	Session 102003	Session 110001	Session 108005	Session 404002	Session 409004	Session 409014	Workshop 05	Session 406003	Session 203004	Session 201002	Session 207001	Session 309002	Panel Discussion 06	Session 304004

*Subject to change

Sessions Schedule



Convention Center (Friday, June 12)

	1 st Floor	2 nd Floor								3 rd Floor					4 th Floor			
	Zhonghua Hall	Nanjing 201	Nanjing 202	Nanjing 203	Nanjing 205	Nanjing 206	Nanjing 207	Nanjing 208	Nanjing 209	Nanjing 302A	Nanjing 302B	Nanjing 303A	Nanjing 303B	Yangtze Room	Nanjing 402A	Nanjing 402B	Nanjing 403A	Nanjing 403B
9:00-11:00	Featured Talks	Session 402001	Session 408004	Session 409003	Session 409007	Panel Discussion 07	Session 305001	Session 305011	Session 303006	Session 303004	Session 303007	Session 303005	Session 303003	Session 302005	Session 409010	Session 409012	Session 409001	Session 408002
11:00-11:15	Coffee Break																	
11:15-12:30	Featured Talks	Session 402001	Session 408004			Panel Discussion 07	Session 305001	Session 305011	Session 303006	Session 303004	Session 303007	Session 303005		Session 302005	Session 409010	Session 409012	Session 409001	Session 401003
12:30-13:30	Lunch (Expo Center Hall 4 Dining Area)																	
13:30-14:30	Plenary Sessions (Zhonghua Hall, 1 st Floor)																	
14:30-15:00	Coffee Break																	
16:30-17:30	Closing Ceremony (Zhonghua Hall, 1 st Floor)																	

Sessions Schedule



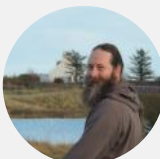
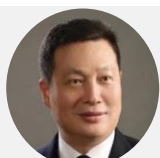
Expo Center (Friday, June 12)

	Hall 4			Hall 5			Hall 6		Hall 7			Hall 8		
	4201	4202	4203	5201	5202	5203	6201	6202	7201	7202	7203	8201	8202	8203
9:00-11:00	Session 108004	Session 110001	Session 105001	Session 404002	Session 409009	Session 402004	Panel Discussion 08	Session 406003	Session 206001	Session 201002	Session 207002	Session 401001	Panel Discussion 09	Session 101002
11:00-11:15	Coffee Break													
11:15-12:30	Session 108004	Session 110001	Session 112001		Session 409009	Session 402004	Panel Discussion 08	Session 406003	Session 206001	Session 201002	Session 207002	Session 401001	Panel Discussion 09	Session 101002
12:30-13:30	Lunch (Expo Center Hall 4 Dining Area)													
15:00-16:30	Poster Session 2 (Hall 5A)													

*Subject to change

Plenary Sessions

Room: Convention Center, Zhonghua Hall

Date	Time	Name & Affiliation	Title
		 Olufunmilayo Ande Soil Science Society of Nigeria	Soil Wealth for Global Security: Harnessing Regenerative Agriculture and Soil's Multifunctional Role for Climate and Environmental Resilience
		 Deli Chen University of Melbourne	Sustainable Nitrogen Management-Bridging Soil Science, Policy, and Practice
		 Panos Panagos The Joint Research Center (JRC) of the European Commission	Soil Health in Europe: Challenges and Opportunities for Soil Science and Policy
		 Pete Smith University of Aberdeen	Looking after Soils so that They Can Look after Us
		 Renfang Shen Institute of Soil Science, Chinese Academy of Sciences	Sustainable Utilization of Acid Soils: Chinese Innovations and Field Practices Offering Insights for Global Prospects

*Subject to change

Plenary Sessions

Date	Time	Name & Affiliation	Title
		 Jiří (Jirka) Šimůnek University of California, Riverside	Numerical Modeling of the Fate and Transport of Contaminants in the Soil-plant Continuum at Various Scales Using HYDRUS
		 Joann Whalen McGill University	Rhizobiome Partners to Optimize Nutrient Transfers from Soil to Plants
		 Yongguan Zhu Research Center for Eco-environmental Sciences, Chinese Academy of Sciences	Harness Soil Microbiome for One Health

*Subject to change



Featured Talks

Room: Convention Center, Zhonghua Hall			
Date	Time	Name & Affiliation	Title
9 June	09:00-09:25	Ganlin Zhang Institute of Soil Science, Chinese Academy of Sciences	No Free Carbon: Rethinking the Global Potential of Soil Carbon Sequestration
9 June	09:25-09:50	Chris Freeman School of Environmental & Natural Sciences, Bangor University	From Enzymes to Ecosystems: Peatlands and the Hidden Carbon Flows Shaping Our Climate
9 June	09:50-10:15	Fang-Jie Zhao Nanjing Agricultural University	Mitigating soil heavy metal pollution to protect human health
9 June	10:15-10:40	Edoardo A.C. Costantini IUSS, CNR-IBE	The Research Forum of the IUSS
9 June	10:40-11:05	Fangbai Li Institute of Eco-environmental and Soil Sciences, Guangdong Academy of Sciences	Nature-Based Solutions for Heavy Metal(loid) Pollution in Acid Reddish Soils: From Biogeochemistry to Applications
9 June	11:15-11:40	Xiaoyuan Yan Institute of Soil Science, Chinese Academy of Sciences	Three Decades of Diffuse Pollution Control in Lake Taihu: Lessons for the Global Soil – Water Community
9 June	11:40-12:05	Zhongjun Jia Northeast Institute of Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences (CAS)	China Black Soils Initiative: New Paradigm and New Breakthrough
9 June	12:05-12:30		

*Subject to change



Featured Talks

Date	Time	Name & Affiliation	Title
12 June	09:00-09:25	Jizhong Zhou Institute for Environmental Genomics, School of Biological Sciences, University of Oklahoma	Drought amplifies warming-induced soil carbon loss in a decade-long experiment
12 June	09:25-09:50	Frank Löffler University of Tennessee, Knoxville	Reducing nitrous oxide emissions
12 June	09:50-10:15	Baoyuan Liu Beijing Normal University	Bottlenecks and Solutions of Global Soil Erosion Mapping
12 June	10:15-10:40	Jianming Xu College of Environmental and Resource Sciences, Zhejiang University	Soil Viruses and Elemental Cycling
12 June	10:40-11:05	Rongliang Qiu South China Agricultural University	Theories and Practices of Heavy Metal Contaminated Soil Remediation in China
12 June	11:15-11:40		
12 June	11:40-12:05		
12 June	12:05-12:30		

*Subject to change



Panel Discussions

Date	Time	Topic	Room
8 June	13:15-15:15	Panel Discussion 01: Bridging the Soil Science Gap: Global Collaboration of National Soil Science Societies	Convention Center, Nanjing 207
9 June	09:00-11:00	Panel Discussion 02: Women in Soil Science: Closing Gaps and Strengthening Collaboration	Expo Center, Hall 5, 5202
9 June	11:15-12:30	Panel Discussion 03: Fostering International Collaboration in Soil Science	Expo Center, Hall 5, 5202
9 June	13:30-16:00	Panel Discussion 04: A 35-Year Journey of Pedosphere: Promoting Soil Sciences across the World	Convention Center, Nanjing 207
9 June	16:30-18:30	Panel Discussion 05: Climate-friendly and sustainable agricultural practices with plateau-specific characteristics and multi-dimensional symbiosis in Yunnan under climate change	Convention Center, Nanjing 303A
11 June	11:15-12:30 13:30-15:15 16:30-18:30	Panel Discussion 06: Open discussion session on observed phenomena in soils and their underlying pedogenic processes: bring and share photos of your macro- and micromorphological observations and join the discussion on debated phenomena!	Expo Center, Hall 8, 8202
12 June	9:00-11:00 11:15-12:30	Panel Discussion 07: Opportunities and challenges for the development of soil science journals	Convention Center, Nanjing 206
12 June	9:00-11:00 11:15-12:30	Panel Discussion 08: China-Spain Summer School on Soil Health and Sustainability	Expo Center, Hall 6, 6201
12 June	9:00-11:00 11:15-12:30	Panel Discussion 09: Elsevier Journal Editors Symposium	Expo Center, Hall 8, 8202

*Subject to change



Panel Discussions

Monday, June 8	Room: Convention Center, Nanjing 207	
Panel Discussion 01	Bridging the Soil Science Gap: Global Collaboration of National Soil Science Societies	
	Conveners: Bruce Lascelles, British Society of Soil Science (BSSS) Song Xin, Soil Science Society of China (SSSC)	
Schedule	Topic	Presenter
13:15-15:15	Classic Collaboration Model Summary: Review successful cases of cross-national cooperation among soil science societies, and summarize feasible cooperation frameworks and operational mechanisms.	Rainer Horn, Honorary member Renfang Shen, Honorary President, Soil Science Society of China Paul Hallett, Academic Chair, British Society of Soil Science; Council Member of Multiple National Soil Science Societies
	Actionable Collaborative Strategies: Discuss the implementation path of innovative cooperation modes such as long-term society twinning, global virtual academies for soil science, open sharing of academic resources, technical training and talent exchange programs.	Andrew Morris, British Society of Soil Science Michael Thompson, Former Chair, American Society of Soil Science
	Future Global Cooperation Layout: Propose standardized, sustainable and inclusive development suggestions for the long-term collaborative development of the global soil science community.	Additional representatives from global national soil science societies (to be confirmed)

*Subject to change



Panel Discussions

Tuesday, June 9	Room: Expo Center, Hall 5, 5202
Panel Discussion 02	Women in Soil Science: Closing Gaps and Strengthening Collaboration
	Convener: Wang Fang, Institute of Soil Science, Chinese Academy of Sciences Co-Conveners: Daniela Sauer, University of Göttingen Sabine Grunwald, University of Florida Laura Bertha Reyes Sánchez, National Autonomous University of Mexico
Schedule	Presenter
09:00-11:00	Chair: Fang Wang, International Atomic Energy Agency; Soil Science Society of China Laura Bertha Reyes Sánchez (Mexico) - IUSS Past President
	Panelist: Daniela Sauer, Soil Science Society of Germany Fang Wang, International Atomic Energy Agency; Soil Science Society of China Joann Whalen, McGill University, Canada He Yan, Zhejiang University, China Olufunmilayo Ande, Soil Science Society of Nigeria Tatiana Minkina, Southern federal university, Russia Christine Morgan, Soil Science Society of American Jussara Borges Regitano, Universidade de Sao Paulo, Brazil Ha Anh, Soil Science Society of American Vietnam Axel Cerón, Soil Science Society of Mexico The list is still in updating.

*Subject to change



Panel Discussions

Panel Discussion

Tuesday, June 9	Room: Expo Center, Hall 5, 5202
Panel Discussion 03	Fostering International Collaboration in Soil Science
	Convener: Wang Fang, Institute of Soil Science, Chinese Academy of Sciences; IAEA
	Co-Conveners: Wei Zhang, Michigan State University Martin Elsner, Technical University of Munich Carlos Bezuidenhout, North-West University
Schedule	Presenter
11:15-12:30	Chair: Fang Wang, International Atomic Energy Agency; Soil Science Society of China Wei Zhang, Soil Science Society of America Martin Elsner, Technical University of Munich, Germany
	Panelist: Yongguan Zhu, Research Center for Eco-environmental Sciences, Chinese Academy of Sciences Deli Chen, University of Melbourne, Australia Daniela Sauer, Soil Science Society of Germany Olufunmilayo Ande, Soil Science Society of Nigeria Maxine J. Levin, Soil Science Society of America Joann Whalen, McGill University, Canada Takuro Shinano, Hokkaido University, Japan Tatiana Minkina, Southern federal university, Russia Cornie van Huyssteen, Soil Science Society of South Africa Cornelius Bezuidenhout, North-West University The list is still in updating.

*Subject to change

Panel Discussions

Tuesday, June 9	Room: Convention Center, Nanjing 207	
Panel Discussion 04	A 35-Year Journey of Pedosphere: Promoting Soil Sciences across the World	
	Convener: Ren Fang SHEN, Institute of Soil Science, Chinese Academy of Sciences (CAS)	
	Co-Conveners: Zhongjun JIA, Institute of Soil Science, Chinese Academy of Sciences (CAS)	
	Fenxiang MENG, Institute of Soil Science, Chinese Academy of Sciences (CAS)	
Schedule	Topic	Presenter
13:30-13:45	A 35-Year Journey of Pedosphere: advancing with soil science	Renfang Shen Institute of Soil Science, Chinese Academy of Sciences
13:45-15:15	Panel Discussion Topics 1. Soil organic matter and Pedosphere 2. Pedosphere and its contribution to soil science development 3. Old journal and young scientist 4. Soil biochemistry, Black Soils & Experience with Pedosphere 5. Research Frontiers & Experiences with Pedosphere 6. Others...	Editorial board members/ Highly cited paper authors/ Hot paper authros Minggang Xu Pete Smith Scott X Chang Alex McBratney Xin Song Andres Rodriguez Seijo Tida Ge Wenyou Hu Fenli Zheng Renkou Xu Others with interest are welcomed...
15:30–16:00	Panel Discussion Topics 1. Soil science journals as the foundation for agronomy, ecosystem and climate sciences 2. Promoting journal impact while advancing soil science 3. Research Frontiers & Soil Science Journals 4. Publishers for advancing both soil science and journals 5. Others...	Invited Editor-in-Chiefs/ Invited Editors and Experts / Publishers William R Horwath Joann k. Whalen Evgenia Blagodatskaya Fang Wang Zhongjun Jia Denny Rigby Fenxiang Meng Others with interest are welcomed...

*Subject to change

Panel Discussions

Tuesday, June 9	Room: Convention Center, Nanjing 303A	
Panel Discussion 05	Climate-friendly and sustainable agricultural practices with plateau-specific characteristics and multi-dimensional symbiosis in Yunnan under climate change	
	Convener: Zhi Zuo, Pesticide Eco-Alternatives Center	
	Co-Conveners: Chunliang Li, Pesticide Eco-Alternatives Center	
	Xurui Dai, Pesticide Eco-Alternatives Center	
Schedule	Topic	Presenter
16:30-16:35	Openning Remarks	Zuo Zhi Executive Director of Pestiside Eco-Alternatives Center, Yunnan
16:35-16:50	Effects of Dry Direct-Seeded Rice and No-Till Soybean Cropping After Rice on Soil Health and Nutrient Utilization in the Puer Region	Xiaohua Li Deputy Director of Agricultural Science Research Institute of Pu'er City, Senior Agronomist
16:50-17:05	An Ecological Farming Model for Climate Adaptation: Synergizing Soil Health and Community Resilience in Yunnan's Rice Paddies	Chonglie Xu Owner of Ecological Farm in Eryuan, Dali
17:05-17:20	Jingmai Mountain's Ancient Tea Forests: A Model of Forest- Tea Symbiosis, Biodiversity, and Cultural Heritage	Kang Nan Blang ethnicity, inheritor of the traditional handmade tea of Jingmai Mountain.
17:20-17:35	Building Climate-Resilient Agriculture through Multi-Stakeholder Engagement: The PEAC Model	Hao Zhao Agriculture Technical Director of Pestiside Eco-Alternatives Center, Yunnan
17:35-17:47	Video Case Share: A Documentary on Climate-Friendly Rice Cultivation in the Hani Terraces: Where Ancient Wisdom Meets Modern Science	Zuo Zhi Executive Director of Pestiside Eco-Alternatives Center, Yunnan
17:47-18:10	Panel Discusion: A Climate Change Perspective on Yunnan’ s Diverse Response Strategies	Zuo Zhi Executive Director of Pestiside Eco-Alternatives Center, Yunnan
18:10-18:30	Closing Remarks	Zuo Zhi Executive Director of Pestiside Eco-Alternatives Center, Yunnan

*Subject to change

Panel Discussions

Thursday, June 11	Room: Expo Center, Hall 8, 8202	
Panel Discussion 06	Open discussion session on observed phenomena in soils and their underlying pedogenic processes: bring and share photos of your macro- and micromorphological observations and join the discussion on debated phenomena!	
	Convener: Daniela Sauer, University of Göttingen, Germany	
	Co-Conveners: Cezary Kabala, Wroclaw University of Environmental and Life Sciences, Poland	
	John Galbraith, Virginia Tech, USA	
Schedule	Topic	Presenter
11:15-12:30	Moderator: Cezary Kabala	
	Still Soil or Already Sediments: Boundary Cases with Ferrugination in Russian Nature Reserves (Smolensk Lakelike and Geyzer Valley)	Ivan N. Semenov Isaev Centre for Problems of Forest Ecology and Productivity
	Discussion on problems of distinguishing soil from sediment	-
13:30-15:15	Moderator: John Galbraith	
	The Umbrisol problem	Michele E. D'Amico DISAA - Universit of Milano
	Discussion on formation mechanisms of Umbrisols	-
	Mattic epipedon: living skin of the Tibetan Plateau	Fei Yang Institute of Soil Science, Chinese Academy of Sciences
	Discussion on formation mechanisms of the “mattic epipedon” in mountain grassland ecosystems	-
16:30-18:30	Moderator: Daniela Sauer	
	Luvisols, Retisols and accompanying ‘glossic’ soils	Cezary Kabala Wroclaw University of Environmental and Life Sciences
	Discussion on the distribution and formation mechanisms of Retisols with tongues and with other morphologies of the E/Bt horizon	-
	What Are Skeletans and How Do They Form?	John Galbraith School of Plant and Environmental Sciences, Virginia Tech
	Discussion on the formation mechanisms of skeletans	-

*Subject to change

Panel Discussions

Friday, June 12	Room: Convention Center, Nanjing 206	
Panel Discussion 07	Opportunities and challenges for the development of soil science journals	
	Convener: Renkou Xu, Institute of Soil Science, Chinese Academy of Sciences	
	Co-Conveners: Tomoyuki Makino, Tohoku University, Japan	
	Xinhua Peng, Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences	
Schedule	Topic	Presenter
09:00-09:15	The Role of Scientific Societies and Their Journals to Foster Trust in Science	Michael L. Thompson Agronomy Department, Iowa State University, USA
09:15-09:30	Authors and Editors	Roland Bol Editor-in-chief of European Journal of Soil Science, Institute of Bio- and Geosciences, Agrosphere (IBG-3), Forschungszentrum Jülich GmbH, Germany
09:30-09:45	Development and Journey of Journal of Soils and Sediment in the Last 20 Years in the Context of Soil, Forestry and Environmental Sciences	Zhihong Xu Editor-in-chief of Journal of Soils and Sediments, School of Environment and Science, Griffith University, Australia
09:45-10:15	Panel Discussions or Questions from Audience for Speakers Above	-
10:15-10:30	Barriers and enablers for publishing soil science content in broad-scope, high-impact journals	Abel Barral Cuesta Deputy Editor of Advanced Science
10:30-10:45	BIOCHAR: Navigating Opportunities and Challenges in a Rapidly Evolving Publishing Landscape	Hailong Wang Executive Editor-in-Chief of Biochar, School of Environment and Chemical Engineering, Foshan University
10:45-11:00	Challenges and coping strategies for the Journals of Soil Science in China	Renkou Xu Editor-in-chief of Acta Pedologica Sinica, Institute of Soil Science, Chinese Academy of Sciences
11:15-12:30	Panel Discussions or Questions from Audience for Speakers Above	-

*Subject to change

Panel Discussions

Friday, June 12	Room: Expo Center, Hall 6, 6201	
Panel Discussion 08	China-Spain Summer School on Soil Health and Sustainability	
	Convener: Jing Che, Institute of Soil Science, Chinese Academy of Sciences, China Co-Convener: Arabela Vega-Aguilar, Autonomous University of Barcelona, Spain	
Schedule	Topic	Presenter
Chair: Jinlong Dong		
09:00-09:15	Ice Nucleating Particle Contributions and Potential Climate Effects of Chinese Agriculture	Siyuan Jing
09:15-09:30	Vineyard management matters: organic practices enhance soil entomopathogens	Jorge Dueñas Hernani
09:30-09:45	Cultivar-Specific Differences in Growth and Rhizosphere Microbial Responses to Soil Acidity Gradients	Xiaorui Jiang
09:45-10:00	Before You Measure: How Sampling Strategies Shape Microplastics Quantification in Soils	Samuel Cusworth
10:00-10:15	Bacteriophages assisted bacteria to facilitate soil multifunctionality under organochlorine pesticide contamination	Zhouzhou Shen
10:15-10:30	Inorganic and Organic Carbon Stocks in Semi-Arid Perennial Systems: The Role of Cover Crops	Cristina Fernández Soler
10:30-10:45	Balancing Fire Recurrence and Soil Recovery: Keys to Maintaining Mediterranean Soil Health	Luis D. Olivares-Martínez
11:15-12:30	Panel discussion	

*Subject to change



Panel Discussions

Friday, June 12	Room: Expo Center, Hall 8, 8202	
Panel Discussion 09	Elsevier Journal Editors Symposium	
Schedule	Topic	Presenter
09:00–09:15	Opening Remarks	Yong-Guan Zhu Research Center for Eco-environmental Sciences, Chinese Academy of Sciences, China
09:15–09:30	Introduction to Elsevier Journals	Adriaan Klinkenberg Publishing Director, Elsevier
09:30–11:00	AI in Scholarly Publishing	-
11:15–12:30	Author Workshop & Panel Discussion	Joann Whalen McGill University

*Subject to change

Entrepreneur Sessions

Area: Expo Center, Hall 4, Entrepreneur Area		
Date	Time	Topic
8 June	13:30-15:00	Introduction to Center Environmental Business Operations
8 June	15:30-17:00	Workshop 03: The Soil Lexicon - Co-shaping Memory, Culture, and Future
9 June	09:00-18:00	Biofertilizers, Biocontrol & Biostimulants: From Science to Technology and Commercialisation
10 June	10:30-12:00	Workshop 04: Soil Profile Simulation Workshop with Recyclable Cartons
11 June	10:30-12:00	IUSS New Book Launch

*Subject to change

Entrepreneur Sessions

Tuesday, June 9

Expo Center, Hall 4, Entrepreneur Area

Biofertilizers, Biocontrol & Biostimulants: From Science to Technology and Commercialisation

Organizers:

Deli Chen, Redmond Barry Distinguished Professor, The University of Melbourne; Director, ARC Research Hub for Smart Fertilisers

Qirong Shen, Chair, Academic Committee, Nanjing Agricultural University; Member, Chinese Academy of Engineering

Yuk Shing Cheng, Director, Centre for Sustainable Development Studies, Hong Kong Baptist University

Enjiang Cheng, Director-General, Global South Network for Sustainable Agriculture

Xia (Emma) Liang, Senior Researcher, The University of Melbourne

Dandan Wang, Senior Advisor, Global South Network for Sustainable Agriculture

Ella Williams, Administration, The University of Melbourne

Schedule	Title	Presenter
09:00 -09:30	Trichoderma Biofertilizer: From Mechanisms to Products	Qirong Shen Chair of Academic Committee, Nanjing Agricultural University
09:30-10:00	Recovery of Nitrogen from Livestock Waste— A Tale of Lignite	Deli Chen Redmond Barry Distinguished Professor, The University of Melbourne
10:00-10:20	Optimizing Nitrogen and Carbon Recovery from Livestock Wastes for Multiple Production and Environmental Benefits	Clayton Butterly Senior Lecturer; Dr. Brendon Costello, Research Fellow School of Agriculture, Food and Ecosystem Sciences, The University of Melbourne

*Subject to change



Entrepreneur Sessions

10:20-10:40	Pricing Nitrogen Pollution to Move Sustainable Agriculture from Rhetoric to Accountability	Emma Liang Senior Research Fellow, The University of Melbourne
10:40-11:00	How Microbe-Organic Fertilizer Promotes Soil and Crop Health	Yan Ma Director of Institute of Agricultural Resources and Environment, Jiangsu Academy of Agricultural Sciences
11:30-11:50	Circular Agriculture: Waste to Value Solutions (Black Soldier Fly)	Xiaomei Ye Director of Circular Agriculture Research Center, Jiangsu Academy of Agricultural Sciences
11:50-12:10	Converting Food Waste Digestate into Value-Added Fertilizer Products	Jonathan Wong, Director of Research Center for Eco-Environmental Engineering, Dongguan University of Technology
12:10-12:30	Biochar-Based Organic Fertilizer: From Lab to Field	Lihong Xue Jiangsu Academy of Agricultural Sciences
13:30- 13:50	Advancing South-South Cooperation Through Agricultural Technology Cooperation for Sustainable Agriculture	Enjiang Cheng, Senior Advisor, Global South Network for Sustainable Agriculture
13:50-14:10	Government Policy & Farmer Behavior Change: Enabling Technology Adoption Through Institutional Frameworks	Yuk Shing Cheng Director of Center for Sustainable Development Studies, Hong Kong Baptist University
14:10-14:30	Development of Biological Control Solutions for Sustainable Pest Management in Digital Era	Feng Zhang Regional Director, CAB International (CABI)

*Subject to change



Entrepreneur Sessions

14:30-14:50	Development of Biocontrol Agents for Horticulture Crops	Jiang Lu Director of Center for Viticulture and Enology, Shanghai Jiao Tong University
14:50-15:10	The Assistance of Functional Microorganisms on High Quality Development of Tropical Crops	Qingyun Zhao Researcher, Spice and Beverage Research Institute, Chinese Academy of Tropical Agricultural Sciences
15:10-15:30	Enhancing Drought and Salinity Resilience in Tomato Plants Using Plant Growth-Promoting Bacillus Species	Erandi Herath Researcher, The University of Melbourne
16:00-16:20	Introduction to Center's R&D in Environmental Technologies and Achievements Commercialization	Gu Ailiang Center Soil Remediation Research Institute (Shenzhen) Co., Ltd.
16:20-16:40	Healthy Soil, Premium Crops: Nutrilite Organic Innovation and Evidence from Long-Term Field Trials	Tingzhao Li Amway (Shanghai) Innovation & Science Co., Ltd
16:40-17:20	Case Study of Commercializing & Scaling Biological Products in China	Xianghe Agriculture Technology Group & Nanjing Woyou Biological Company
17:20- 18:00	Regional Peer Learning: ASEAN CONTEXT & TECHNOLOGY FIT	-

*Subject to change



Workshops

Date	Time	Topic	Room/Area
8 June	13:15-15:15	Workshop 01: Author Workshop & Editorial Q&A: How to Publish Successfully in Soil Science Journals	Convention Center, Nanjing 206
8 June	15:30-17:00	Workshop 02: The Soil Lexicon - Co-shaping Memory, Culture, and Future	Expo Center, Hall 4, Entrepreneur Area
8 June	16:30-18:00	Workshop 03: Advancing Research Integrity: Best Practices in Peer Review and Artificial Intelligence	Convention Center, Nanjing 206
10 June	10:30-12:00	Workshop 04: Soil Profile Simulation Workshop with Recyclable Cartons	Expo Center, Hall 4, Entrepreneur Area
11 June	16:30-18:30	Workshop 05: Chinese Community-Supported Agriculture Networks and Participatory Guarantee Systems	Expo Center, Hall 6, 6201

*Subject to change



Workshops

Monday, June 8		Room: Convention Center, Nanjing 206	
Workshop 01		Author Workshop & Editorial Q&A: How to Publish Successfully in Soil Science Journals	
Schedule	Topic	Presenter	Abstract
13:15-15:15	How to Strengthen Your Manuscript: Editorial Insights from Soil Biology & Biochemistry	Joann K. Whalen McGill University; Editor-in-Chief, Soil Biology & Biochemistry	This workshop, led by Prof. Joann Whalen (Editor-in-Chief of Soil Biology & Biochemistry), provides practical, transparent guidance on improving manuscript quality and increasing publication success in leading soil science journals like SBB. Topics include what editors look for, common reasons for early rejection and how to avoid them, how to present methods and results effectively, and strategies for navigating peer review comments. Following the presentation, an interactive Q&A/panel discussion (with invited panel from Elsevier editors: TBC - Kees Jan van Groenigen of Geoderma; Cezary Kabala of Catena; Felipe Bastida of Applied Soil Ecology; Xinhua Peng of Soil & Tillage Research; Brent Clothier of Agricultural Water Management; Lena Ma of Soil & Environmental Health) will allow participants to engage directly with the Editors-in-Chief for tailored advice.
	How to publish soil science research in top-tier journals?	Abel Barral Cuesta, Wiley; Deputy Editor of Ecology & Environment, Advanced Science	In this workshop, Abel Barral Cuesta – former editor at Nature Plants, Nature Ecology & Evolution and One Earth, and currently Deputy Editor for Ecology & Environment at Wiley’s Advanced Science – will provide insight into what broad scope, high-impact journals seek in soil science papers. He will provide a view of current trends in soil science content in top-tier journals, shed light on elements that improve impact and retention of papers in them, and explain paper selection criteria by their editors. He will also reflect on the opportunity that different article formats bring, and provide some advice on how to write them. Lastly, he will share hints on how to shape submissions to make a strong case for interest in top-tier journals. After his presentation, the workshop will move forward to a Q&A session with Abel and other Wiley editors that will help attendees to better understand how editors think of papers and unveil the editorial blackbox in submission handling.

*Subject to change



Workshops

Monday, June 8		Room: Expo Center, Hall 4, Entrepreneur Area
Workshop 02		The Soil Lexicon - Co-shaping Memory, Culture, and Future
Schedule	Presenter	Abstract
15:30-17:00	Jin Lipeng Associate Professor at Sichuan Fine Arts Institute	This workshop invites scientists, educators, and the public to come together and explore the many meanings of soil—not only as a scientific object, but as a living archive of memory, culture, and shared future. Through dialogue, sensory experience, and collective creation, participants will share personal stories of the land and engage in conversations around soil health, climate change, and local knowledge. Moving beyond data and disciplinary boundaries, we will co-create a collective artwork that reflects the deep connection between soil and humanity. Everyone is a co-creator of the soil lexicon. Join us in shaping a shared language for the future of soil.

*Subject to change



Workshops

Monday, June 8		Room: Convention Center, Nanjing 206
Workshop 03		Advancing Research Integrity: Best Practices in Peer Review and Artificial Intelligence
Schedule	Presenter	Abstract
16:30-18:00	Boris Kuzmanovic MDPI	This workshop explores two key aspects of modern scholarly communication: best practices in peer review and the growing role of artificial intelligence (AI) in scientific publishing. As research and publishing continue to evolve, maintaining quality, transparency, and integrity requires both rigorous peer-review standards and the responsible adoption of emerging technologies. The first session, Peer Review Guidelines: Best Practices for Authors and Reviewers, will provide practical guidance on conducting fair, transparent, and constructive peer review. Participants will learn how to prepare high-quality manuscripts, respond effectively to reviewer comments, and deliver objective, ethical, and actionable reviews. Common challenges in the review process and strategies for improving publication quality will also be discussed. The second session, AI in the Scientific Publishing Industry, will examine the impact of AI on manuscript preparation, editorial workflows, reviewer selection, plagiarism detection, language enhancement, and research discovery. The session will highlight both the opportunities and limitations of AI-driven tools, with a particular focus on ethics, transparency, and responsible use. Special attention will be given to how these practices support research quality, reproducibility, and scientific impact within the soil science community. The workshop aims to equip researchers, reviewers, and editors with practical knowledge to navigate the evolving publishing landscape while upholding the highest standards of research integrity. The workshop will be delivered by Boris Kuzmanovic, an author and publishing professional with more than six years of experience in scientific publishing and research integrity.

*Subject to change



Workshops

Wednesday, June 10		Room: Expo Center, Hall 4, Entrepreneur Area
Workshop 04		Soil Profile Simulation Workshop with Recyclable Cartons
Schedule	Presenter	Abstract
10:30-12:00	Adriana Ribon Goiás University in Brazil	1. Using empty milk or juice cartons to simulate a soil body; 2. Drawing soil horizons on the cartons; 3. Applying glue and selecting different soil colors to illustrate the horizons.



Workshops

Thursday, June 11		Room: Expo Center, Hall 6, 6201	
Workshop 05		Chinese Community-Supported Agriculture Networks and Participatory Guarantee Systems	
Schedule	Topic	Presenter	Abstract
16:30-18:30	EcoHowFun: The Practice of Chinese Community-Supported Agriculture Networks and Participatory Guarantee Systems	Yan Shi EcoHowFun	Agroecology and Community-Supported Agriculture (CSA) are gaining prominence as critical pathways to mitigate soil degradation, ensure food security, and promote sustainable agricultural development. In China, indigenized CSA networks, exemplified by initiatives such as EcoHowFun, utilize Participatory Guarantee Systems (PGS) to establish a trust-based mechanism. This approach not only reconfigures producer-consumer relationships but also elevates soil health cultivation into a collaborative community practice. These initiatives provide verifiable socio-economic models for agroecological implementation and resonate with core soil science research on soil microbiology, carbon sequestration, and agroecosystem diversity. As part of Session #504004 of the 23rd World Congress of Soil Science, this panel bridges cutting-edge soil science and grassroots agricultural innovation. The core discussion will focus on how Chinese CSA networks, through PGS, guide farmers in improving soil properties. Furthermore, The session will also assess how these community-based practices contribute to the "One Health" vision, exploring actionable pathways to synergistically advance ecological integrity and human well-being.
		Yi Zhu Natural Mulching and No-Tillage Empirical Laboratory, Hechuren Agro-culture Heritage & Development Center	
		Lipeng Jin Experimental Art School, Sichuan Fine Arts Institute	

*Subject to change

Parallel Sessions

Tuesday, June 9		Room: Expo Center, Hall 5, 5203	
Session 101001		Advances in Soil Morphology and Micromorphology: Unveiling the Earth's Hidden Resource	
		Convener: Fabio Terribile, Università di Napoli Federico II, Italy	
		Co-Convener: Richard J Heck, University of Guelph, Canada	
Schedule	ID	Title	Presenter
09:00-09:03	-	Presentation of the session	Fabio Terribile
09:03-09:16	34521	IUSS Digital Soil Thin Section Collections Working Group	Richard J. Heck School of Environmental Sciences, University of Guelph, Guelph, Canada
09:16-09:29	33476	SEM-EDS and Micromorphological Evidence of Kaolinite Hematite Interactions in Ferruginous Duricrusts from Devonian Sediments of the Parnaíba Basin (Central North Brazil)	Daniela Schievano de Campos University of São Paulo
09:29-09:42	32975	Preferential spatial co-location of organic matter with identified mineral phases in intact soil microstructures	Yahan Hu TUM School of Life Sciences, Technical University of Munich

*Subject to change

Parallel Sessions

09:42-09:55	34240	Proto-soils of extreme environments: understanding chemical composition at a microscale with the use of Raman spectroscopy	Nikita Mergelov Department of Soil Geography and Evolution, Institute of Geography RAS, Moscow, Russia
09:55-10:08	34168	Segmentation-Guided Conditional Diffusion with Optical Flow Constraints for 3D Interpolative Super-Resolution of Soil CT Images	Meihui Song Beijing Forestry University
10:08-10:21	36293	Micropedology and Artificial Intelligence - evolution of quantitative approaches	Lilit Pogosyan Red de Ecología Funcional, Instituto de Ecología AC INECOL
10:21-10:34	33018	Morphological Characterization and Mapping-Based Classification of Soils in Two Locations in Southwest Nigeria	Temitope S. Babalola Department of Soil Science and Land Resources Management, Federal University Oye-Ekiti
10:34-10:47	30532	The Comparative Investigation of Soil Morphological Organization in Polar Urals (Yamal, Russia) and Qilian Mountains (Qinghai-Tibet Plateau, China)	Evgeny Abakumov Saint-Petersburg State University
10:47-11:00	31881	Quantitative analysis of soil erosion crack dimensions caused by wind-driven rainfall using image processing	Seyed Hamidreza Sadeghi Professor (Corresponding Author), Department of Watershed Management Engineering, Faculty of Natural Resources, Tarbiat Modares Resources University

*Subject to change



Parallel Sessions

Friday, June 12		Room: Expo Center, Hall 8, 8203	
Session 101002		Micromorphology as a Tool for Understanding the Evolution of Soils and Environments in Natural and Human-Impacted Landscapes	
		Convener: Daniela Sauer Georg-August-University Göttingen, Germany	
		Co-Conveners: Fabio Terribile University of Naples Federico II, Italy Maria Bronnikova, Texas Tech University, USA; Institute of Geography Russian Academy of Sciences, Russia	
Schedule	ID	Title	Presenter
09:00-09:15	35505	Soil Carbonate Memory: From Conceptualization to Experimental Evidence	Curtis Monger New Mexico State University", "USDA-NRCS Natl Soil Survey Center (retired)
09:15-09:30	34148	Quaternary landscape dynamics of the Venetian Pre-Alps (NE Italy) revealed through paleosols micromorphology	Laura Fracasetti Department of Geosciences, University of Padova, Padua, Italy
09:30-09:45	32380	Final stage of loess accumulation in the periglacial zone of the Northern Caspian region.	Marina Lebedeva V.V. Dokuchaev Soil Science Institute
09:45-10:00	34548	Formation and Evolution of Volcanic Soils in Central Apennine Mountains (Molise, Italy)	Alessio Manzo University of Molise

*Subject to change

Parallel Sessions

10:00-10:15	33859	Unveiling the Origins of Northern Cameroon's Linear-Dune Landscape	R.K. Enang Soil Science Department, Faculty of Agronomy and Agricultural Sciences, University of Dschang
10:15-10:30	32913	Micromorphological Insights into Intra-Urban Spatial Dynamics: A Case Study from Oudenaarde (Belgium)	Meihui Li Vrije Universiteit Brussel
10:30-10:45	32717	Stepped Canal and Levigation Pools in Teotihuacan, a study through their micromorphological and hydraulic relationships	Ma. del Carmen Gutiérrez Castorena Programa de Edafología. Colegio de Postgraduados.
10:45-11:00	36107	Species-Specific Impact of Earthworm Ecological Groups on Soil Coprolite Physico-Chemical Properties and Microstructure	Agnieszka Józefowska Department of Soil Science and Agrophysics, University of Agriculture in Krakow, Krakow, Poland
11:15-11:30	32402	The Micromorphology of Brazilian Oxisols (Latossolos): variability and fertility connections of the most representative agricultural soil in the tropics	Carlos Schaefer Federal University of Rio de Janeiro, Geography Department
11:30-11:45	36376	Microscopic Morphological Characteristics of the Albic Layer in the Black Soil Region of Northeast China	Xin-Yu Liu; Zhong-Xiu Sun; Si-Yi Duan; Wei-Wen Qiu; Ying-Ying Jiang Shenyang Agricultural University
11:45-12:00	34561	Micromorphological mechanisms reveal 45-year Anthropogenic barrier layer formation in Northeast China's Black Soil Region: pore connectivity collapse drives sustainable management imperative	Xiao-Miao Yu Shenyang Agricultural University
12:00-12:15	32224	Integrating Micro- and Submicromorphological Data for Diagnosing Redoximorphic Conditions in Soils of Topographic Depressions in the Oka-Don Lowland	Kornilova Anastasiia Lomonosov Moscow State University", "Dokuchaev Soil Science Institute

*Subject to change



Parallel Sessions

Monday, June 8		Room: Expo Center, Hall 4, 4202	
Session 102001		Magnetic Enhancement of the Soils in Urban/Industrial Areas: Sources and Properties of Anthropogenic Magnetic Particles and Its Influences on Soil Genesis	
		Convener: Xue-Feng Hu, School of Environmental and Chemical Engineering, Shanghai University, Shanghai 200444, China	
		Co-Convener: Kokyo Oh, Center for Environmental in Saitama, Saitama 347-0115, Japan	
Schedule	ID	Title	Presenter
13:15-13:30	32854	Characterization of magnetic particles emitted from vehicle and train	Shinichi Yonemochi Center for Environmental Science in Saitama
13:30-13:45	36346	Vertical distribution of magnetic property of urban soil profiles in Shanghai and its environmental implications	Kokyo Oh Center for Environmental Science in Saitama
13:45-14:00	34998	Magnetic Characteristics of Typical Soils in Guangdong Province and Their Responses to Parent Materials and Land Use	Ying Lu South China Agricultural University
14:00-14:15	33028	Magnetic properties of paleosols in loess and coastal plain of the Yangtze River catchment	Weiguo Zhang East China Normal University

*Subject to change



Parallel Sessions

14:15-14:30	31629	Magnetic properties and geochemical elements, climate change in loess/paleosol from the eastern Chinese Loess Plateau	Pingguo Yang Shanxi Normal University
14:30-14:42	33712	Mineral magnetic characterization of surface soil in an industrial area within Guangzhou city: Implications for heavy metal pollution monitoring	Tingping Ouyang South China Normal University
14:42-14:54	34285	Study on Optically Stimulated Luminescence Dating and developmental model of alpine meadow soil in ThreeRiver Headwater Region	Xianba Ji Qinghai Normal University
14:54-15:05	35069	Impacts of Vehicular Non-Exhaust Emissions on Magnetic Enhancement and Heavy Metal Accumulation in Urban Road Dust	Xin-Ming Ying Shanghai University
15:05-15:15	34056	Variation in Magnetic Susceptibility of the Red Soils in the Leizhou - Hainan Region, South China, and its Implications for the Diversity of Parent Rocks and Pedogenic Environment	Da-Lin Nie Shanghai University

*Subject to change

Parallel Sessions

Thursday, June 11		Room: Expo Center, Hall 4, 4201	
Session 102003		Soil Structure and Ecosystem Functioning in Earth's Critical Zone	
		Convener: Gary Feng, USDA-ARS, Genetics and Sustainable Agricultural Research Unit	
		Co-Conveners: Wei Dai, Louisiana State University-Agricultural Center, 262 Research Station Dr., Bossier City, LA 71112. Xi Zhang, Department of Biosystems Engineering and Soil Science, University of Tennessee, Knoxville, TN 37996.	
Schedule	ID	Title	Presenter
11:15-11:30	31887	Redefining soil structural vulnerability to enhance ecosystem services in a changing world	Wei Hu New Zealand Institute for Bioeconomy Science Limited, Plant & Food Research Group
11:30-11:45	32728	Silicon cycling model and its roles on soil evolution in a subtropical critical zone	Jin-Ling Yang Institute of Soil Science, Chinese Academy of Sciences
11:45-12:00	32818	Implications of land uses and land cover conversion on soil quality in the Lower Alwero watershed Gambela Region Western Ethiopia	Shimeles Damene School of Development Studies, College of Social Sciences, Arts, and Humanities (CSS-ArTH), Addis Ababa University
12:00-12:15	33153	Microstructural controls on carbon cycling and nematode communities across land-use agroecosystems and climate scenarios	Mengqi Wu Department of Soil System Science, Helmholtz-Centre for Environmental Research - UFZ, Halle, Germany

*Subject to change

Parallel Sessions

12:15-12:30	34180	Effects of Increased Temperature, Elevated CO ₂ Concentrations and Drought on Soil Structure and Gas Diffusion in a Submontane Grassland Soil	Vincent Felde Leibniz University Hannover
13:30-13:45	33196	Straw incorporation mitigates polyethylene residual film-induced suppression of fungal necromass	Conghui Liu Northwest Agricultural and Forest University
13:45-14:00	33678	Geodiversity-Driven Patterns of <i>Prunus ledebouriana</i> in Tarbagatay Mountain Landscapes of SE Kazakhstan	Malgorzata Suska-Malawska Faculty of Biology, University of Warsaw
14:00-14:15	33963	Geological controls and mineral-based restoration of degraded soils - insights from South West Nigeria: A synthesis of pedogenetic drivers for a shared future	Igonor Emmanuel Eghietsemeh University of Johannesburg
14:15-14:30	34037	Continuous ¹³ C-CO ₂ labelling reveals mechanisms of SOC stabilization in constrained, poorly structured soil	Katherine Weigh Department of Primary Industries and Regional Development, NSW
14:30-14:45	34084	Size - Specific Effects of Intra-Aggregate Pore Size Distribution on Soil Aggregate Stability	Chaonan Liu Northeast Forestry University
14:45-15:00	34107	Spatial heterogeneity shapes enantioselective horizontal transfer of antibiotic resistance genes by pydiflumetofen in agricultural soils	Boya Gao Ocean University of China
15:00-15:15	34268	Evolution of SRO Fe oxides in soils along a paddy field chronosequence: A Fe isotope perspective	Zhao Wang Institute of Soil Science, Chinese Academy of Sciences

*Subject to change

Parallel Sessions

16:30-16:45	34479	Investigating growing environment, drip irrigation frequency, and farmyard manure rate on soil bulk density and water retention characteristics of a tomato field	Gabriel O. Awe Department of Soil Resources and Environmental Management, Ekiti State University, Ado-Ekiti, Nigeria
16:45-17:00	34574	Assessing Soil Function Loss in Traditional Gold Mining Landscapes Using Function-Based Soil Quality Indicator Models	Meaza Zenebe Gerehans Raya University, Tigray, Ethiopia", "Mekelle University, Tigray, Ethiopia
17:00-17:15	34596	Labile carbon inputs moderate the temperature sensitivity of protein depolymerisation in soils from contrasting long-term cropping and nitrogen management systems	Xiaojuan Wang School of Agriculture Food, and Ecosystem Sciences, The University of Melbourne, Parkville, VIC, Australia
17:15-17:30	35005	Nonstationary response evolutionary mechanisms of aggregate binding agents in Quaternary red soils during 400 years of cultivation	Si-Yi Duan Shenyang Agricultural University
17:30-17:45	35256	Deep soil nitrate accumulation depends on the regolith structure and surface land management	Shunhua Yang State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences
17:45-18:00	35358	Pore-Scale Structural Regulation of Soil Carbon Mineralization during the Corn Growing Season in a Yellow-Brown Soil	Tian Tian Anqing Normal University
18:00-18:15	35901	Stabilizing Soil Aggregates with Synthetic Polymers: A Wet Adhesion Perspective	Gang Li TheHongKongPolytechnicUniversit y
18:15-18:30	36116	Spatial distribution and influencing factors of the argillic horizon in the Northeast Black Soil Region	Xi-Ting zhang Shenyang Agricultural University

*Subject to change

Parallel Sessions

Monday, June 8		Room: Expo Center, Hall 4, 4201	
Session 102005		Soil Survey Technology and Spectral Database	
		Conveners: Ganlin Zhang, Nanjing Institute of Geography & limnology, Chinese Academy of Sciences Jianping Qian, Chinese Academy of Agricultural Sciences	
		Co-Conveners: Wenbin Wu, Institute of Agriculture Resources and Regional Planning, Chinese Academy of Agriculture Sciences Yuguo Zhao, Institute of Soil Science, Chinese Academy of Sciences Changbao Ma, Cultivated land quality monitoring and protection center, Ministry of Agriculture and Rural Affairs, People's Republic of China Eyal Ben-Dor, Tel Aviv University Yijian Zeng, University of Twente in Enschede Zhou Shi, Zhejiang University	
Schedule	ID	Title	Presenter
13:15-13:30	35624	The 3rd National Soil Survey of China: Integrating the Past and the Future	Ganlin Zhang Institute of Soil Science, Chinese Academy of Sciences
13:30-13:45	33387	Technical Approaches and Practices for Assessing Agricultural Suitability of Soils in China	Ke-ning Wu China University of Geosciences, Beijing
13:45-14:00	35633	Uncovering the spatial heterogeneity and drivers of grassland soil quality in Northwest China	Laiming Huang Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences
14:00-14:15	34452	Spatial Status and Variability of Micronutrients and Secondary Nutrients in Soils under Diverse Cropping Systems of Theni District, Tamil Nadu, India	M Elayarajan Professor (SS&AC)

*Subject to change

Parallel Sessions

14:15-14:30	31712	Environmental factors influencing soil particle size distribution and their spatial distribution characteristics in the Tarim River Basin	Yang Hu Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences
14:30-14:45	33999	Soil acidification trajectories and cropland ecological multifunctionality under intensified nitrogen input in Henan Province	Ling Li Henan Agricultural University
14:45-15:00	35191	A Novel Soil Type Inference Method Using AI Large Language Models	Jie Liu Institute of Soil Science, Chinese Academy of Sciences
15:00-15:15	33774	The National Soil Archive of China	Zhiying Guo, Yuguo Zhao Institute of soil science, Chinese Academy of Sciences
16:30-16:45	33475	Standards and Protocols for Soil Spectral Reflectance to Enable Remote and Precision Soil Mapping	Eyal Ben Dor Tel Aviv University
16:45-17:00	33761	Building a National Soil Spectral Library from China's Third Soil Survey	Changkun Wang; Yuguo Zhao Institute of Soil Science, Chinese Academy of Sciences
17:00-17:15	35155	A Global Transformer Framework for Aligned Soil Spectral Analysis Across Sensors and Continents	Nikolaos Tziolas University of Florida
17:15-17:30	35186	Toward Global Soil Spectral Interoperability: Domain-Invariant Latent Embeddings with Federated Learning	Nikolaos Tziolas University of Florida
17:30-17:45	34451	Construction of Hainan Soil Spectral Library Driven by Large Model and Mapping of Organic Matter at 30m Resolution	Zhen Wang Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences
17:45-18:00	34589	Effects of Soil pH on Spectral Inversion of Soil Organic Matter in Survey-Based Soil Spectral Libraries	Tianqi Lv State Key Laboratory of Efficient Utilization of Arid and Semi-arid Arable Land ∨ Key Laboratory of Agricultural Remote Sensing, Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences

*Subject to change



Parallel Sessions

Tuesday, June 9		Room: Expo Center, Hall 5, 5203	
Session 104002		Classification Systems for the Anthropocene and Human-Made Soils	
		Conveners: Cornie van Huyssteen; Chair - Commission 1.4: Soil Classification, University of the Free State, South Africa Cezary Kabala, chair of the IUSS Working Group WRB, Wroclaw University of Environmental and Life Sciences, Poland	
		Co-Conveners: David Badia-Villas; Vice-chair - Commission 1.4: Soil Classification, Universidad Zaragoza, Spain Lúcia Anjos; Universidade Federal Rural do Rio de Janeiro, Brazil Joey Shaw; USDA-NRCS, USA Stephan Mantel, vice-chair of the IUSS Working Group WRB, ISRIC World Soil Information, Wageningen, The Netherlands	
Schedule	ID	Title	Presenter
11:15-11:30	33011	Early collaborations between China and the US on Soil Survey—James Thorp’ s visit, 1933-1936	Curtis Monger New Mexico State University", "USDA-NRCS Natl Soil Survey Center (retired)
11:30-11:45	31827	The definitions of field characteristics in the WRB Field Guide	Peter Schad Technical University of Munich
11:45-12:00	34472	Towards a simplified key and groupings of the World Resource Base for Soil Resources (WRB)	Stephan Mantel ISRIC World Soil Information, Wageningen, the Netherlands
12:00-12:15	36487	Simplification lessons for the WRB diagnostics on the modernized Hungarian Soil Classification System	Márta Fuchs Department of Soil Science, Institute of Environmental Sciences, Hungarian University of Agriculture and Life Sciences, Gödöllő, Hungary

*Subject to change

Parallel Sessions

12:15-12:30	33935	Soil classification as a carrier of functional information in viticultural terroir: linking pedogenesis and wine metabolomics	Paola Bambina University of Palermo
13:30-13:45	32395	History of the concept of Technosols, and other soils in urban areas	Wolfgang Burghardt Soil Technology, Faculty of Biology, University Duisburg-Essen
13:45-14:00	32640	Extending Technosols? The status of human-transported materials in soil classification	Marcin Świtoniak Nicolaus Copernicus University in Toruń, Faculty of Earth Sciences and Spatial Management, Department of Soil Science and Landscape Ecology
14:00-14:15	31943	Soils constructed and transformed by different cultures in the Mexico Basin: from the Teotihuacans to the Aztecs	Ma. del Carmen Gutierrez-Castorena Colegio de Postgraduados
14:15-14:30	34517	Soils of stone-wall bench terraced anthroscapes: A proposal for their classification	Jaime Boixadera Lleida University
14:30-14:45	33014	Proposals for Urbic Technosols in World Reference Base	Tatiana V. Prokof'eva Faculty of Soil Science, Lomonosov Moscow State University
14:45-15:00	33150	Towards better classification of human-altered soils In WRB: A systematic framework and new qualifiers	Stefaan Dondeyne Department of Geography, Ghent University", "Gembloux Agro-Bio Tech, Université de Liège", "Dep. of Soil Science and Land Resources, Universitas Padjadjaran
15:00-15:15	33692	The rationale behind the revision of the German Soil Systematics	Einar Eberhardt Dep. Groundwater and Soil, Bundesanstalt für Geowissenschaften und Rohstoffe (BGR)
16:30-18:30	-	Commission 1.4 & WRB Business Meetings	-

*Subject to change



Parallel Sessions

Friday, June 12		Room: Expo Center, Hall 4, 4203	
Session 105001		Advancing Pedometrics	
		Convener: Alessandro Samuel-Rosa, Federal Technological University of Paraná, Brazil	
Schedule	ID	Title	Presenter
09:00-09:15	35352	The Uncertainty of the Carbon Sequestration Potential of Arable Soils in European Russia at different scales	Joulia L. Meshalkina Soil Science Faculty, Lomonosov Moscow State University, Moscow, Russia
09:15-09:30	35272	Exploring the controlling factors of soil spatial heterogeneity with high-resolution environmental covariates: A case study of wildfire-affected and reclaimed artificial forests in Japan	Takuya O. Takahashi Department of Geography, Tokyo Metropolitan University
09:30-09:45	35181	Use of Geophysical Methods for Mapping Eucalyptus Root Systems in Different Soil Types	Marcio Rocha Francelino Universidade Federal de Viçosa
09:45-10:00	34877	Mapping Soil Classes in highly imbalanced environments with Machine-Learning Prediction of Diagnostic Properties and Hierarchical Rule-Based Integration	Trenti William University of Bologna
10:00-10:15	34586	Pedological controls reshape global projections of soil respiration and soil carbon-climate feedbacks under climate change scenarios	Carlos Schaefer GeoCiS (Geotechnologies in Soil Science Research Group), Department of Soil Science, Luiz de Queiroz College of Agriculture (ESALQ), University of São Paulo, Piracicaba, Brazil
10:15-10:30	32442	Climate and Land Use Independent Modelling of Soil Carbon Stocks	Yuting Dai Institute of Subtropical Agriculture Chinese Academy of Sciences
10:30-10:45	32253	AI Multiagent Systems as Partners in Discovery and Knowledge Synthesis for Soil Science Research	Budiman Minasny The University of Sydney

*Subject to change

Parallel Sessions

Monday, June 8		Room: Expo Center, Hall 4, 4203	
Session 106003		Reading Soil Memory Across Geological Timescales: Traditional Insights and Novel Approaches	
		Conveners: Francisco Sérgio Bernardes Ladeira, Institute of Geosciences, State University of Campinas (UNICAMP), Brazil Maria Bronnikova, Texas Tech University, USA; Institute of Geography Russian Academy of Sciences, Russia	
		Co-Conveners: Brad Sion, Desert Research Institute, USA Xue-Feng Hu, Shanghai University, China	
Schedule	ID	Title	Presenter
13:15-13:30	33430	New findings from the Baix loess profile (Rhône Rift Valley, southern France) in the climatic transition zone between Central and Southern Europe	Daniela Sauer Department of Physical Geography, Institute of Geography, University of Göttingen, Germany
13:30-13:45	35185	The basalt - laterite sequences in the Leizhou Peninsula, South China: Indicating multiple alternations between volcanic eruption and laterite formation in the tropical region since the Middle Pleistocene	Xue-Feng Hu Shanghai University
13:45-14:00	34992	Distribution, characteristics, and formation mechanism of siliceous restrictive layers in the black soil region of Northeast China	Zhong-Xiu Sun Shenyang Agricultural University
14:00-14:15	34408	Paleosols as a key for piecing together the past climates and the intricacies of soil processes	Andrey Alekseev Institute of Physicochemical and Biological Problems in Soil Science of Russian Academy of Sciences
14:15-14:30	34243	Acid sulphate pedogenesis of the geological past of the Earth and beyond it	Tatiana Alekseeva Institute of Physicochemical and Biological Problems in Soil Science of Russian Academy of Sciences, Pushchino, Russia

*Subject to change

Parallel Sessions

14:30-14:45	32900	Informational role of buried Podzols in reconstruction of Holocene pyrogenic activity: a case study of Northern European Russia	Dmitriy Petrov Department of Soil Geography and Evolution and Radiocarbon Laboratory, Institute of Geography, Russian Academy of Sciences
14:45-15:00	33601	Earthen archaeological sites as archives of information on the evolution of soils and paleoclimate of the second half of the Holocene, dry steppe zone, Southern Cis-Urals, Russia	Alyona Sverchkova Institute of Geography, Russian Academy of Sciences
15:00-15:15	33073	Deciphering the Construction of the Ancient City of Palenque and its Effects on the Landscape	Laurin Reim Chair of Soil Sciences, School of Life Sciences, Technical University of Munich", "5Soil Biophysics and Environmental Systems, School of Life Sciences, Technical University of Munich", "MITIGATE GmbH
16:30-16:45	33013	Paleosols and Their Classification in US Soil Taxonomy	John M. Galbraith School of Plant and Environmental Sciences, Virginia Tech
16:45-17:00	36611	Radiocarbon dating: new approaches in soils and paleosols - are these new opportunities or problems?	Elya Zazovskaya Center for Applied Isotope Studies, University of Georgia
17:00-17:15	34502	Paleoenvironmental significance of earthworm aestivation chambers from Cretaceous paleosols of Araripe Basin, Brazil	Francisco Sérgio Bernardes Ladeira Unicamp
17:15-17:30	35485	Palaeobotanical records from soil infill of rodent burrows reveal Mid- to Late-Holocene environmental dynamics: A case study from the central chernozem region of Russia	Valerii Pimenov Lomonosov Moscow State University", "Belgorod State National Research University
17:30-17:45	35098	Revisiting krotovina formation using luminescence dating - a case study from NE China	Aimin Zhang Institute of Soil Science, Chinese Academy of Sciences
17:45-18:00	34874	Testing the Transferability of Paleosol Geochemical Proxies in Tropical Maastrichtian Climates: Evidence from India	Anjali Kumari Panjab University, Chandigarh, India", "Department of Earth Science, Indian Institute of Technology Bombay, Mumbai
18:00-18:15	36111	Climate-driven silicate weathering and biogeochemical coupling in black soils	Cheng-Cheng Zhang Shenyang Agricultural University

*Subject to change



Parallel Sessions

Tuesday, June 9		Room: Expo Center, Hall 4, 4202	
Session 107001		Permafrost-Affected Soils of the Changing High-Latitude and High-Altitude Environments	
		Convener: Alexey V. Lupachev, PhD in Biology (Soil Science), Senior research scientist in the Institute of physico-chemical and biological problems in soil science RAS, Pushchino, Russian Federation. Chair, Commission 1.7/3.8: Permafrost Affected Soils IUSS	
		Co-Conveners: Adrian Unc, PhD in Soil Science, University of Guelph, Agronomist, soil scientist and environmental microbiologist, Professor at the Memorial University of Newfoundland and affiliated with the McGill University; Co-chair, Commission 1.7/3.8: Permafrost Affected Soils IUSS Alexander P. Ginzburg, PhD student in Biology (Soil Science) in the Institute of physico-chemical and biological problems in soil science RAS, Pushchino, Russian Federation	
Schedule	ID	Title	Presenter
09:00-09:15	34431	Climate-Induced Changes in Soil-Forming Factors and Processes in Permafrost-Affected Areas: Positive and Negative Trends (A Review)	Sergey Goryachkin Institute of Geography, Russian Academy of Sciences
09:15-09:30	31549	Soil-Permafrost Complexes of the Russian North-East Arctic Accumulative Sea Coasts: Structure, Properties, Diagnostics, Ecological Functions	Aleksei Lupachev Institute of Physicochemical and Biological Problems of Soil Science, Russian Academy of Sciences
09:30-09:45	33690	Heterogeneity of cryogenic soil cover related to development of patterned ground of Kolguyev Island (Barents Sea)	Anastasia Shmatova Institute of Geography, Russian Academy of Sciences

*Subject to change

Parallel Sessions

09:45-10:00	32531	Features of Soil Formation in Khasyreys (Tundra Thermokarst Depressions)	Alexandr Pastukhov Institute of Biology Komi SC UB RAS (Syktyvkar, Russia)
10:00-10:15	32526	Landscape Conditions of Soil Formation in Drained Lake Basins of the Russian European North	Dmitry Kaverin Institute of Biology Komi SC RAS
10:15-10:30	31822	Structural Features of Soils and Upper Permafrost of Eastern Chukotka Coastal Plains	Nikita D. Samokhvalov Lomonosov Moscow State University
10:30-10:45	31795	Suggestions for Classifying Soils of the Retrogressive Thaw Slumps Impact Zone in Future Russian and International Soil Taxonomies	Alexander P. Ginzburg Institute of Physico-Chemical and Biological Problems in Soil Science RAS
10:45-11:00	36166	Organic-matter rich soils hidden inside alpine periglacial blockfields: paleosols or aeolian deposits?	Michele E. D'Amico DISAA - University of Milano
11:15-11:30	33192	Qualitative Field Observations of Cryostructures and Visible Ice Content Can Produce Quantitative Estimates of Excess Ice in Permafrost-Affected Soils	Megan L. Andersen University of Alaska Fairbanks
11:30-11:45	35940	Soil structural transformation under multiple freeze-thaw cycles with comprehensive morphological and topological analysis: the hypothesis of periodicity	Tolstygin Kirill D. Laboratory of digital twins of agricultural landscapes, Dokuchaev Soil Science Institute, Moscow, Russia
11:45-12:00	36147	Effects of freeze-thaw to erosional transport of Mollisol carbon and nitrogen	Xiaoyi Yang Northwest A&F University

*Subject to change

Parallel Sessions

12:00-12:15	34740	Characterizing Pan-Arctic Soil Organic Carbon: A Comprehensive Database of Particulate and Mineral-Associated Fractions	You Jin Kim Kyung Hee University
12:15-12:30	32320	Enzymatic activity in podzols of the north of Yamalo-Nenets Autonomous Okrug	Marina Rozanova Faculty of Soil Science, Lomonosov Moscow State University
13:30-13:45	33459	Minerals and Peroxidases Regulate Soil Carbon Stability in Permafrost	Guanghui Yu Tianjin University
13:45-14:00	31913	Wildfires accelerate permafrost area loss via reducing soil organic matter	Dan Zhu College of Urban and Environmental Sciences, Peking University
14:00-14:15	34401	Assessment of Carbon Stocks in Soils of the Western Siberian North	Maria Strizhakova Lomonosov Moscow State University, Faculty of Soil Science, Moscow, Russia
14:15-14:30	36617	Soil organic carbon stock assessment in cryoturbated turf/grass mounds in Kobresia Meadows, Qinghai-Tibetan Plateau	Chien-Lu Ping University of Alaska Fairbanks
14:30-14:45	33389	Environmental controls on soil organic matter composition across a glacial-landscape gradient: A case study of debris-covered glaciers in Gongga Mountain, southwest China	Wenjing Mao Institute of Mountain Hazards and Environment, Chinese Academy of Sciences, "University of Chinese Academy of Sciences
14:45-15:00	32539	Freeze-Thaw-Driven Soil Moisture Return Significantly Contributes to Spring Phenology on the Warming Qinghai-Tibet Plateau	Hanrui Zhao State Key Laboratory of Hydraulics and Mountain River Engineering, College of Water Resource and Hydropower, Sichuan University

*Subject to change

Parallel Sessions

15:00-15:15	36618	Mattic layer ruptures in the Third pole: mechanisms, distribution, consequences, and monitoring	Zhuodong Jiang Shenyang Agricultural University
16:30-16:45	34886	Vertical Distribution of Methane Concentration in Permafrost-Affected Soils of Central Yakutia	Nikita I. Tananaev North-Eastern Federal University, Yakutsk, Russia", "Vitus Bering Kamchatka State University, Petropavlovsk-Kamchatsky, Russia
16:45-17:00	34229	Climate trends and soil greenhouse gas emission at the southern permafrost boundary (Western Siberia, Russia)	Olga Goncharova Department of Soil Science, Lomonosov Moscow State University, Moscow, Russian Federation
17:00-17:15	32894	Greenhouse Gas Fluxes from Different Species of Epigeic Lichen Species on Arctic Tundra Cryosols	Anastasia I. Matvienko Sukachev Institute of Forest SB RAS, Federal Research Center "Krasnoyarsk Science Center SB RAS"
17:15-17:30	32014	Greenhouse gas fluxes by the epiphytic lichen Bryoria in response to projected moisture increase in boreal forests underlain by thawed permafrost soils	Oxana V. Masyagina Sukachev Institute of Forest SB RAS, Federal Research Center "Krasnoyarsk Science Center SB RAS"
17:30-17:45	32000	The CO ₂ and CH ₄ fluxes from the epiphytic lichen Evernia mesomorpha collected in boreal forest underlain by cryosols	Svetlana Y. Evgrafova Sukachev Institute of Forest SB RAS, Federal Research Center "Krasnoyarsk Science Center SB RAS"
17:45-18:00	34352	Soils of European Arctic cities under climate change	Andrey Dolgikh Institute of Geography, Russian Academy of Sciences
18:00-18:30	-	Closing of the session, overall conclusions, statements and resolution	Alexey Lupachev, Aleksandr Ginzburg

*Subject to change



Parallel Sessions

Tuesday, June 9		Room: Expo Center, Hall 4, 4201	
Session 108001		Advances in Remote Sensing for Soil Property Mapping	
		Convener: Miao Lu, State Key Laboratory of Efficient Utilization of Arid and Semi-arid Arable Land in Northern China, Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences, Beijing 100081, China Co-Conveners: Qiangyi Yu, State Key Laboratory of Efficient Utilization of Arid and Semi-arid Arable Land in Northern China, Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences, Beijing 100081, China Xiaolin Sun, College of Agriculture, Guangxi University, Nanning 520004, China Xianli Xie, State Key Laboratory of Soil & Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences, No.298 Chuangyou Road, Jiangning District, Nanjing, China	
Schedule	ID	Title	Presenter
13:30-13:45	35457	Mapping Soil Salinity with Satellite Embeddings and Environmental Covariates	Peng Fu Louisiana State University AgCenter, Louisiana State University
13:45-14:00	35192	A Meta Learning Framework for Spatio-temporal Mapping of Cropland Topsoil pH in Southern China	Nuo-Xi Qiu University of Chinese Academy of Sciences", "Institute of Soil Science, Chinese Academy of Sciences
14:00-14:15	32592	Intelligent Monitoring of Soil Salinization by Integrating Agronomic Features	Miao Lu Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences

*Subject to change



Parallel Sessions

14:15-14:30	36597	A Property-Dependent Strategy for Digital Soil Mapping: Optimizing Sentinel-2 Time-Series for Stable and Dynamic Soil Attributes	Kriuchkov Nikita Faculty of Biology, Shenzhen MSU-BIT University, Shenzhen, China
14:30-14:45	34214	Multi-view hyperspectral feature can improve soil property retrieval	Lixia Ma Institute of Soil Science, Chinese Academy of Sciences
14:45-15:00	33557	Accurate Time-Series Retrieval of Soil Salinity from CYGNSS Data by Physics-Based Surface Correction and Semi-Empirical Model	Li Wang The Institute of Agricultural Resources and Regional Planning Chinese Academy of Agricultural Science
15:00-15:15	35156	Physically supervised harmonic framework for spatial characterization of apparent soil thermal diffusivity between 5 and 10 cm	Martín Francia Department of Soils and Water, Faculty of Agronomy, Universidad de la República, Montevideo, Uruguay
16:30-16:45	33135	Soil Reflectance Composite and Terrain Attributes for Digital Soil Mapping in a Mediterranean Cropland District	Simone Priori University of Tuscia, Department of Agriculture and Forest Sciences
16:45-17:00	33071	Digital mapping of soil organic matter under conservation tillage in Northeast China based on multi-source remote sensing	Hongjun Liu China Agricultural University

*Subject to change



Parallel Sessions

17:00-17:15	32778	Integrating UAV-Mounted Gamma-Ray Spectrometry and Soil Laboratory Analysis to Characterize Sediment Erosion, Composition, and Pollution in Vineyards	Liam Delaney Stellenbosch University
17:15-17:30	32228	Geostatistical fusion of field and remote sensing data for assessing soil salinity in southern region of Morocco	Mohamed Ghassan Center for Sustainable Soil Sciences,UM6P, Mohammed VI Polytechnic University
17:30-17:45	31944	Integrating Remote Sensing and Soil Drainage Mapping to Predict Salinization Risk	Grace Gowera University of Saskatchewan
17:45-18:00	31841	Study on the coupling relationship between agricultural water and soil resources carrying capacity and grain production capacity in typical black soil regions of Northeast China	Sidi Wang Shenyang Agricultural University
18:00-18:15	35108	Digital Mapping of Soil Clay and Organic Carbon using Remote Sensing and Random Forest in Semi-arid watershed of Southern India	Bullo yami Department of Soil Science, ICAR-Indian Agricultural research institute, New Delhi, India", "Division of Resource Management, ICAR-Central Research Institute for Dryland Agriculture, Hyderabad-500 059, Telangana, India

*Subject to change



Parallel Sessions

Tuesday, June 9		Room: Expo Center, Hall 4, 4201	
Session 108002		Democratizing Digital Soil Mapping: Innovative Technologies for Global Soil Services and Solutions	
		Convener: Asim Biswas, University of Guelph	
		Co-Conveners: GanLin Zhang, Nanjing Institute of Geography and Limnology, Chinese Academy of Sciences	
		Zhou Shi, Zhejiang University	
		Songchao Chen, Zhejiang University	
		Lin Yang, Renmin University of China	
Schedule	ID	Title	Presenter
09:00-09:05	-	Introduction of the Session	Asim Biswas
09:05-09:18	33545	Innovative Technologies for European and Global Soil Services and Solutions -SoilWise Project Achievements	Tomas REZNIK Masaryk University
09:18-09:31	35810	Projected intensification of soil salinization in global drylands under future aridity increase	Dietian Yu Zhejiang University
09:31-09:44	32893	Future Projections of Global Belowground Net Primary Productivity in Response to Climate Change	Menghan Li Central China Normal University
09:44-09:57	33001	A Multi-Source Product Assessment and Uncertainty-Aware Modeling Framework for SOC Mapping in China	Xunjie Ma Sichuan Agricultural University

*Subject to change



Parallel Sessions

09:57-10:10	32436	The spatiotemporal variation in soil inorganic carbon	Xiaodong Song Institute of Soil Science, Chinese Academy of Sciences
10:10-10:23	34412	Integrating Proximal and Remote Sensing to Cross-scale Quantify Soil Organic Carbon and Moisture Dynamics via Multi-model Learning	Sheng Wang Pioneer Center Land-CRAFT, Department of Agroecology, Aarhus University, Aarhus, 8000, Denmark
10:23-10:36	36497	UAV assisted high-resolution mapping of soil organic carbon and nitrogen in the mattic layer of the Tibetan alpine meadow	Shuo-Peng Zhang Shenyang Agricultural University
10:36-10:49	35698	Development of Digital Fertility Maps for Policy Decision and Farm-Specific Recommendations to Enhance Agricultural Productivity in Kenya; A progress Report	Golicha David Duba Kenya Agricultural and Livestock Research Organization (KALRO)
10:49-11:00	-	General Q&A	Asim Biswas
11:15-11:28	35232	Digital Soil Mapping Plus Complexity Analysis: an Effective Approach to Identify Sensitive Areas of Landscape Evolution	Shuran Gao BeijingNormalUniversity
11:28-11:41	34506	Warming and Drying Patterns across Iran: A Three-Decade Remote Sensing Perspective on Land Surface Temperature, Soil Moisture, and Vegetation Dynamics	Farnaz Ahmadi Soil Science Department, University of Tehran, Karaj, Iran
11:41-11:54	319B11	Innovation in Large-scale Soil Pollution Investigation Driven by Multi-source Data: A Transition from Grid-based to Precision-based Approaches	Guanlin Guo Technical Centre for Soil, Agriculture and Rural Ecology and Environment, Ministry of Ecology and Environment
11:54-12:07	33855	Predicting Textural Classes Using GPR-derived Geophysical Data and Optimized Machine Learning in Subtropical Forests	Jairo Calderari de Oliveira Junior Federal University of Parana (Department of Soil Science)
12:07-12:25	-	General Q&A	Asim Biswas
12:25-12:30	-	Closing	Asim Biswas

*Subject to change

Parallel Sessions

Tuesday, June 9		Room: Expo Center, Hall 4, 4203	
Session 108003		Leveraging Site and Spatial Data for Soil Monitoring	
		Convener: Qiangyi Yu, Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences Co-Conveners: Bingbo Gao, China Agricultural University Songchao Chen, Zhejiang University Wenbin Wu, Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences	
Schedule	ID	Title	Presenter
13:30-13:45	32614	Assessing human activity impacts on soil nutrient condition in Australia.	Ho Jun Jang The University of Sydney
13:45-14:00	34934	Step towards a 1:100,000-scale Soil Map of Italy supporting the implementation of a national soil monitoring network and service	Giovanni L' Abate CREA Council for Agricultural Research and Economics
14:00-14:15	33548	Using legacy data and geostatistics for assessing soil organic carbon change in the Sele River Plain (southern Italy)	Gabriele Buttafuoco National Research Council of Italy, Institute for Agricultural and Forest Systems in the Mediterranean, Rende CS. Italy
14:15-14:30	32532	Well-facilitated Farmland Construction enhances soil organic carbon storage in China	Zheng Wang Zhejiang University

*Subject to change

Parallel Sessions

14:30-14:45	33045	Low-Cost Sensors for Monitoring Soil Condition in Landscape Restoration	Vanessa Wong Monash University
14:45-15:00		Development and Applications of a Soil Spectral Library in Hainan, China	Zheng Wang Zhejiang University
15:00-15:15	32118	Standardized Soil Water Deficit Index for Monitoring Agricultural Drought in India with a Machine Learning Extended Root Zone Soil Moisture Dataset	Alka Rani Division of Soil Physics, ICAR-Indian Institute of Soil Science
16:30-16:45	35238	Improve the Quality and Effectiveness of Cropland Monitoring Network through the Rational Use of Crowdsourced Data	Suxin Zhang Institute of Agricultural Resources and Regional Planning, CAAS
16:45-17:00	34646	Measuring Ephemeral Gully Morphology Using a Portable Gullimeter and Image- based Techniques	Harnoordeep Singh Mann School of Environmental Sciences, University of Guelph, Canada
17:00-17:15	34196	Modeling of spatiotemporal heterogeneity of agrochemical properties of soils within the territory of testing agricultural crop varieties	Bodalev Konstantin Andreevich Kazan Federal University
17:15-17:30	33978	Quantifying Pan-European Soil Organic Carbon Trends and Associated Uncertainty for Soil Health Monitoring	Ali Sakhaee Thünen Institute of Climate-Smart Agriculture
17:30-17:45	32772	WoSIS: An international effort to share standardised soil data for the world	Laura Poggio ISRIC - World Soil Information
17:45-18:00	32319	Soil Fertility Index and Spatial Variability as Drivers of Site-Specific Fertilizer Management in the Tigray Highlands	Mulugeta Sebhateab Tesfay Mekelle University", "Land Resources Management and Environmental Protection, Mekelle University

*Subject to change

Parallel Sessions

Friday, June 12		Room: Expo Center, Hall 4,4201	
Session 108004		Operational Digital Soil Mapping: Fitness for Use of DSM Products: Pitfalls to Avoid and Way Forward	
		Convener: Laura Poggio, ISRIC-World Soil Information	
		Co-Conveners: Feng Liu, Institute of Soil Science, Chinese Academy of Sciences D G Rossiter, ISRIC-World Soil Information, david.rossiter@isric.org; Section of Soil & Crop Sciences, Cornell University (USA) Mercedes Román Dobarco, NEIKER Basque Institute for Agricultural Research and Development (E)	
Schedule	ID	Title	Presenter
09:00-09:10	-	Welcome and orientation to the session: procedures and themes	Organizers
09:10-09:25	31974	Characterisation of global and continental DSM products: beyond point accuracy and towards user needs	Laura Poggio ISRIC - World Soil Information
09:25-09:40	33864	From Legacy Soil Maps to Fit-for-Use DSM Products: A Case Study from Portugal	Samuel Guerreiro LEAF—Linking Landscape, Environment, Agriculture and Food Research Centre, Instituto Superior de Agronomia, Universidade de Lisboa", "Santarém Polytechnic University, School of Agriculture
09:40-09:55	34866	Digital Soil Mapping of pH at European scale: comparing national vs. continental inputs	Maria Fantappiè CREA - Council for Agricultural Research and Economics, Italy

*Subject to change

Parallel Sessions

09:55-10:10	34265	Operational Digital Soil Mapping for Soil Resource Monitoring in Semi-Arid Mediterranean Environments: A SOILS4MED Initiative and Tunisia case study	ATTIA Rafla DGACTA, Ministry of Agriculture, Tunisia
10:10-10:25	34271	Transposability of MUSE (French DSM method for the Evaluation of Soil Multifunctionality) to EU scale in the framework of EU-funded Horizon Europe SPADES project	Amazigh Ouaksel BRGM", "IRSTV
10:25-11:00	-	Discussion: lessons from first session	Organizers, presenters first session
11:15-11:30	319B12	Mapping and validating the root zone plant-available water holding capacity in central Ethiopia	Musefa A. Redi Ethiopian Institute of Agricultural Research
11:30-11:45	35230	National soil information grids of China: problems and possible solutions	Feng Liu Institute of Soil Science, Chinese Academy of Science
11:45-12:00	36622	Revealing the landscape with Digital Soil Mapping	David G. Rossiter ISRIC-World Soil Information
12:00-12:15	33550	Beyond uncertainties: making standalone metrics decision-oriented through game theory	Trevan Flynn University of Fort Hare
12:15--12:30	-	Discussion: lessons from second session and overall	Organizers, presenters second section, all

*Subject to change



Parallel Sessions

Thursday, June 11		Room: Expo Center, Hall 4, 4203	
Session 108005		Digital Soil Mapping and Assessment: Advances, Applications, and Future Directions	
		Convener: Alessandro Samuel-Rosa, Federal Technological University of Paraná, Brazil Chair of the Digital Soil Mapping Working Group	
		Co-Convener: George Van Zijl, North-West University, South Africa	
Schedule	ID	Title	Presenter
11:15-11:30	36206	Distributional Validation of Digital Soil Maps using Aggregated Commercial Data	Alessandro Samuel-Rosa Federal Technological University of Paraná (Department of Agronomy, Santa Helena, Paraná, Brazil)
11:30-11:45	35762	Model Selection for Digital Soil Mapping Using Spatial Structure Indices	Fang-He Zhao Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences
11:45-12:00	32826	Continental-Scale Soil Assessment in Africa: Design, Implementation, and Early Findings from Soils4Africa	Samuel Ayodele Mesele International Institute of Tropical Agriculture
12:00-12:15	32926	Mapping of bundles of soil-based ecosystem services in the European Union and their evolution by 2050	Nicolas Saby INRAE, Info&Soils
13:30-13:45	35340	Integrating Hierarchical Factor Analysis and Digital Soil Mapping to Update Legacy Maps and Identify Soil Carbon Loss Hotspots for Land-Use Policy	Anna Gorbacheva HSE University, International Laboratory of Landscape Ecology

*Subject to change

Parallel Sessions

13:45-14:00	34913	Assessing the carbon sequestration potential and identifying influential factors of cultivated soils in Northeast China	Zicheng Wang Shenyang Agricultural University
14:00-14:15	34917	Three-dimensional soil organic carbon stocks in Tibet, China: spatial heterogeneity, driving factors, and future Changes	Jiaying Li Shenyang Agricultural University
14:15-14:30	34918	Soil organic carbon in Chinese grassland ecosystems: spatial heterogeneity, driving factors, and future changes	Yi ran Wang Shenyang Agricultural University
14:30-14:45	33587	Intelligent Mapping Paradigm to Overcome Systematic Bias in Remote Sensing SOC Estimation: A Case Study of the Black Soil Region in China and the United States	Chong Luo Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
14:45-15:00	35778	Enhancing Regional Topsoil Total Nitrogen Mapping through Differentiated Fusion of Ground Hyperspectral Data and Satellite Images Under Low Vegetation Cover	Rongpeng He Aerospace Information Research Institute
15:00-15:15	34419	Spatial Variability of Soil Acidity and Mapping of Selected Soil Properties in Chanco Micro Watershed, South western Ethiopia	Abdissa Bekele Sima Oda Bultum University", "Chiro", "Ethiopia
16:30-16:45	35702	Integrating Digital Soil Mapping and Remote Sensing-Based Soil Moisture for Crop Water Requirement Modelling at the Land Parcel System Scale	Rosario Napoli CREA - Research Centre for Agriculture and Environment
16:45-17:00	32261	Mapping Spatiotemporal Soil Temperature in Real-time using Neural Networks Combined with Heat Transfer Equation	Marliana Widyastuti Sydney Institute of Agriculture & School of Life and Environmental Sciences, The University of Sydney

*Subject to change

Parallel Sessions

17:00-17:15	34258	Propose an improved digital mapping method for mountainous soil heavy metals based on spatial structure feature integrated with geographic optimal similarity (SI-GOS) model to explore more effective regional environmental management pathways	Jiakang Liu Center China Normal University
17:15-17:30	35317	Comparative Study on Soil Spatial Provenance Based on Soil Property Similarity Clustering and Pedogenic Environment Inference	Rong Zeng Nanjing University of Information Science and Technology
17:30-17:45	35552	Within-field soil variability in agro-silvo-pastoral systems: a baseline for Precision Agriculture adoption	João Horta Marques MED—Mediterranean Institute for Agriculture, Environment and Development and CHANGE—Global Change and Sustainability Institute, Universidade de Évora, Pólo da Mitra, Ap. 94, 7006-554 Évora, Portugal", "CEF-Centro de Estudos Florestais and TERRA - Associate Laboratory, Instituto Superior de Agronomia, Universidade de Lisboa, Tapada da Ajuda, Lisbon 1349-017, Portugal
17:45-18:00	31832	Applying Digital Soil Assessment to Support the Effectiveness Evaluation and Design Optimization of Buffer Strips	Tianying Li University of Guelph
18:00-18:15	36202	Mapping Soil Fine and Coarse Mineral Fractions Using Compositional Methods	Taciara Zborowski Horst Federal Technological University of Paraná (Department of Agronomy, Dois Vizinhos, Paraná, Brazil)
18:15-18:30	32459	New dimensions of farmers' decision making: Demonstration of a 3D web-viewer for erosion mitigation strategies	Marvin Melzer Leibniz Centre for Agricultural Landscape Research (ZALF)

*Subject to change

Parallel Sessions

Thursday, June 11 Friday, June 12		Room: Expo Center, Hall 4, 4202	
Session 110001		Advances in Soil Health Monitoring with Proximal Sensing	
		Convener: Yongsheng Hong, Wuhan University	
		Co-Conveners: Bifeng Hu, Jiangxi University of Finance and Economics Yiyun Chen, Wuhan University Asim Biswas, University of Guelph Zhou Shi, Zhejiang University	
Schedule	ID	Title	Presenter
Thursday, June 11			
11:15-11:30	34398	Measuring Soil Health Using Technologies Across Scales	Asim Biswas School of Environmental Sciences, University of Guelph, Guelph, ON Canada N1G 2W1
11:30-11:45	33627	Towards Sustainable Land Use: Soil Health Assessment at a National Scale using Spectral Information	Asa Gholizadeh Department of Soil Science and Soil Protection, Czech University of Life Sciences Prague
11:45-12:00	33115	A proposed stacking-inspired multi-angle spectral integration framework for estimating potentially toxic elements in soil	Nisha Bao Northeastern University
12:00-12:15	35719	Monitoring soil arsenic content in densely vegetated agricultural areas using UAV hyperspectral, satellite multispectral and SAR data	Xiao-Lin Sun College of Agriculture, Guangxi University

*Subject to change

Parallel Sessions

12:15-12:30	34078	SWRCI: A Novel Remote Sensing Index for Soil Water Retention Capacity	Linghua Meng Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
13:30-13:45	35573	Comparison of mid-infrared and visible/near-infrared spectroscopy of moist-intact cores and dry-ground soils for soil property prediction	Wenjun Ji China Agricultural University
13:45-14:00	35314	A comparative study of four color measurement methods for soil color identification and related properties prediction	Rong Zeng Nanjing University of Information Science and Technology
14:00-14:15	33198	A transferable spatiotemporal deep learning framework integrating soil moisture dynamics for high-resolution cropland Soil Organic Matter Mapping Across Regions	Chong Luo Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences, Changchun, 130102, China
14:15-14:30	32359	Evaluating Portable X-Ray Fluorescence (pXRF) for Soil Fertility Assessment: Influence of Moisture and Soil Properties	Deepanjan Mridha Washington State University
14:30-14:45	33900	Improving in-situ spectral estimation of wetland soil organic carbon by integrating multiple optimization strategies	Bifeng Hu Jiangxi University of Finance and Economics
14:45-15:00	34835	Successful analysis of Brazilian Cerrado soils and crops via portable X-ray fluorescence spectrometry	Bruno Teixeira Ribeiro Federal University of Lavras
15:00-15:15	36177	Hybrid Deep Learning for Soil Property Prediction Using Vis-NIR Spectroscopy	Wang Xiaoqing Chengdu University of Information Technology

*Subject to change

Parallel Sessions

16:30-16:45	36449	Advancing Soil Health Monitoring Using Proximal VIS-NIR and MIR Spectroscopy Integrated with Multivariate Modeling	Seema Department of Soil Science and Agricultural Chemistry, College of Agriculture, Agriculture University Jodhpur, Jodhpur, Rajasthan, 342304, India
16:45-17:00	35826	Mapping mollic epipedon thickness via ground-penetrating radar based on the combined method of Variational Mode Decomposition and Average Envelope Amplitude	Xiangming Zhu Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
17:00-17:15	34902	Validation and calibration of FAO's WaPOR soil moisture product using in-situ measurements	Abdolnabi Abdeh Kolahchi SCWMRI
17:15-17:30	34403	Accuracies and costs of prediction and mapping soil properties using proximal sensors: A systematic review	Carlos Lozano Fondón, Ph.D Research Centre for Agriculture and Environment, Council for Agricultural Research and Economics, via di Lanciola 12/A, 50125 Florence, Italy
17:30-17:45	32634	Sequential indirect modeling of soil properties from spectral data with small sample set	Gretelerika Vindeker Department of soil genesis, geography and classification, V. V. Dokuchaev Soil Science Institute
17:45-18:00	31768	Evaluating Spectroscopy and Chemometrics as Tools to Improve Agricultural Soil Analysis	Gbenga D. Adejumo University of Saskatchewan
18:00-18:15	31937	Evaluating Portable Miniaturized NIR and Vis-NIR Technologies for Soil Spectroscopic Analysis	Reda Mokere Center of Excellence in Soil and Fertilizer Research in Africa, Mohammed VI Polytechnic University (UM6P)
18:15-18:30	34642	Soil drainage survey using Electromagnetic induction Sensing	Harnoordeep Singh Mann School of Environmental Sciences, University of Guelph, Canada

*Subject to change

Parallel Sessions

Friday, June 12			
09:00-09:15	33029	Deep Learning-Based Similarity Framework for Rapid Soil Organic Matter Assessment from Smartphone Imagery	Asim Biswas University of Guelph
09:15-09:30	31995	Intelligent Soil Monitoring	Yongsheng Hong Wuhan University
09:30-09:45	32542	Low-cost portable near infrared spectroscopy for in-situ and laboratory prediction of soil organic carbon in Ferrosols	Zhengyang Xu Zhejiang University
09:45-10:00	33374	Regional bare soil mapping method integrating multi-source remote sensing data in cloudy environments	Junzhe Fang Zhejiang University
10:00-10:15	36483	Identification of Alkalized Horizons Using Ground Penetrating Radar in Typical Saline-Alkali Areas of the Songnen Plain	chenyang gao College of land and environment, Shenyang Agricultural University Shenyang, Liaoning CHINA
10:15-10:30	34110	The Accurate Estimation of Soil Available Nutrients Achieved by Feature Selection Coupled with Preprocessing Based on MIR and pXRF Fusion	Qi Zou China Agricultural University
10:30-10:45	34388	A Dataset-Based Statistical Comparison and Fusion of Gamma-Ray and Visible-Near-Infrared Sensing Technologies for Soil Texture Prediction	Jiang Liu Department of Environment, Faculty of Bioscience Engineering, Ghent University
10:45-11:00	33121	Preprocessing and Optimizing Sensitive Wavelength Enable End-to-End Estimation of Soil Heavy Metals using Hyperspectral Remote Sensing	Chang Meng Inner Mongolia Agricultural University
11:15-11:30	34055	Spatio-temporal fusion-based analysis of soil salinization dynamics in the Ningxia-Inner Mongolia Yellow River Irrigation District (2000-2025)	Qidong Ding Ningxia University
11:30-11:45	32887	Coastal Soil Salinity Inversion Using Resource Satellite Data and Explainable Machine Learning: A Case Study of Southern Laizhou Bay	Rui Ma Liaocheng University
11:45-12:00	35670	Dynamic inversion of soil salinity in farmland across the Hetao Plain of China based on a spatiotemporal fusion algorithm (2000-2024)	Huayu Huang Ningxia University

*Subject to change

Parallel Sessions

Monday, June 8		Room: Expo Center, Hall 5, 5203	
Session 110003		Soil Spectroscopy: A Global Solution for Sustainable Soil Management and Food Security	
		Convener: Asim Biswas, Chair of Proximal Soil Sensing Working Group of IUSS, University of Guelph	
		Co-Convener: Yi Peng, Global Soil Partnership, Food and Agriculture Organization of the United Nations (FAO)	
Schedule	ID	Title	Presenter
13:15-13:25	34889	Vis-NIR Spectroscopy and Chemometrics for Soil Pollution Assessment: Challenges and Opportunities	Claudio Colombo University of Molise, Department of Agricultural, Environmental and Food Science, Campobasso (CB), Italy
13:30-13:45	34993	Sample Transfer Learning for Improving Field-Scale Soil Organic Matter Inversion via UAV Hyperspectral Remote Sensing	Xian-Li Xie State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences, Nanjing
13:50-14:00	32206	The use of low-cost spectrometers to predict key soil properties for digital soil mapping in South Sumatra, Indonesia	Astria Rahmi Setiawati School of Life and Environmental Sciences & Sydney Institute of Agriculture, The University of Sydney
14:05-14:15	32829	A Vis-NIR penetrometer system for field measurement of soil organic carbon	Yin-Chung Huang School of Life and Environmental Science & Sydney Institute of Agriculture, The University of Sydney
14:20-14:30	32625	Comparison of mid and near infrared spectroscopy in predicting stable isotope values ($\delta^{13}\text{C}$ and $\delta^{15}\text{N}$) of tropical soils in Madagascar	Ramifehiarivo Nandrianina Laboratoire des Radioisotopes-University of Antananarivo, "Ecole Supérieure des Sciences Agronomiques-University of Antananarivo

*Subject to change

Parallel Sessions

14:35-14:45	35947	Estimation of soil inorganic carbon storage for profiles based on spectroscopy	Guanghui Zheng School of Geographic Sciences, Nanjing University of Information Science and Technology
14:50-15:00	33190	Transferability of Global Spectral Models for Local Soil Organic Carbon Predictions: Effects of Spiking on Model Performance	Anshu Beri School of Environmental Sciences, University of Guelph, 50 Stone Road East, Guelph, ON N1G 2W1, Canada
15:05-15:15	35066	Rapid identification of andic soil properties using mid-infrared spectroscopy and machine learning	Aleksandra Kalisz University of Wisconsin - Madison
16:30-16:40	35039	Characterization of soil organic matter regarding both the structure and composition by Fourier transform infrared attenuated reflectance spectroscopy	F. Ma The State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences, Nanjing 210008, China;
16:45-16:55	33241	Carbon Assessment in Peat Soils Through Moisture-Corrected Vis-NIR Spectroscopy and Instrument Comparison	Leonardo Pace University of Tuscia
17:00-17:10	31906	Prediction of soil organic matter using visible-near-infrared spectroscopy combined with textural hand-feel determination	Meihua Yang Yuzhang Normal University
17:15-17:25	33644	Comparative analysis of Vis-NIR and MIR spectroscopy for predicting soil properties and identifying minerals at smallholder cocoa farms across Papua New Guinea	Tom Swan University of Sydney
17:30-17:40	33379	Spectroscopic Screening of Soil Extracellular Oxidases and Their Application in Soil Health Monitoring and Carbon Modeling	Jianwei Li Tennessee State University
17:45-17:55	33140	A comparative study of Random Forest and Neural Network with implementation of Boruta algorithm for predicting soil properties from Visible-Near Infrared spectra	Daria Zhulidova V. V. Dokuchaev Soil Science Institute
18:00-18:10	35697	Development of soil health index at regional scales in West African cocoa plantations using Near-Infra Red Spectroscopy	Gideon Asamoah Cranfield University/VCSIR-Soil Research Institute

*Subject to change

Parallel Sessions

Monday, June 8		Room: Expo Center, Hall 5, 4203	
Session 112001		Advances in Numerical Soil Classification	
		Convener: Budiman Minasny, The University of Sydney	
		Co-Conveners: Jingyi Huang, The university of Wisconsin, USA Songchao Chen, Zhejiang University, China	
Schedule	ID	Title	Presenter
11:15-11:30	31820	Layer-Profile Integration for Numerical Soil Classification	Wartini Ng The University of Sydney
11:30-11:45	36456	Efforts to develop modern objective numerical data sources to support universal approaches of soil classification	Erika Micheli Department of Soil Science, Institute of Environmental Sciences, Hungarian University of Agriculture and Life Sciences, Gödöllő, Hungary
11:45-12:00	33222	Harmonization of Soil Typological Units Across Administrative Regions: A Case Study from Italy	Roberto Barbetti CREA-FL council for agricultural research and economics, Forestry and Wood, Casale Monferrato IT

*Subject to change

Parallel Sessions

Monday, June 8 Tuesday, June 9		Room: Expo Center, Hall 7, 7202	
Session 201001		Beyond Plant Available Water - New Insights on Soil Water Accessibility	
		Convener: Ying Zhao, Ludong University	
		Co-Conveners: Peth Stephan, Leibniz University Hanover	
		Wei Hu, The New Zealand Institute for Plant and Food Research Limited, New Zealand	
Schedule	ID	Title	Presenter
Monday, June 8			
13:15-13:35	36620	Pore systems and functions in structured soils- how far affect soilmanagement and environmental impacts an unambiguous assignment?	Rainer Horn Soil Science, CAU Kiel, Germany
13:35-13:50	36221	Soil Pore Size Distribution and Water Retention Curves by Low-Field NMR	Etelvino Henrique Novotny Embrapa Soils, Rio de Janeiro, Brazil
13:50-14:05	36121	Field-scale Assessments of Subsoil Compaction and Soil Structural Functions in Lower Saxony, Germany	Xinjun Huang Henan University of Technology
14:05-14:20	34718	Stress-Strain Mechanism of Salt-affected Soils in the Yellow River Delta	Lidong Ren Modern Agricultural Engineering Laboratory, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences
14:20-14:35	33960	Creating Pathways for Roots: Artificial Macropores through Compacted Subsoils	Elron Wiedermann Thuenen Institute of Climate-Smart Agriculture

*Subject to change

Parallel Sessions

14:35-14:50	33183	A complete morphological and topological description of soil pore structure dynamics during wetting-drying	Kirill D. Tolstygin Laboratory of digital twins of agricultural landscapes, Dokuchaev Soil Science Institute, Moscow, Russia
14:50-15:05	32590	Development of soil mechanical stability during initial soil formation - from field to rhizosphere scale	Stephan Peth Leibniz University Hannover, Institute of Earth System Sciences, Section Soil Science
15:05-15:15	33788	Trees' Effect on Soil Penetration Resistance Under Livestock-Forestry System in Southern Brazil	Karina Maria Vieira Cavalieri-Polizeli Department of Soil Science and Agr. Eng., Federal University of Paraná
16:30-16:50	33760	A Mechanistic Soil-Plant Model to Assess Soil Water Accessibility	Jan Vanderborght Agrosphere Institute (IBG-3), Forschungszentrum Jülich
16:50-17:05	36251	Mucilage effects on soil-plant hydraulics and stomatal regulation under drought	Gaochao Cai Sun Yat-sen University
17:05-17:20	32578	Defining, monitoring, and utilizing plant available water information as a public good	Tyson E. Ochsner Oklahoma State University
17:20-17:35	32479	A Process-Based Proxy for the Water Availability to Plants	Quirijn de Jong van Lier Universidade de São Paulo
17:35-17:50	32368	Water Balance and Plant Soil Water Availability: Linking Soil Physics and Hydrology	Allen Hunt Wright State University
17:50-18:05	31340	Confronting Water Availability versus Water Accessibility in Plant-Soil Relations	Ying Zhao Ludong University
18:05-18:20	32899	Rhizosphere Hydraulic Regulation Across Soil Textures: Evidence for Texture-Dependent Mucilage Function	Mohsen Zare Professorship for Soil Biophysics and Environmental Systems, Technical University of Munich
18:20-18:30	-	Summary	-

*Subject to change

Parallel Sessions

Tuesday, June 9

09:00-09:20	32281	Impact of Biosolids on Plant Available Water and Beyond	Markus Flury Washington State University
09:20-09:35	35458	Improvement of the Soil Water Retention Model Based on the Additivity Hypothesis	Anatoly Zeyliger Hydroinformatics Laboratory, Water Problems Institute of the Russian Academy of Sciences, Moscow, Russia", "Southern Federal University, Rostov-on-Don, Russia", "Moscow Institute of Physics and Technology, Moscow, Russia", "Russian State Agrarian University-Moscow Timiryazev Agricultural Academy, Moscow, Russia
09:35-09:50	34774	Impact of drought and root excision on root regeneration, xylem hydraulics and leaf physiological characteristics in Robinia Pseudoacacia	Min Li Northwest A&F University
09:50-10:05	34251	Biochar application to soil in agricultural water management	Agnieszka Medynska-Juraszek Institute of Soil Science, Plant Nutrition and Environmental Protection, Wroclaw University of Environmental and Life Sciences
10:05-10:20	33929	Surface Soil Moisture Estimation for Precision Agriculture Using UAV and Sentinel-2 RGB Imagery	Azadeh Sedaghat Soil and Water Research Institute, Agricultural Research, Education and Extension Organization

*Subject to change



Parallel Sessions

10:20-10:35	33062	Estimating Soil Water Matric Potential from Penetration Resistance Measurements	Chao Wang China Agricultural University
10:35-10:50	32321	Predawn Leaf Water Potential of Grapevines Is Not Necessarily a Good Proxy for Soil Moisture	Yingxue Yu The Pennsylvania State University
10:50-11:00	32042	Modeling Water Movement in Gravity Potential Difference Irrigation Based on Hydraulic Potential Difference-Driven Outflow Mechanism	Su Dandan State Key Laboratory of Efficient Utilization of Arid and Semi-arid Arable Land in Northern China/Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences", "College of Natural Resources and Environment, Northwest A&F University
11:15-11:35	319B25	Water-Microbe-Mediated Rhizosphere Microbial Communities Reshaping Agroecosystem Resilience	Gary Y. Gan College of Life and Environmental Science, Zhejiang Provincial Key Lab for Water Environment and Marine Biological Resources Protection, Wenzhou University
11:35-11:50	36441	From Laboratory to Field: Advancing Soil Heat Flux Plate Accuracy through Philip Correction and Field Calibration	Bing Tong Research Center for Eco-environmental Sciences, Chinese Academy of Sciences
11:50-12:05	35800	Evolution of Salt Precipitation: Governing Water and Heat Transport in Saline Soils	Xinhu Li Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences

*Subject to change

Parallel Sessions

12:05-12:20	31599	A Complex-Plane Representation of Gas Diffusivity in Variably Saturated and Fractured Porous Media	Chamindu Deepagoda Lincoln University
13:30-13:50	31586	Soil-water and Groundwater: Connections at the Food-Water-Energy Nexus	Brent Clothier Bioeconomy Science Institute ", "Plant & Food Group
13:50-14:05	33991	Modeling plant water and solute uptake by HYDRUS	Jiri Simunek Department of Environmental Sciences, University of California
14:05-14:20	32306	Root zone in the Earth system	Hongkai Gao East China Normal University
14:20-14:35	35642	Adaptive water use strategies of artificially revegetated plants in a water-limited desert: Implications for sustainable ecological restoration	Laiming Huang Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences
14:35-14:50	36244	Collaborative roles of soil and plant hydraulic resistances in plant water transport: insights from modeling and data synthesis	Guoqing Lei Wuhan University
14:50-15:05	34439	Assessment of irrigation water consumption in the Yellow River Delta based on GIS and HYDRUS-1D	Zhenghui Lv Shenyang Agricultural University
15:05-15:15	-	Summary	-

*Subject to change



Parallel Sessions

Thursday, June 11 Friday, June 12		Room: Expo Center, Hall 7, 7202	
Session 201002		Linking Physical and Hydrological Processes with Soil Health and Functionality in Terrestrial Ecosystems	
		Convener: Gang Wang, China Agricultural University	
		Co-Conveners: Andrea Carminati, ETH Zurich	
		Teamrat A. Ghezzehei, University of California, Merced	
		Ye Deng, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences	
		Samuel Bickel, Graz University of Technology	
		Ying Liu, China Agricultural University	
		Huang Ping, Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences	
Schedule	ID	Title	Presenter
Thursday, June 11			
11:15-11:35	320B20	Soil physical constraints on plant evolution and ecosystem water limitations	Andrea Carminati ETH Zurich
11:35-11:55	33284	In-situ determining the dynamic of soil bulk density by using the combined soil moisture and thermal property sensors in a Vertisol and its relationship with waterlogging	Xinhua Peng Institute of Agricultural Resources and Regional Planning, CAAS
11:55-12:15	35957	Microscale biophysical interactions determine environmental microbial ecology	Gang Wang China Agricultural University

*Subject to change

Parallel Sessions

13:30-13:45	31864	Optimizing implementation strategies for efficient soil water evaporation measurements with multi-probe heat pulse sensors	Ke Liu China Agricultural University
13:45-14:00	32506	Cover Crops, More Than Crop Rotation Diversity, Improve Soil Porosity, Carbon Storage, and Hydraulic Conductivity in a Long-Term No-Till Field Experiment in South Dakota	Xi Zhang University of Tennessee
14:00-14:15	33419	Quantifying the Impact of Tractor Tire Pressure and Soil Management History on Soil Porosity and Void Morphology	Olatunbosun Ayetan School of Environmental Sciences, University of Guelph, Guelph, ON N1G 2W1, Canada
14:15-14:30	34597	Study on the Evolution of Multi-scale Pore Structure and Hydraulic Properties in the Arable Layer of Paddy Fields	Guiling Wang CentralChinaNormalUniversity
14:30-14:45	35616	Bearing capacity of an Argiudoll under direct seeding and controlled machinery trafficked with soluble calcium	Silvia Imhoff ICiAgro Litoral (Institute of Agricultural Science of Litoral)-CONICET-UNL
14:45-15:00	34088	Root-mediated regulation of soil infiltration dynamics in eroded Mollisols	Yang Zhang Northeast Forestry University
15:00-15:15	34046	Hydrodynamic Shear Stress Regulates <i>P. aeruginosa</i> Attachment via Motility Organelles	Chen Song China Agricultural University
15:15-15:30	35222	Transformation of Agro-Physical Soil Properties During Urbanization: A Case Study in the Republic of Adygea	Tazieva A. O. Soil Physics and Melioration, Moscow State University, Moscow, Russia

*Subject to change

Parallel Sessions

16:30-16:45	33919	The added value of CoreVESS score, penetration resistance, and geophysical techniques in predicting and characterizing the soil-water retention curve	Lin Lin University of Liège", "Ghent University
16:45-17:00	32401	Applicability and transferability of the state-space approach to predict saturated soil hydraulic conductivity at watershed scale	Luis Carlos Timm Rural Engineering Department, Faculty of Agronomy, Federal University of Pelotas
17:00-17:15	33844	Estimation of soil water retention curves by combining thermal conductivity and electrical conductivity curves	Siqi Zhou China Agricultural University
17:15-17:30	33351	Soil moisture, irrigation efficiency, and soil strength interactions under centre pivot irrigation	Ana Carolina De Mattos E Avila Tasmanian Institute of Agriculture", "University of Tasmania
17:30-17:45	33741	Causality analysis and prediction of soil saturated hydraulic conductivity by combining empirical modeling and machine learning techniques	Yundong Wang Huazhong Agriculture University
17:45-18:00	33076	Biochar Effects on Soil Hydrophysical and Chemical Properties: Texture and Particle Size Matter	Laurin Reim, M.Sc. mult. Soil Biophysics and Environmental Systems, School of Life Sciences, Technical University of Munich", "Chair of Soil Sciences, School of Life Sciences, Technical University of Munich", "MITIGATE GmbH
18:00-18:15	33740	Long-term organic fertilizer substitution alleviates the surface soil compaction of a Vertisol by improving soil structure	Liman Ao Huazhong Agricultural University
18:15-18:30	32026	Root-soil interface traits in modern and landrace barley genotypes differ in the lab but not the field	Sean Graham University of Aberdeen", "The James Hutton Institute

*Subject to change

Parallel Sessions

Friday, June 12

09:00-09:15	33710	Dry-wet cycles promote microbial interactions and horizontal gene transfer	Xinrui Wei China Agricultural University; University of Delaware
09:15-09:30	32284	Modelling the relationship between naturally occurring radionuclides and grain size of sediment of various river basins, South Africa	J Bezuidenhout Stellenbosch University
09:30-09:45	32392	Accurate soil thermal conductivity schemes are crucial for improved earth system modelling skill	Hailong HE University of Manitoba
09:45-10:00	32202	Seasonal dynamics of soil structure and water retention of field soils with different long-term endment rates of slurry and compost: measurements and modelling	Utibe E. Utin Department of Soil Science and Land Resources Management, University of Uyo", "School of Biological Sciences, University of Aberdeen", "School of Geosciences, University of Aberdeen
10:00-10:15	36394	Mechanical Adaptive Feedback Mechanisms of Microbial Colonies to External Physical Pressure	Mingyu Su China Agricultural University
10:15-10:30	36275	Effects of Different Land Uses on Soil Structure and Hydrological Function: Mechanisms and Implications	Heng Liu Northwest A&F University
10:30-10:45	35563	Nitrous oxide emissions in Argiudolls of the Central Pampas Region of Argentina managed with no-tillage and controlled traffic farming	Silvia Imhoff ICiAgro Litoral (Institute of Agricultural Science of Litoral)-CONICET-UNL
11:15-11:30	31608	Revisiting soil water retention behavior as influenced by microbial growth under unsaturated conditions	Yili Lu China Agricultural University
11:30-11:45	34230	Controls on near-saturation water retention and structural stability of soils across four climatic regions: long-term land use versus single endment	Amrakh I. Mamedov Department of Environmental Sciences, Western Caspian University, Baku, Azerbaijan.
11:45-12:00	35902	Pore Structure-Controlled Water and Solute Transport in Agricultural Soils of Plain River Network Areas	Xiaoqin Sun Hohai University
12:00-12:15	33349	Soil structure versus soil life: Microbial resilience to compaction in contrasting soil types	Mariia Timofeeva Department of Soil Physics and Hydrology, V.V. Dokuchaev Soil Science Institute, Moscow, Russia

*Subject to change



Parallel Sessions

Monday, June 8 Tuesday, June 9		Room: Convention Center Nanjing 402A	
Session 202001		Physicochemical and Biological Processes of Chemicals in Soils	
		Convener: Hanzhong Jia, Northwestern Agricultural and Forestry University	
		Co-Conveners: Ya-Hui Chuang, National Chung Hsing University Hui Li, Michigan State University	
Schedule	ID	Title	Presenter
Monday, June 8			
16:30-16:48	34780	Effects of Microplastic Pollution on Soil Organic Carbon Turnover	Hanzhong Jia Northwest A&F University
16:48-17:06	33926	Emerging Contaminants in Soil, Water, and Plant Systems: One Health Perspective	Wei Zhang Department of Plant, Soil and Microbial Sciences, Michigan State University
17:06-17:18	36063	Machine learning-based prediction of phenanthrene accumulation and toxicity in earthworms across soils	Guofeng Li Institute of Urban Environment", "Institute of Urban Environment, Chinese Academy of Sciences

*Subject to change



Parallel Sessions

17:18-17:30	35441	Organo-mineral interactions for improving pollutant retention and nutrient cycling	Juan Antelo CRETUS, Universidade de Santiago de Compostela
17:30-17:42	32792	Chemical transformation pathways demonstrating elemental sulfur effectiveness in alkaline-sodic soils	Mst Sarmin Akter Ranu School of Agriculture and Food Sustainability, The University of Queensland
17:42-17:54	32294	Using radiogenic and metal stable isotope ratios as new tools to assess nutrient cycling in agricultural systems	Bei Wu Institute of Bio- and Geosciences: Agrosphere (IBG-3), Forschungszentrum Jülich GmbH (FZJ)
17:54-18:06	32154	Effects of repeated wetting and drying cycles on potassium fertiliser behaviour and nutrient dynamics in diverse soils	Yili Zang The University of Queensland
18:06-18:18	32145	The effect of endogenous hydrogen on the soils of the degassing sites of the Central Chernozem region of the Russian Federation	Aleksei Kiriushin Lomonosov Moscow State University
18:18-18:30	319B21	Sea weed contribute enormous number of charges to soil system and enhances massive rice productivity	Sanjib Kar University of Calcutta

*Subject to change

Parallel Sessions

Tuesday, June 9

09:00-09:18	35807	Surface-Modified Carbonaceous Media for Enhanced Removal of Short-Chain Per- and Polyfluoroalkyl Substances from Urban Stormwater	Wenqing Xu Department of Civil and Environmental Engineering, Villanova University, 800 E. Lancaster Avenue, Villanova, PA 19085, USA
09:18-09:36	32998	Transformation of PFAA Precursors in Soil Under Environmental Conditions	Jianzhou He Center for Advanced Materials Science, Department of Biochemistry, Chemistry and Physics, Georgia Southern University
09:36-09:48	33418	Fate and transformation of Pharmaceuticals in soil and their impacts on plant growth	Boaz Wilium Samo Uniwersytet im. Adama Mickiewicza w Poznaniu
09:48-10:00	32845	Persistence, Transport and Transformation of Per- and Polyfluoroalkyl Substances in Soils from repeated Land Application of Biosolids	Zhiliang Xu Department of Plant, Soil and Microbial Sciences, Michigan State University
10:00-10:12	32721	Process-Based Multi-Surface Modeling of Soil Arsenic: Enabling Large-Scale prediction of environmental fate and Guiding Remediation Strategies	Yuhong Huang Nanjing university
10:12-10:24	29049	Floodplain Wetlands as Biogeochemical Filters Following Wildfire	Sean Fettrow Colorado State University
10:36-10:48	34579	When Salt Meets Arsenic: Salinity-Driven Controls on Arsenic Speciation in Flooded Coastal Soils	Layla Izadi University of Texas at Dallas
10:48-11:00	35926	Tetracycline adsorption and degradation potential of Fe-Al oxides-rich soils	Nadeesha Koralegedara Department of Geology, University of Peradeniya

*Subject to change

Parallel Sessions

13:30-13:48	34527	The fate of endocrine disruptor compounds in soil. The role of humic substances	Nicola Senesi 1 Dept of Soil, Plant and Food Sciences, University of Bari “Aldo Moro” , Bari, Italy
13:48-14:00	35852	Rice Growth and Yield Formation in Heterogeneous Sodic and Saline-Sodic Soils: Challenges and Management Strategies	Sulaiman Shah Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences, Changchun 130102, China.
14:00-14:12	35675	Soilendment-Driven Changes in Exchangeable Acidity and Nutrient Use Efficiency in Acidic Soils under Potato-Based Systems	Emmanuel R. Mwakidoshi Kenyatta University
14:12-14:24	35240	Soil Biological Crusts as Key Regulators of Surface Geochemistry in Degraded Semi-Arid Landscapes	Maria Eugenia Escobar Universidade Federal do Ceará
14:24-14:36	33839	A high-resolution map of urban soil pH in the megacity of Xi'an	Shuangshuang Wei Xi' an Jiaotong University
14:36-14:48	33301	Size-dependent colloidal stability and transport behaviors of typical zonal soil colloids	Chen-yang Xu Northwest A&F University
14:48-15:00	32260	Salix acutifolia Willd. as an ecological engineer in the processes of soil formation and plant succession in sandy areas	Rahmonov O., Czajka A. Department of Natural Sciences. Institute of Earth Sciences
15:00-15:12	32238	Impact of Saltwater Intrusion on Phosphorus Speciation and Mobility in an Agricultural Soil	Piyapas Sricharoenvech Department of Soil Science, Kasetsart University
16:30-16:42	36478	Novel Ball-Milled Tourmaline-Biochar Composite: Application in Heavy Metal-Contaminated Groundwater and Bottom Sediment Remediation	Wecheng Wang Nankai University

*Subject to change

Parallel Sessions

16:42-16:54	36312	Ultrasensitive detection of trace Hg(II) in acidic conditions using DMABR loaded on sepiolite: Function, application and mechanism studies	YunCheng Wang State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences", "University of Chinese Academy of Sciences
16:54-17:06	35123	Sulfur Dynamics Coupled with Heavy Metal Behavior under Fluctuating Redox Conditions in Paddy Soils	Tomoyuki Makino Tohoku University, Graduate School of Agricultural Science
17:06-17:18	33793	Sorption and Desorption of Phosphorus in Soil: Implications for Water Quality	Jian Liu Norwegian Institute of Bioeconomy Research
17:18-17:30	33220	Molecular modeling of natural organic matter-heavy metal cations interactions	Chi Zhang College of Natural Resources and Environment, Northwest A & F University
17:30-17:42	32895	Fe(II) and Organic Acid Influence Arsenic Sorption by Magnetite	Jertz Vlyn Escala Kasetsart University
17:42-17:54	32869	Evaluation of Corncob Biochar Application on Soil Fertility, and Nitrogen Cycle in Arabica Coffee Cropping System	Nuttapon Khongdee Department of Plant and Soil Science, Faculty of Agriculture, Chiang Mai University
17:54-18:06	32679	What controls the metallomes of carrot and wheat grown under varying soil water conditions in greenhouse?	Qinyuan Cao Department of Plant, Soil and Microbial Sciences, Michigan State University
18:06-18:18	32540	Mapping Microscale pH Dynamics at Soil-Amendment Interfaces Under Fluctuating Moisture Conditions	Kun Zhu China Agricultural University
18:18-18:30	31741	Potassium mineralization potentials of some soilendments applied to a degraded tropical Ultisol	Nnaemeka Henry Okoli Federal University of Technology

*Subject to change

Parallel Sessions

Tuesday, June 9		Room: Convention Center Nanjing 403B	
Session 202002		Advances in Soil Carbon Dynamics Across Scales: From Molecules to Ecosystems	
		Convener: Karen Vancampenhout, Dpt. of Earth and Environmental Sciences, University of Leuven	
		Co-Conveners: Boris Jansen, Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam Jianying Shang, China Agricultural University	
Schedule	ID	Title	Presenter
09:00-09:15	36457	Chemical pathways of soil organic carbon stabilization in Mediterranean soils	Matheus Toloto Associated Laboratory for Sustainability and Technology in Inland Regions (La SusTEC), Polytechnic Institute of Bragança, "A Coruña University, Centro Interdisciplinar de Química e Biología (CICA)
09:15-09:30	36445	Divergent stabilization controls of lignin phenols and amino sugars as biomarkers for soil organic carbon source	Songyu Yang Institute of Soil Science, Chinese Academy of Sciences, Nanjing, China
09:30-09:45	34465	Molecular-thermal coupling of plant residue-derived organic matter mediated by clay minerals: insights from solid-state ¹³ C NMR	Chen Xiaodong Faculty of Agriculture, Kyushu University, Fukuoka, Japan
09:45-10:00	33706	Abiotic processes dominate short-term carbon emissions in sandy soil after soil rewetting: impact of mineral and reactive oxygen species	Fuhao Liu Yangzhou University

*Subject to change

Parallel Sessions

10:00-10:15	32251	Dual-Domain Regulation of Dissolved Organic Matter Release in Soil: The Role of pH and Calcium	Hui Gao Institute of Soil Science, Chinese Academy of Sciences (Nanjing)", "Wageningen University & Research
10:15-10:30	31721	Iron and Manganese Catalyzed Maillard Chemistry: Molecular Characteristics, Evolution Pathways, and Implications for Soil Organic Carbon Formation	Bo Chen Shanghai Jiao Tong University
10:30-10:45	34815	A comparison effect of land application of biochar on crop yield and carbon dioxide emission from Acidic soils of southern vs Calcareous soils of northern Guam	Mohammad H. Golabi College of Natural and Applied Sciences, The University of Guam, Mangilao, GU 96923, USA
10:45-11:00	36350	Black Carbon Accelerates Soil Carbon Loss through Coupled Iron Redox Cycling	Jianying Shang and Qirui Li China Agricultural University
11:15-11:30	35923	Arbuscular Mycorrhizal Fungi Strengthen Aggregate Protection and Reactive Fe/Al Pools to Stabilize Soil Organic Carbon in Acidic Soils	Wenqi Zhang Nanjing Forestry University, College of Forestry and Grassland, College of Soil and Water Conservation
11:30-11:45	33291	Integrating zoogeochemistry in Dynamic Global Vegetation Models: status and next steps	Yue Cheng Aarhus University
11:45-12:00	31249	Carbon Cycling in Soils of Northern Coastal Ecosystems	Pavel Krasilnikov Faculty of Soil Science, M.V. Lomonosov Moscow State University
12:00-12:15	33108	Controlling factors on soil organic matter stability under threat of global warming and drought in central Asian semi-arid mountain ecosystems	Zheng SUN Graduate School of Agriculture, Kyoto University

*Subject to change

Parallel Sessions

13:30-13:45	33010	Soil Carbonate—Its Move from Soil Survey to the Global Carbon Cycle	Curtis Monger Dept Plant and Environmental Sci", "New Mexico State University", "USDA (retired)
13:45-14:00	34689	Soil organic carbon sequestration potential and stability in Solonetzic and Vertisolic soils of the Northerican Prairie	Shayeb Shahariar Department of Soil Science, College of Agriculture and Bioresources, University of Saskatchewan, Saskatoon, Saskatchewan, Canada
14:00-14:15	33280	Impact of active Al and Fe on mineral-associated organic matter in acidic to alkaline tropical to subtropical non-volcanic soils	Han LYU Institute of Agriculture, Tokyo University of Agriculture and Technology, Tokyo, Japan
14:15-14:30	34039	Establishing trees into permanently grazed grassland to increase SOC stocks - scaling results from microbes to landscapes	Sam McNally Bioeconomy Science Institute (Manaaki Whenua Group)
14:30-14:45	32229	SOM stability and energy storage in soil depending on land use change	Ekaterina Filimonenko Shandong Agricultural University ", "Sirius University
14:45-15:00	35763	Model Ecosystems as Scalable Pathways for Soil Carbon Sequestration, Productivity and Climate-Smart Land Restoration in Africa	Caleb Melenya Ocansey CSIR - Crops Research Institute", "AINAS - African Initiative for Nature-based Solutions
15:00-15:15	35163	Soil Organic Carbon Dynamics During Vegetation Restoration Across Dryland Precipitation Gradients Revealed by Radiocarbon Isotopes and Microbiology	Jinhong Guan Qinghai Normal University
16:30-16:45	33024	Fertilizing the system, not the crop: Impacts of integrated residue and nutrient management on soil carbon	Andrew T. Regan University of New England", "CSIRO

*Subject to change

Parallel Sessions

16:45-17:00	33276	National mapping of cropland soil pH buffer capacity and acidity debt in China	Jun Jiang Chinese Academy of Sciences Institute of Soil Science
17:00-17:15	36389	Effects of Human Land Use Practices on the Binding Patterns of Organic Carbon and Iron Oxides	Ping Lu Shenyang Agricultural University
17:15-17:30	33226	Do cover crops and no-tillage reshape soil biota and organic matter across depth?	Chiara Poesio Department of Agricultural, Food and Environmental Sciences, University of Perugia, Perugia, Italy
17:30-17:45	34111	Interactive effects of straw and biochar reorganize humic acid molecular architecture toward coupled reactivity and persistence	Rui Ma Key Laboratory of Plant Nutrition and Fertilizer in South Region, Ministry of Agriculture, Guangdong Key Laboratory of Nutrient Cycling and Farmland Conservation, Institute of Agricultural Resources and Environment, Guangdong Academy of Agricultural Sciences
17:45-18:00	34028	Carbon sequestration dynamics of MAOC in the tea plantation with different ages: evidence from Fe/Al oxides and organo-mineral interactions	Tiantian Tang Sichuan agricultural university
18:00-18:15	34238	Functional Cover Crop Diversity Enhances Root-Driven Organo-Mineral Associations and Nutrient Efficiency in High-Latitude Agriculture.	Thiago M. Inagaki Department of Biogeochemistry and Soil Quality. Norwegian Institute of Bioeconomy Research, Ås, Norway
18:15-18:30	36501	Linking MAOM Formation from Lab to Field Scale - Conventional vs. Conservation Agricultural Management	Yael Mishael Hebrew University of Jerusalem

*Subject to change

Parallel Sessions

Tuesday, June 9		Room: Expo Center, Hall 7, 7202	
Session 203001		Diversity and Function of Soil Viromes	
		Convener: Jianming Xu, College of Environmental and Resource Sciences, Zhejiang University, Hangzhou, 310058, China	
		Co-Convener: Jizheng He, University of Melbourne, Melbourne, Australia Bin Ma, College of Environmental and Resource Sciences, Zhejiang University, Hangzhou, 310058, China	
Schedule	ID	Title	Presenter
16:30-16:35	-	Brief introduction of Session 203001	Jianming Xu
16:35-16:50	32285	Biogeographic patterns and drivers of soil viromes	Bin Ma Zhejiang University
16:50-17:05	32464	Twenty-Year Time Series Reveals Ecological and Evolutionary Dynamics of Viruses in a Freshwater Lake	Zhichao Zhou Shenzhen University
17:05-17:20	32211	Into the Unknown: A Continental Exploration of Viral Diversity in Australian Soils	Peipei Xue The University of Sydney
17:20-17:31	32615	Viral cooling of N ₂ O emissions in long-term acidified soils	Hailin Zhang Southwest University
17:31-17:42	33364	Translational profiles reveal prokaryotic resource allocation to prophages	Kankan Zhao University of California San Diego
17:42-17:53	36061	How do soil viruses exert impacts on the soil carbon cycle under anaerobic? The ubiquitous but neglected part	Di Tong Zhejiang University
17:53-18:04	33386	Virus-prokaryote interactions assist pollutant removal in constructed wetlands	Zhiyuan Yao Ningbo University
18:04-18:15	36252	Rhizosphere phage-host interactions drive crop rotation-enhanced disease suppressiveness	Min Nie Institute of Soil Science, Chinese Academy of Sciences
18:15-18:26	33032	Soil viruses as key regulators of carbon sequestration and plant growth	Yongfeng Wang Institute of Applied Ecology, Chinese Academy of Sciences

*Subject to change

Parallel Sessions

Monday, June 8		Room: Expo Center, Hall 7, 7201	
Session 203002		Roles of Extracellular Polymeric Substances in Biogeochemical Cycling and Soil Health	
		Convener: Peng Cai, National Key Laboratory of Agricultural Microbiology, College of Resources and Environment, Huazhong Agricultural University	
		Co-Conveners: Marc A. Redmile-Gordon, Department of Environmental Horticulture, Royal Horticultural Society	
		Yichao Wu, National Key Laboratory of Agricultural Microbiology, College of Resources and Environment, Huazhong Agricultural University	
		Ke-Qing Xiao, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences	
Schedule	ID	Title	Presenter
13:15-13:35	319B23	Small fractions, large effects: the role of extracellular polymeric substances in soil function	Marc Redmile-Gordon The Royal Horticultural Society
13:35-13:55	319B22	Extracellular polymeric substances in soil: drivers, functionality and future research directions	Cordula Vogel Institute of Soil Science and Site Ecology, TU Dresden
13:55-14:10	33355	Functional Group Composition and Persistence of Extracellular Polymeric Substances in Soils	Chenchen Qu Huazhong Agricultural University

*Subject to change



Parallel Sessions

14:10-14:23	33996	Nitrogen deposition reorganizes extracellular polymeric substances production through microbial physiological adjustments in subtropical forest soils	Fengping Lai Institute of Geography, Fujian Normal University", "Fujian Sanming Forest Ecosystem National Observation and Research Station", "Key Laboratory of Humid Subtropical Eco-geographical Process of Ministry of Education, School of Geographical Sciences, Fujian Normal University
14:23-14:36	34033	Mechanisms of simulated warming and altered precipitation on microbial metabolism residues in soils of abandoned land	Xing Wang College of Agronomy, Northwest A&F University
14:36-14:49	32616	Chemical Speciation of Phosphorus in Farmland Soils and Soil Aggregates Around Mining Areas	Mengxi Feng Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
14:49-15:02	33380	Microbial extracellular residues dominate long-term soil organic carbon storage	Peipei Qian Huazhong Agricultural University
15:02-15:15	34102	Microbial Legacy: The Differential Transformation of Biomass Components into Soil Organic Matter	Yifeng Zhang State Key Laboratory of Black Soils Conservation and Utilization, Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
16:30-16:50	33603	Plant growth-promotion triggered by poly- γ -glutamic acid is associated with facilitation of bacterial cross-feeding networks of the rhizosphere	Yian Gu Nanjing Tech University

*Subject to change



Parallel Sessions

16:50-17:10	33595	Pore-scale spatial heterogeneity of moisture and microbe interactions during moisture evaporation	Rong Li South China University of Technology
17:10-17:25	32073	Seeing the Invisible: Visualizing Enzymatic Processes in Soil Hotspots	Nataliya Bilyera Geo-Biosphere Interactions, Department of Geosciences, University of Tuebingen
17:25-17:35	32796	Characterization of compound-specific extracellular polysaccharide biomarkers across soil organisms and plants	Tao Li Division of Terrestrial Ecosystem Research, Center for Microbiology and Environmental Systems Science, University of Vienna", "Doctoral School in Microbiology and Environmental Science, University of Vienna
17:35-17:45	34259	Steering Microbial EPS Pathways to Improve Soil Aggregation: From Carbon Source Quality to Model Polysaccharide	Mithat Can Kuscü Wageningen University and Research, the Netherlands", "European centre of excellence for sustainable water technology (WETSUS), the Netherlands
17:45-17:55	33381	Investigating Microbial Intracellular and Extracellular Carbon Production Efficiency Using ¹³ C and ¹⁸ O Isotope Techniques	Jingyi Ren Huazhong Agricultural University
17:55-18:05	33378	Modeling the Turnover and Stabilization of Soil Extracellular Polymeric Substances (EPS)	Xiaoyu Cheng Huazhong Agricultural University
18:05-18:15	35690	Effect of Humic acid on lysozyme interaction with montmorillonite and kaolinite	Yan Li Institute of Environment Resource and Soil Fertilizer, Zhejiang Academy of Agricultural Sciences
18:15-18:25	32896	Regulatory effects of Mortierella on soil microbial network stability and aggregate structure under saline-alkali stress	Ankang Wang Henan Agricultural University

*Subject to change



Parallel Sessions

Monday, June 8 Tuesday, June 9		Room: Convention Center Nanjing 403A	
Session 203003		Soil Biodiversity and Soil Health: Interactions, Indicators, and Innovative Approaches	
		Convener: Qi Li, Institute of Applied Ecology, Chinese Academy of Sciences	
		Co-Conveners: Haiyan Chu, Institute of Soil Sciences, Chinese Academy of Sciences T. Martijn Bezemer, Leiden University, Netherlands.	
Schedule	ID	Title	Presenter
Monday, June 8			
13:15-13:30	32149	Soil Health Bioindicators: Sequences to Services across Europe for wide-scale monitoring	Giles M Ross Netherlands Institute of Ecology (NIOO - KNAW)
13:30-13:45	32265	A Next-Generation Approach to Soil Health in Brazil	Glacy Jaqueline da Silva Biotechnology Applied to Agriculture Department, Paranaense University
13:45-14:00	32051	Biochar-Compost Interactions: Impacts on Soil Health and Plant Performance in Regenerative Organic Systems	Dinesh Panday Rodale Institute
14:00-14:15	31939	Carbon Nanoparticles and Biochar–Hydrogel Nanocomposites for Sustainable Agriculture	Xiaoping Xin School of Natural Resources, Division of Plant Science and Technology, University of Missouri
14:15-14:30	34687	Soil Health Under Climate Change Era: Restoration Strategies using Nanobiotechnology and Soil Engineering	Vishnu D. Rajput Southern Federal University, Rostov on Don, Russia

*Subject to change

Parallel Sessions

14:30-14:45	35096	A Functional Molecular Framework for Scalable Soil Health Assessment	Rafael Borges da Silva Valadares Vale Institute of Technology - Sustainable Development
16:30-16:45	33654	Developing a Framework for Soil Microbial Indicators	Michael Crawford Cooperative Research Centre for High Performance Soils
16:45-17:00	33247	Crop Coexistence Redefines Belowground Microbial Assembly Toward N-Cycling Archaea and Fungal Resource Networks	Angela Roccotelli Department of Agriculture, Food, Environment and Forestry (DAGRI), University of Florence, Piazzale Delle Cascine 28, 50144, Florence, Italy
17:00-17:15	31687	Contrasting global patterns and drivers of soil bacterial and fungal diversity responses to crop rotation	Chong Li University of Alberta
17:15-17:30	33043	Model-Driven Microbiome: Next-Gen Soil Bioremediation	Zhepu Ruan South China Agricultural University
17:30-17:45	32588	The role of microorganisms in changing the properties of eroded soils	Gracheva Tatiana Soil science faculty, Lomonosov Moscow State University
17:45-18:00	31942	Synergistic Effects of Clay, Hay residue, and Fertilizer in Sandy Soil	Linda E. Lindongi UWA School of Agriculture and Environment, The University of Western Australia", "Faculty of Agriculture, University of Papua
18:00-18:15	35309	Rhizosphere Compartmentation Reveals Conserved and Divergent CO ₂ Responses Across Wheat Genetic Lineages	Qingyang zhuang Nanjing University
18:15-18:30	33400	Soil Ecological Shifts Following Land Use Conversion to Agriculture in Southern Ethiopia	Emiru Birhane Department of Land Resource Management and Environmental Protection, Mekelle University, P.O. Box 231, Tigray, Ethiopia;

*Subject to change

Parallel Sessions

Tuesday, June 9

09:00-09:15	31660	Steering soil microbiomes for healthier crops	T.Martijn Bezemer Institute of Biology, Leiden University
09:15-09:30	34946	The response of soil faunal and biological activities to silvicultural management in a Tuber Magnatum Pico productive area in Tuscany, Italy	Carlos Lozano Fondón Research Centre for Agriculture and Environment, Council for Agricultural Research and Economics, via di Lanciola 12VA, 50125 Florence, Italy
09:30-09:45	33988	Organic rice farming restructures nematode communities through trophic structure, functional guilds, and ecological niches across farming systems in the Mekong delta, Vietnam	Nguyen Van Sinh Soil Science Faculty, College of Agriculture, Can Tho University
09:45-10:00	33734	Impact of long-term conservation agriculture on soil biota and inter-taxonomic interactions in Andisols, Japan	Soh SUGIHARA Tokyo University of Agriculture and Technology
10:00-10:15	33080	Belowground nutrient transfer between Scots pine and bilberry mediated by ectomycorrhizas	Jie Xu Institute for Atmospheric and Earth System Research (INAR)", "Department of Forest Sciences, Faculty of Agriculture and Forestry, University of Helsinki
10:15-10:30	32511	Mycorrhizal fungal communities in Sarayaku territory: Impact of traditional agricultural practices	Alex Dahua-Machoa Alex Dahua-Machoa
10:30-10:45	32113	Soil Enzyme Activities and Microbial Biomass Biomarker Associated with the Integration of Cereal Rye to Improve Tomato Soil-Borne Disease Suppression and Yield	Nicola Lorenz The Ohio State University
11:15-11:30	34585	Predatory protists - crucial drivers of soil antibiotic resistance	Thi Bao-Anh Nguyen School of Agriculture, Food and Ecosystem Sciences, Faculty of Science, The University of Melbourne, Parkville, VIC, 3010, Australia

*Subject to change

Parallel Sessions

11:30-11:45	33735	Effects of five-year of conservation agriculture on soil chemistry and soil biological communities in Japan	Shinichi Watanabe Tokyo University of Agriculture and Technology
11:45-12:00	32902	Permanent spontaneous vegetation cover as a strategy to enhance soil multifunctionality in perennial crops in the Mediterranean basin	Alicia Morugán-Coronado Departamento de Ingeniería Agronómica, Unitécnica de Cartagena
12:00-12:15	32825	Harnessing Soil Cyanobacteria for Resilient Agriculture: Evidence from a 20-Year Mediterranean Orchard Trial	Adriano Sofo University of Basilicata
13:30-13:45	32047	A data-driven methodology to identify key biological indicators linked with ecosystem services in agricultural soils	Alberto Garre Universidad Politecnica de Cartagena
13:45-14:00	32435	Soil organisms from multiple trophic levels regulate respiration in dryland purple soil	Zhiyuan Yao Institute of Mountain Hazards and Environment, Chinese Academy of Sciences
14:00-14:15	32556	Auxotrophic bacteria in maize rhizosphere and bulk soil: insights into microbial dependencies	Gabriel de Castro Theodoro University of São Paulo
14:15-14:30	31658	Enzyme-Mediated Nutrient Dynamics in Cover Crop Systems: Temporal and Spatial Optimization Strategies	Oluwasegun J. Olubisi University of Florida IFAS, School of Natural Resources and Environment, Gulf Coast Research and Education Center, Wimauma, FL 33598, USA
14:30-14:45	30618	Evaluating tillage effects on soil biodiversity across functional groups using extracellular eDNA	Philippe Belliard Zoology Department, Universität Innsbruck
14:45-15:00	35187	Plant origin modulates the stability of the soil microbiome under drought and dry-wet cycles	Hengjun Zhao School of Life Sciences, Sun Yat-sen University", "Netherlands Institute of Ecology, NIOO-KNAW, Department of Terrestrial Ecolog

*Subject to change

Parallel Sessions

15:00-15:15	34288	Cover Crops Enhance Soil Multifunctionality by Shifting Microbial Life-History Strategies in topsoil	Mengmeng Wen Northwest University
16:30-16:45	33944	Substitution of chemical fertilizer by consortia of rhizospheric microorganisms to improve the growth of the plants	Jairo Mora-Delgado Department of Livestock Production; Livestock Agroforestry Systems Research Group, University of Tolima
16:45-17:00	33842	Overlooked migration risk of resistomes in mining soil environments	Li Tian Sun Yat-sen University
17:00-17:15	32561	Soil management drives microbial diversity patterns and community structure under Cd and Cr contamination	Jussara Borges Regitano Department of Soil Science, ESALQ/USP
17:15-17:30	31678	Rewiring Micro-Food Webs: How Copper Nanopesticides Can Reshape Nitrogen Fluxes via Trophic Decoupling	Xuchen Yan Shanghai Jiao Tong University
17:30-17:45	31585	Long-Term Effects of Nitrogen and Lime Application on Plant-Microbial Interactions and Soil Carbon Stability in a Semi-Arid Grassland	Kwenama Buthelezi School of Agricultural, Earth and Environmental Sciences, University of KwaZulu-Natal
17:45-18:00	319B24	Biochar effects on soil physicochemical properties and biological activity in Mediterranean agricultural soils	Irene Ortiz-Bernad University of Granada
18:00-18:10	36070	Coupling of Intraspecific Root Traits and Rhizosphere Fungal Communities in Cynodon dactylon across Hydrological Gradients of a Reservoir Drawdown Zone	Xiaoxiao Wang Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences
18:10-18:20	31709	The effect of iron-bound organic carbon on fungal denitrification in regulating upland red soils N ₂ O emission	Huifang Xu Jiangxi Agricultural University
18:20-18:30	33338	Conservation Tillage Reduces Mycotoxin Contamination in Black-Soil Maize Systems	Mengtian Chen China Agricultural University

*Subject to change

Parallel Sessions

Thursday, June 11		Room: Expo Center, Hall 7, 7201	
Session 203004		Soil Biogeochemistry in Wetlands: Foundations for Restoration and Climate Resilience	
		Convener: Dominik Zak, Department of Ecoscience, Aarhus University, Aarhus, Denmark	
		Co-Convener: Ying Zhao, College of Hydraulic and Civil Engineering, Ludong University, China	
Schedule	ID	Title	Presenter
11:15-11:45	319B20	Enzymatic latch	Chris Freeman School of Environmental & Natural Sciences, Bangor University
11:45-12:00	36303	Redox processes of particular organic matter in mediating carbon emissions in peatlands	Hongyan Wang Nanjing University of Information Science and Technology
12:00-12:15	34563	Role of Iron Minerals in Carbon Stabilization in Redox-Active Ecosystems	Amanda Duim Ferreira University of Sao Paulo
13:30-13:45	33833	Thiol-activated ROS generation by particulate organic matter: The overlooked role of interface-accelerated organic radical chain reaction	Yixuan Wang Nanjing University
13:45-14:00	32638	Millimeter-scale niche differentiation of N-cycling microorganisms across the soil-water interface has implications for N ₂ O emissions from wetlands	Yu-Jia Cai Shenzhen University
14:00-14:15	32832	Nitrogen input regulates soil carbon fixation via microbial-driven mineral-associated organic carbon formation in wetlands	Shouyang Luo Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
14:15-14:30	34139	Impact of Phenolic Additions on Microbial Properties of Peatland	Hojeong Kang North China University of Water Resources and Electric Power

*Subject to change

Parallel Sessions

14:30-14:45	34418	Microbially Mediated Mechanisms of PFAS-Induced Soil Carbon Priming Effects in Mangrove Ecosystems	Meiqi Zhao Sun Yat-sen University
14:45-15:00	34417	Soil structure determines dissolved organic carbon release from peat soils	Ji QI Faculty of Agriculture, Civil and Environmental Engineering, University of Rostock, Rostock, Germany
15:00-15:15	34937	Vertical Heterogeneity of Soil Arsenic Distribution and Its Relationship with Iron-Manganese Minerals Geochemical Barrier Combined with Microbial Effects	Shengkai Wang Tohoku University
16:30-16:45	34964	Soil carbon and nitrogen dynamics along a salinity gradient in Amazonian mangroves	Silvia F Mardegan Laboratory of Botany, Institute of Biological Sciences, Federal University of Pará, Belém - PA, Brazil
16:45-17:00	35920	Coupled effects of human activities and river-Lake interactions evolution alter sources and fate of sedimentary organic carbon in a typical river-Lake system	Shilan Wang Hunan Normal University
17:00-17:15	32750	Climate warming suppresses the preservation of mineral-associated organic carbon in peatlands	Liang Yang Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
17:15-17:30	31635	Nonlinear response of anaerobic methane oxidation to water table drawdown in peatlands under climate warming	Lichao Fan Northwest A&F University
17:30-17:45	34010	Water level regulation for reducing carbon emissions in urban restored wetlands	Kangting Ouyang Sun Yat-sen University
17:45-18:00	34770	Recovery of wetland soil function under passive and active hydrological restoration: evidence from multi-decadal spectral indicators	Christopher Auricht Auricht Projects and Adelaide University
18:00-18:15	34138	Planting density constrains soil organic carbon pools during native plant restoration following <i>Spartina alterniflora</i> removal across invasion chronosequences	Jingfeng Wang Beijing Normal University
18:15-18:30	32471	Exploiting Soil Recalcitrant Phosphorus (P) Drives Invasion: Adaptive P-acquisition Strategies of <i>Spartina alterniflora</i> in Chinese Coast	Jinguo Hua XiamenUniversity

*Subject to change



Parallel Sessions

Monday, June 8 Tuesday, June 9		Room: Convention Center Nanjing 402B	
Session 203005		Soil Microbiomes - Importance For Climate Resilient Future, Degraded Lands Restoration And Plant Health Control	
		Convener: Magdalena Frac, Institute of Agrophysics, Polish Academy of Sciences, Lublin, Poland	
		Co-Conveners: Alberto Acedo - Biome Makers Inc., USA Ellen Kandeler - University of Hohenheim, Stuttgart, Germany Shamina Imran Pathan - University of Florence, Italy Anna Walkiewicz - Institute of Agrophysics, Polish Academy of Sciences, Poland	
Schedule	ID	Title	Presenter
Monday, June 8			
13:15-13:30	36591	Contrasting patterns of belowground biodiversity homogenization across urban greenspaces	Francisco Rocha Laboratorio de Biodiversidad y Funcionamiento Ecosistémico, Instituto de Recursos Naturales y Agrobiología de Sevilla (IRNAS), CSIC, Sevilla, Spain
13:30-13:45	34163	Tracing the dynamic life story of soil microbial hotspots	Seyed Sajjad Hosseini Department of Soil Science, Faculty of Agriculture, Ferdowsi University of Mashhad, Mashhad, Iran ", "Department of Soil and Plant Microbiome, Institute of Phytopathology, Christian-Albrechts-University of Kiel, Kiel, Germany

*Subject to change



Parallel Sessions

13:45-14:00	34523	Establishing Genetic, Phylogenetic and Functional Mechanisms that Shape Acidobacteriota Diversity of Arctic Tundra and Boreal Forest Soils	Max Häggblom Rutgers University - New Brunswick
14:00-14:15	35857	Integrated impacts of land use intensification on greenhouse gas emissions and soil microbial communities in the Taihu Lake Region: patterns, mechanisms, and implications	Weishou Shen Nanjing University of Information Science and Technology
14:15-14:30	33268	Long-term soil storage highlights the role of precipitation history in microbial dynamics and CO ₂ emissions	Kirill Bogdanov University of Otago, Department of Microbiology and Immunology, Dunedin, New Zealand
14:30-14:45	32477	Methanotrophic activity as a driver of soil carbon cycling in agricultural soils	Anna Walkiewicz Institute of Agrophysics, Polish Academy of Sciences
14:45-15:00	36012	Fungal community shifts govern microbial carbon use efficiency across an elevation gradient at Qinling mountain, China	Yangquanwei Zhong Northwestern Polytechnical University
15:00-15:15	33959	Global agricultural intensification disproportionately erodes rare soil microbial taxa with consequences for ecosystem functioning	Samiran Banerjee North Dakota State University
16:30-16:45	31850	Shrub-Crop Microbiome and Mycorrhizae Hyphal Interactions: A Novel Rhizosphere Alliance to Mitigate Drought and Promote Beneficial Microorganisms in the Sahel	Richard Dick Ohio State University, USA

*Subject to change



Parallel Sessions

16:45-17:00	35476	Mycorrhizal types as key drivers of root-associated fungal composition and pathogen spillover in desert plants	Li Sun College of Ecology and Environment, Xinjiang University", "Key Laboratory of Oasis Ecology of Education Ministry, Xinjiang University", "Xinjiang Jinghe Observation and Research Station of Temperate Desert Ecosystem, Ministry of Education, Xinjiang University
17:00-17:15	33099	Beyond plant diversity: plant productivity responses to extreme drought are linked to arbuscular mycorrhizal fungal diversity	Wei Fu Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
17:15-17:30	32528	Mycorrhiza Helper Streptomyces Strains for Combating Phytophthora Blight	Junli Hu State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences
17:30-17:45	35806	Fungal mutualism in plant growth: dark septate endophytes and arbuscular mycorrhizal colonization in soybean (Glycine max)	Harshi K. Gamage Queensland Alliance for Agriculture and Food Innovation, The University of Queensland, St Lucia, QLD 4072, Australia
17:45-18:00	31648	A Niche-Based Approach of Endemic Cyanobacteria in Soil and Water Conservation in Saline Soils	Sudabeh Gharemahmudl Postdoctoral Fellow, Department of Watershed Management Engineering, Faculty of Natural Resources, Tarbiat Modares University

*Subject to change

Parallel Sessions

Tuesday, June 9

09:00-09:15	36523	Soil Bacterial Succession as a Driver of Rhizosphere Function: Wheat-Derived Plant Growth-Promoting Rhizobacteria and Plant Stress Resilience	Asmae Boumezgane School of Animal, Rural and Environmental Sciences, Nottingham Trent University, UK
09:15-09:30	34094	Unraveling the mechanisms of halotolerant plant growth-promoting microbes in saline-alkaline habitats through microbial diversity, functional traits and transcriptomics	Jianrong Huang Henan University
09:30-09:45	35991	Soil microbial communities regulate plant response to drought stress	Tianci Zhao University of Groningen
09:45-10:00	34672	From Soil to Sustainability: Exploring Plant Growth Promoting Bacteria for Drought Stress Tolerance and Yield Improvement in Wheat Crop	Tanvi Bhatia Department of Microbiology, CCSHAU College of Agriculture, Bawal, India
10:00-10:15	33502	Applying wild (NatCom) soil microbiomes to alleviate primary stressors for peas and wheat	Francois P. Teste Agriculture and Agri-Food Canada (AAFC) and University of Saskatchewan
10:15-10:30	31715	A SWEET Challenge: Less Sugar for Rhizospheric Microbiome Under the Successive Wheat Cultivation	Mehdi Rashtbari Department of Soil and Plant Microbiome, Institute of Phytopathology, Christian-Albrechts-University of Kiel
10:30-10:45	31604	Impacts of soil biostimulants on 'Valencia' sweet orange performance on Flatwoods and Ridge soils in Florida	Duplicate Sambani University of Florida, Soil, Water and Ecosystem Sciences Departments, Institute of Food and Agricultural Sciences, Citrus Research and Education Center

*Subject to change

Parallel Sessions

10:45-11:00	34361	Unlocking Multifunctionality: The Interplay Between Legume-Cereal Intercropping, Soil Microbial Communities, and Ecosystem Cycles.	Shamina Imran Pathan Department of Agriculture, Food, Environment and Forestry (DAGRI), University of Florence, Piazzale Delle Cascine 28, 50144, Florence, Italy
11:15-11:30	36352	Effects of inter-row management and cover crops on vineyard rhizosphere microbial communities	Barnabas Kovacs University of Tokaj
11:30-11:45	34867	Impact of multiple driving factors on soil bacterial community dynamics in a wheat-maize/soybean rotation system in the North China	Ya Huang Nanjing Agricultural University
11:45-12:00	32674	Leguminous Cover Crops Enhance Soil Microbial Communities and Tea Quality via Rhizosphere Microbiome Modulation	Kadarkarai Murugan Department of Zoology, School of Life Sciences, Bharathiar University
12:00-12:15	35846	Synergistic Soil Remediation and Microbial Network Reconstruction: Leguminous Cover Crops and Probiotics in Degraded Dry-Hot Valley Coffee Plantations	yushuang yang Southwest Forestry University
13:30-13:45	35995	Assessing the Role of Soil Amendments and Root-Associated Fungi in Anaerobic Soil Disinfestation	James Littrell University of Tennessee, Knoxville
13:45-14:00	34311	Ozonate Irrigation: Soil Microbial Stress, Nematode Suppression and Tomato Brown Rugose Fruit Virus control	Sofia Maria Muscarella Department of Agricultural, Food and Forest Sciences, University of Palermo, Palermo, Italy
14:00-14:15	33260	Resistant crops engineer beneficial soil microbial legacies for disease suppression	Shanshan Liu Nanjing Agricultural University", "Utrecht University

*Subject to change



Parallel Sessions

14:15-14:30	33097	Holostitic Pest Management and Rhizospheric Microbiome Dynamics in Mediterranean Forest Soils: Insights from LIFE FAGESOS	Carmen Morales-Rodriguez Department of Innovation in Biological, Agro-Food and Forest Systems (DIBAF), University of Tuscia
14:30-14:45	33224	The stem microbiome assists maize in resisting stalk rot	Da Li Institute of Microbiology, Chinese Academy of Sciences
14:45-15:00	32956	A Novel Strategy for Rapid Discovery of Disease-Suppressive Functional Microbial Consortia Using High-Throughput Microbial Community Synthesis	Xizhi Huang Hubei University
15:00-15:15	32698	Global Change and Human Activity on Soil Microbial Community and Metabolism	Huaihai Chen Sun Yat-sen University
16:30-16:45	32496	Combined Microbial Inoculation and Reduced Inorganic Fertilization Enhances Diversity and Functionality in Potato Rhizosphere Microbiome at Field Scale	Raul Zornoza Universidad Politecnica de Cartagena
16:45-17:00	31595	The application of liquid soil activator increased the activity of soil microbiota and enhanced the degradation of straw and plant growth in two different field locations	Seyed HOSSEINI Department of Plant Care Discovery, Olmix
17:00-17:15	34414	Recovery Mechanism of Kobresia humilis in Alpine Meadows	Junxi Li SichuanUniversity
17:15-17:30	34395	When Plants Choose Their Microbes: Genotype-Driven Assembly of Salt-Adaptive Microbiomes in Wheat	Mahdi Shahabi Rokni Department of Soil and Plant Microbiome, Institute of Phytopathology and Plant Protection, Faculty of Agricultural and Nutritional Sciences, Christian-Albrechts University of Kiel, Germany

*Subject to change

Parallel Sessions

Tuesday, June 9		Room: Expo Center, Hall 7, 7201	
Session 203007		Diversity Dynamics and Ecosystem Functions in Soil Microbial Ecology	
		Convener: Zhongjun JIA, Northeast Institute of Geography and Agroecology, CAS Institute of Soil Science, CAS	
		Co-Conveners: Xue-Xian Zhang, University of Auckland Makoto Ikenaga, Kagoshima University Junjie Liu, Northeast Institute of Geography and Agroecology, CAS Cécile Gubry-Rangin, University of Aberdeen, UK	
Schedule	ID	Title	Presenter
09:00-09:10	319B29	Challenges and opportunities in interpreting the complex microbial interactions in soil	Xue-Xian Zhang School of Biological Sciences, University of Auckland
09:10-09:30	320B21	Conservational agriculture for achieving soil and human health and enhancing the climate-regulating function of agroecosystems	Liudmila Orlova
09:30-09:50	32932	Carbon monoxide metabolism as a driver of volcanic soil colonisation	Marcela Hernandez University of East Anglia
09:50-10:10	319B28	Does land use conversion from temperate steppe to farmland increase broad scale homogeneity of soil biota and its functional genes?	Junjie Liu State Key Laboratory of Black Soils Conservation and Utilization, Key Laboratory of Mollisols Agroecology, Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
10:10-10:25	34383	Cobamide Auxotrophy and Unexpected Cobamide Synthesis Potential in Organohalide-respiring Dehalococcoidia	Yiru Cui Institute of Applied Ecology, Chinese Academy of Sciences

*Subject to change

Parallel Sessions

10:25-10:50	35164	Microbial growth is the key to soil organic carbon cycling	Qing-Fang Bi Max-Planck Institution of Biogeochemistry, Jena, Germany", "Martin Luther University Halle-Wittenberg, Halle (Saale), Germany
10:50-11:05	34897	Widespread presence of extraordinary high-affinity of atmospheric methane oxidation by conventional methanotrophs in paddy soils across China	Yan Zheng Northeast Institute of Geography and Agroecology, Chinese Academy of Science, Changchun 130102, PR China
11:15-11:30	35733	Synergistic remediation of desertification and carbon sequestration in extreme environments via region-tailored acclimated microbial-biochar systems	Chao Song Institute of Hydrogeology and Environmental Geology, Chinese Academy of Geological Sciences
11:30-11:45	34696	Effects of Perennial and Annual Plant Life Forms on Rhizosphere Bacterial Communities in Saline-Alkali Desert Soils	Ying Zhu Institute of Biology, Gansu Academy of Sciences
11:45-12:00	35990	Summer drought impacts micropredator abundance and microbial foodweb structure in a rewetted fen peatland	Die Hu Greifswald of University
12:00-12:15	33370	Climatic stability predominates over soil properties in structuring soil antibiotic resistance across Australia	Mingming Du The University of Sydney
12:15-12:30	319B27	Life and death of ammonia oxidizers drives soil organic carbon accumulation in long-term different fertilization soils	Xueru Huang College of Land and Environment, Shenyang Agricultural University
13:30-13:50	35298	Microbial interactions drive microbial succession during soil formation	Kazuo Isobe Peking University
13:50-14:10	32886	Wetland Age and Seasonality Drive the Succession of Active Methanotrophs in Constructed Wetlands	Yo-Jin Shiau Department of Bioenvironmental Systems Engineering, National Taiwan University
14:10-14:30	32888	Leveraging the root economics space: outsourcing rice varieties outperform do-it-self strategies under stress	Fang Li Henan Agricultural University
14:30-14:45	32415	Experimental drought drives divergent succession of soil microbiota	Sihang Deng Tsinghua University
14:45-15:00	34309	Tropical rubber plantations' expansion alters multiple ecosystem functions and C storage	Ashutosh Kumar Singh Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences, Menglun, Yunnan 666303, China

*Subject to change

Parallel Sessions

15:00-15:15	35051	Decoding Deep Soil Microbial Response Dynamics to Afforestation in Semiarid Regions: Biotic-Abiotic Trade-offs Under Land-Use Transition	Rongrong Zheng Research Center for Eco-Environmental Sciences
16:30-16:50	36045	Effects of Disturbance Intensity on Soil Microbial Diversity, Composition, and Network Complexity in Coastal Georgia, USA	Tiehang Wu Department of Biology, Georgia Southern University
16:50-17:10	33684	Eco-evolutionary patterns of microbial engine that drives reduction of greenhouse gas	Zhongjun Jia Institute of Soil Science, Chinese Academy of Sciences
17:10-17:25	32839	Analysis of Soil Microbial Community Composition and Diversity Under Different Forest-Medicinal Plant Intercropping Patterns	Shutong SANG Experimental Center of Subtropical Forestry
17:25-17:40	35478	Colonization and Community Structure of Arbuscular Mycorrhizal Fungi and Dark Septate Endophytes in Typical Desert Plants: A Comprehensive Analysis Across Seasonal and Drought Conditions	Li Sun College of Ecology and Environment, Xinjiang University", "Key Laboratory of Oasis Ecology of Education Ministry, Xinjiang University", "Xinjiang Jinghe Observation and Research Station of Temperate Desert Ecosystem, Ministry of Education, Xinjiang University
17:40-17:55	34194	Effects of Different Straw Return Methods on Soil Microbial Community Structure and Diversity	Yuxia Yuan Inner Mongolia Agricultural University
17:55-18:10	36085	The Effect of Nitrogen Enrichment on Soil Fungal and Bacterial Community Assembly Processes and Phylogenetic Diversity in Wetland	Yiting Zhao Key Laboratory of Black Soils Conservation and Utilization, Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences, Changchun 130102, PR China", "University of Chinese Academy of Sciences, Beijing 100049, PR China
18:10-18:25	35292	Elucidating Soil Microbial Community Activity Through Sipros-and-Aerith-Assisted Proteomic and Metabolomic Stable Isotope Probing	Yi Xiong The University of Oklahoma

*Subject to change

Parallel Sessions

Monday, June 8		Room: Convention Center Nanjing 403B	
Session 204003		Disciplinary Development and Interdisciplinary Frontiers in Soil Mineralogy	
		Convener: Sofia N. Lessovaia, St.-Petersburg State University (SPSU), Russia	
		Co-Convener: Georges-Ivo Ekosse, University of Venda, South Africa, Project Leader of Clays and Clay Minerals in Africa	
		Edson Campanhola Bortoluzzi, the University of Passo Fundo (UPF), Brazil	
Schedule	ID	Title	Presenter
16:30-16:45	33047	Mineralogical and Geochemical Contributions to the Study of Clays and Clay Minerals in Africa	Georges Ekosse University of Venda
16:45-17:00	33046	Contributions to the Study of Geophagic Clays in Africa	Georges Ekosse University of Venda
17:00-17:15	36592	Mineralogical Composition of Bulk and Clay Fractions in Mongolian Soils: Insights from X-Ray Diffraction Across Arid to Forest-Steppe Gradients	Undrakh-Od Baatar Institute of Soil Science and Land Evaluation, Hohenheim University, Stuttgart, Germany", "Mongolia
17:15-17:30	32088	Clays as Therapeutic Agents: A Focus on Mineralogy and Geochemistry of Geophagic Clays at Mfensi-Adankwame in the Ashanti Region of Ghana and their Healing Properties	Rasheed Mohammed Abdul State Key Laboratory of Environmental Geochemistry, Institute of Geochemistry, Chinese Academy of Sciences", "University of Chinese Academy of Sciences", "Department of Earth Science, School of Physical Sciences, C. K. Tedam University of Technology and Applied Sciences
17:30-17:45	34070	Health implications of geophagic kaolin in Gabon	Megne Tiegoum Adeline University of Venda, South Africa
17:45-18:00	32394	Models of rock weathering in soil environments based on rock fractal geometry	Sofia N. Lessovaia St.-Petersburg State University

*Subject to change



Parallel Sessions

Friday, June 12		Room: Expo Center, Hall 7, 7201	
Session 206001		Hydropedology: Addressing Real-World Problems Through Interdisciplinary Science	
		Convener: Johan van Tol, Department Soil, Crop and Climate Sciences, University of the Free State, South Africa	
		Co-Convener: LI Xiaoyan, Department of Geography, Beijing Normal University	
Schedule	ID	Title	Presenter
09:00-09:15	34921	Pore Architecture, Water Dynamics, and Climate Sensitivity of Mountain Volcanic Soils: Integrating SEM-DIA and NMR Relaxometry for Hydropedological Assessment	Di Iorio Erika Molise University
09:15-09:30	35574	Infiltration-Runoff Processes in Soil-Epikarst Systems on Karst Hillslope in Southwest China	Hongsong Chen; Jun Zhang Institute of Subtropical Agriculture, Chinese Academy of Sciences
09:30-09:45	36355	Diagnosing Non-Rigid Soil Water Flow through Window-Scale Evolution of Hydraulic Parameters with Physics-Informed Learning	Kai Chang China University of Geosciences, Wuhan
09:45-10:00	33294	Deciphering Soil Water-Carbon Coupling in the Earth's Critical Zone and Its Environmental and Edaphic Controls	Xi Zhang The University of Tennessee
10:00-10:15	33676	Modelling water retention curves for hydrophobic granular soils	Tingting Zhao The University of Edinburgh

*Subject to change



Parallel Sessions

10:15-10:30	32429	Addressing water security in DOCG vineyards: a hydropedological framework linking soil water balance, plant stress, and berry quality	Antonello Bonfante National Research Council of Italy (CNR), ISAFOM
10:30-10:45	32611	Runoff and Sediment Response to Rainfall and Vegetation Cover in the Toutun River Basin (Xinjiang, China)	Liu Li Xinjiang Agricultural University
10:45-11:00	31653	Soil aggregate stability along a gradient of flooding intensity in the riparian zone: the role of root functional traits	Ping Huang Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences
11:15-11:30	31670	Evapotranspiration varies across different landscape units, influenced by hillslope position, soil properties and vegetation: An example from the Qinghai-Tibet Plateau	Yurova Alla State Key Laboratory of Cryospheric Science and Frozen Soil Engineering, Northwest Institute of Eco-environment and Resources CAS
11:30-11:45	36245	Development of Environmental Benchmark of Cr(VI) in Soils for the Protection of Groundwater Quality	Jing Song Institute of Soil Science, Chinese Academy of Sciences, Nanjing, China
11:45-12:00	36325	Quantitative Characterization and Prediction Model for the Evolution of Soil Cracks in the Daqing Region	Xin Zheng Heilongjiang Bayi Agricultural University
12:00-12:15	34708	Redistribution of hydrological and dissolved nutrient by self-organized shrubs: strategies to collect rain and nutrient for surviving in drylands	Guangyao Gao Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
12:15-12:30	33006	Spatiotemporal variations and driving factors of groundwater ecosystem service value in a typical arid region: A case study of the Xinjiang, China	Adila Ailaiti Nanjing University

*Subject to change

Parallel Sessions

Thursday, June 11		Room: Expo Center, Hall 7, 7203	
Session 207001		Modelling Soil Processes from Ped to Global Scale	
		Convener: Yonggen Zhang, School of Earth System Science, Tianjin University, Tianjin, China	
		Co-Conveners: Lutz Weihermüller, Institute Agrosphere IBG-3, Forschungszentrum Jülich GmbH, 52428 Jülich, Germany Martine van der Ploeg, Hydrology and Quantitative Water Management Group, Dept. Environmental Sciences, Wageningen University, Wageningen, the Netherlands Attila Nemes, Faculty of Environmental Sciences and Natural Resource Management, Norwegian University of Life Sciences, Ås, Norway Wenhao Shi, School of Earth System Science, Tianjin University, Tianjin, China Yijian Zeng, Faculty of Geo-Information Science and Earth Observation, University of Twente, 7522 NB Enschede, the Netherlands	
Schedule	ID	Title	Presenter
11:15-11:30	34252	Multi-scale simulations of soil transport properties with dynamic soil structure: combination of molecular, micro and continuum approaches	Kirill M. Gerke Center for Computational Physics, Landau School for Physics and Research, Moscow Institute of Physics and Technology
11:30-11:45	35324	Predicting soil and macropore hydraulic properties: combination of direct simulations and machine learning	Vladimir N. Dolgushev Center for Computational Physics, Landau School for Physics and Research, Moscow Institute of Physics and Technology (Moscow Region, Russia)
11:45-12:00	33321	Coupling soil biogeochemical processes and structural dynamics in a pore-scale model for an advanced understanding of organic carbon and nitrogen turnover	Maximilian Rötzer Modeling and Numerics, Department of Mathematics, University of Erlangen-Nürnberg, Erlangen, Germany

*Subject to change

Parallel Sessions

12:00-12:15	34105	Quantitative Analysis of Pore Scale Factors Effecting Permeability in Porous Media	Wenjing Qin TaiyuanUniversityofTechnology
13:30-13:45	31450	Probabilistic and Entropy Models of Soil Properties for Contemporary Processes Assessment	Irina Mikheeva Institute of Soil Science and Agrochemistry of Siberian Branch of Russian Academy of Sciences
13:45-14:00	33100	Modeling on-farm spatial variability of crop yield	Ole Wendroth Department of Plant & Soil Sciences, University of Kentucky
14:00-14:15	32369	Differentiable Hybrid Modeling for Data-Driven Discovery of Hidden Processes in Soil Water Retention	Sarem Norouzi Department of Agroecology, Aarhus University", "Department of Earth Sciences and Engineering, Imperial College London
14:15-14:30	34621	Predicting the Impacts of Metal Nanoparticles on Soil Properties: A Machine-Learning-Based Study of Soil Health Dynamics	Yaping Lyu University of Science and Technology of China
14:30-14:45	33446	Multi-scale modelling of integrated hydrological and biogeochemical processes in soils	Junye Wang Athabasca University
14:45-15:00	31985	Advancing Daisy's denitrification function to improve predictions of nitrous oxide emissions from agricultural soils	Tobias Klöffel Department of Plant and Environment, University of Copenhagen
15:00-15:15	36222	Towards predicting plant uptake of trace elements with a mechanistic mass-balance model	Hadee Thompson-Morrison Bioeconomy Science Institute

*Subject to change



Parallel Sessions

16:30-16:45	34977	Evaluating Conditioned Probabilistic Subsampling for the Validation of 3D Regional Subsurface Models using Legacy Data	Pablo De Weerd Ghent University
16:45-17:00	33164	A GIS-BASED SOIL-LANDSCAPE MODELING APPROACH TO PREDICT SPATIAL DISTRIBUTION OF SOILS IN UNDIFFERENTIATED AREAS OF DAVAO CITY, PHILIPPINES	Dernie T. Olguera Department of Agricultural Sciences, University of Southeastern Philippines, Davao de Oro, Philippines
17:00-17:15	35241	SoilData: A MapBiomass Initiative for Soil Data Rescue, Curation, and Open Science in Brazil	Alessandro Samuel-Rosa Federal Technological University of Paraná (Department of Agronomy, Santa Helena, Paraná, Brazil)
17:15-17:30	36201	MapBiomass Soil: Soil Information across Four Decades of Land Use and Land Cover Change	Taciara Zborowski Horst Federal Technological University of Paraná (Department of Agronomy, Dois Vizinhos, Paraná, Brazil)
17:30-17:45	35271	Estimation of Soil Temperature at Depth Using Time Series of Satellite Imagery	Seyed Kazem Alavipanah Department of Remote Sensing and GIS, Faculty of Geography, University of Tehran, Iran
17:45-18:00	33826	Fusing ERA5-Land and SMAP L4 for an Improved Global Soil Moisture Product	Yonggen Zhang Tianjin University
18:00-18:30	-	Session Wrap-up & Panel Discussion	All Speakers / Convenor

*Subject to change

Parallel Sessions

Friday, June 12		Room: Expo Center, Hall 7, 7203	
Session 207002		Soil Erosion Modelling: Global Alliance	
		Convener: Pasquale Borrelli, Department of Science, Roma Tre University, Rome, Italy Co-Convener: Christine Alewell, Department of Environmental Sciences, University of Basel, Basel, Switzerland Panos Panagos, European Commission, Joint Research Centre (JRC), Ispra, Italy Jae E. Yang, Department of Biological Environment, Kangwon National University, Chuncheon, Republic of Korea	
Schedule	ID	Title	Presenter
09:00-09:10	-	Convenors Message - Ongoing collaborative research activities	Pasquale Borrelli
09:10-09:35	32790	Assessments of Gully Erosion Susceptibility in Typical Thick-Layer Mollisol Region of Northeast China	Fenli Zheng Northwest A & F University
09:35-10:00	34859	Impacts of Soil Erosion on Soil Organic Carbon Dynamics and Carbon Neutrality	Jae Yang Department of Biological Environment, Kangwon National University
10:00-10:15	36203	Mobilizing Legacy Data for Continental-Scale Erosion Modelling: The MapBiomass SoilData Initiative in Brazil	Taciara Zborowski Horst Federal Technological University of Paraná (Department of Agronomy, Dois Vizinhos, Paraná, Brazil)

*Subject to change



Parallel Sessions

10:15-10:30	32393	InSAR-based Quantitative Remote Sensing of Spatiotemporal Characteristics of Soil Erosion	Hailong He University of Manitoba", "Northwest A&F University
10:30-10:45	32085	Spectra-based predictive mapping of soil erosion rates in sloping croplands	Pu Shi Jilin University
11:15-11:30	34943	Impacts of cascading check dams on sediment yield in the middle Yellow River Basin: Insights from 50 years of grid-cell-level simulation	Guangyao Gao Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
11:30-11:45	34969	Advancing Soil Erosion Modelling in Africa: Integrating Processes, Uncertainty, and Future Change from Catchment to Continental Scales	Hamza BRIAK Center for Sustainable Soil Sciences (C3S), College of Agriculture and Environmental Sciences (CAES), Mohammed VI Polytechnic University (UM6P), Ben Guerir, Morocco
11:45-12:00	32018	The influence of the soil cover on the reliability of soil erosion modelling on the Central Russian Upland	Andrey Zhidkin V.V. Dokuchaev Soil Science Institute
12:00-12:15	33973	From Micromechanics to Watershed Management: Insights from Simulation Experiments, Model Development, and Regional Risk Assessment	Hossein Asadi Soil Science Department, University of Tehran
12:15-12:30	34290	Pasture Restoration Improves Runoff, Soil loss, and Sediment Sorting in a Brazilian Karst Basin	Henrique Marinho Leite Chaves Watershed Mgt. Lab, University of Brasilia

*Subject to change



Parallel Sessions

Thursday, June 11		Room: Convention Center Nanjing 209	
Session 301001		Better Management of Organic Agro-Waste in Response to Various Global Environmental Issues	
		Convener: Morihiro Maeda, Okayama University, IUSS-Commission 3.1 vice-chair	
		Co-Convener: Masato Nakamura, National Agriculture and Food Research Organization	
Schedule	ID	Title	Presenter
11:15-11:30	35661	Global Potential Effects Analysis of Biochar on Crop Yields and Soil Quality	Zhichao Xu College of Resources and Environment, University of Chinese Academy of Sciences
11:30-11:45	33693	Evaluating nutrient dynamics in marginal soils amended with biochar and torrefied biomass with Plant Root Simulator probe	Asfaw Bekele Imperial Oil Resources Limited
11:45-12:00	33567	Silicon Rich Biochar from Crop Residues Reduces Heavy Metals in Soil and Paddy Rice in Central Vietnam	Thi Thai Hoa Hoang University of Agriculture and Forestry, Hue University, Hue city, Vietnam
12:00-12:15	32982	Removal of methylene blue using biochar from compressed rice straw	Yasushi Mori Okayama University
12:15-12:30	32877	Better agro-waste management for soil health	Morihiro Maeda Okayama University
13:30-13:45	36602	Agro-Waste and Cement-Based Soil Stabilization Techniques: Potential Implications for Sustainable Land Use and Hazard-Resilient Planning in Bangladesh	Najmun Nahar Associate Professor (Department of Geography and Environment Faculty of Life and Earth Science, Jagannath University, Dhaka, 1100, Bangladesh)
13:45-14:00	35073	Biotic and Abiotic Catalytic Strategies for Accelerated Humic Substance Formation	Mahmoud National Chung Hsing University

*Subject to change

Parallel Sessions

14:00-14:15	32855	¹⁵ N tracing reveals nitrogen uptake dynamics and retention under contrasting irrigation and residue management in paddy soils	Yo-Jin Shiau Department of Bioenvironmental Systems Engineering, National Taiwan University
14:15-14:30	32210	Facultative heap compost effects on soil N ₂ O, CO ₂ , and CH ₄ emissions under aerobic incubation	Tran Thi Minh Chau University of Agriculture and Forestry, Hue University
14:30-14:45	32184	CO ₂ emission from forest soils in Western Japan as affected by water repellency	Dewpura A.L. Leelamanie Faculty of Agriculture, University of Ruhuna
14:45-15:00	32170	Current Situations of Antibiotic Resistance Genes in Compost, Soil, and Sediment in Vietnam	Lingxue Gao Graduate School of Environmental, Life, Natural Science and Technology, Okayama University
15:00-15:15	33344	Anaerobic fermentation of food waste to connect fork to farm and minimize greenhouse gas emissions	Samantha Kehoe University of Reading
16:30-16:45	34604	Effects of repeated application of horse dung manure on the accumulation of the elements in topsoil of paddy fields -A case of newly reclaimed paddy fields in Kyoto University Farm, Japan-	Nirmala Juita Life Environment Conservation Science, The United Graduate School of Agricultural Science, Ehime University, Matsuyama, Japan
16:45-17:00	34581	Soil nutrients and maize performance with application of trichoderma activated composts on two different soil types in Nigeria	Komolafe Adenike Fisayo Federal College of Agriculture, Ibadan
17:00-17:15	33985	Assessment of the effects of cocoa pod husk and cattle manure on old cocoa plantation soil chemistry under tropical lowland agroclimatic conditions in Papua New Guinea	Shirleya Aipa The PNG University of Natural Resources and Environment
17:15-17:30	30292	Reconciling carbon sequestration value and soil health benefit of organic amendments	Nanthi Bolan UWA School of Agriculture and Environment", "The University of Western Australia
17:30-17:45	319B31	An Evaluation of the Quantity-Intensity Relationship of Potassium (K) on Some Lowland Rice-Growing Soils	Sanjib Kar University of Calcutta
17:45-18:00	33854	Effects of Application of Ferment Solution Produced from Discarded Vegetable Leaves on Soil Microbial Community and Celery Growth	Zi-Yue Zhang Shanghai University

*Subject to change



Parallel Sessions

Monday, June 8		Room: Convention Center Nanjing 207	
Session 301002		Soil Evaluation and Land Use Planning for Sustaining Productivity	
		Convener: Jagdish Prasad, Former Principal Scientist and Head, Division of Soil Resource Studies, ICAR-National Bureau of Soil Survey and Land Use Planning, Nagpur- 440 033 India	
		Co-Convener: Morihiro Maeda, Professor Department of Rural and Environmental Sciences Graduate School of Environmental, Life, Natural Science and Technology Okayama University, 3-1-1, Tsushima-Naka, Kita-Ku, Okayama 700-8530, Japan	
Schedule	ID	Title	Presenter
16:30-16:45	35286	Soil multifunctionality assessment in Grenoble Alpes metropolis using the MUSE method for sustainable land use planning	Amazigh Ouaksel BRGM", "IRSTV
16:45-17:00	35118	Soil-Geochemical Controls of NDVI Seasonality in Steppe ecosystems of the Turano-Uyuk Intramontane Depression (Tuva, South Siberia)	Natalia Ilinova Lomonosov Moscow State University
17:00-17:15	33600	Spatial heterogeneity and driving factors of five global arable land datasets in China under a ‘single cropland map’ framework	Surina College of Resources and Environmental Sciences, Inner Mongolia Agricultural University, Hohhot, 010011, China
17:15-17:30	32984	WRB-Harmonised Soil Mapping to Support Sustainable Land Use Planning in Mediterranean Regions	Samuel Guerreiro LEAF—Linking Landscape, Environment, Agriculture and Food Research Centre, Instituto Superior de Agronomia, Universidade de Lisboa, Tapada da Ajuda, 1349-017 Lisboa, Portugal; 2Santarém Polytechnic University, School of Agriculture

*Subject to change



Parallel Sessions

17:30-17:45	33736	Long-term soil multifunctionality under climate trajectories, land-use transitions, and management practices	C. Walter SAS, Institut Agro Rennes-Angers, INRAE
17:45-18:00	36587	Assessing the Physico-Chemical Properties and Fertility Status of Selected South African Wetland Soils Using XRF, SEM, and Soil Fertility Index	FR Kutu School of Agricultural Sciences, Faculty of Agriculture and Natural Sciences, University of Mpumalanga, Mbombela, 1200, South Africa
18:00-18:15	33685	Background concentration and range of potentially toxic elements in Lebanese soils for land suitability assessment	Talal Darwish National Council for Scientific Research-CNRS Lebanon
18:15-18:30	32873	An interactive land suitability tool for Queensland, Australia	Ben Harms Department of the Environment, Tourism, Science and Innovation
18:30-18:45	32462	Preliminary Study on a Method for Evaluating the Basic Soil Fertility of Medium and Low-Yielding Land in Anhui Province Based on Natural Soil Properties	Shunmeng Dou Chinese Academy of Agricultural Sciences, Institute of Agricultural Resources and Regional Planning
18:45-19:00	31889	Integrated Assessment of soil security	Amin Sharififar the University of sydney

*Subject to change

Parallel Sessions

Monday, June 8		Room: Expo Center, Hall 8, 8203	
Session 302004		Rethinking the Planning of Soil and Water Management Under Climate Change	
		Convener: Lillian Øygarden. Chair of IUSS commission 3.2 Soil and water conservation	
		Co-Convener: Dorota Dec. Vice chair of commission 3.2 Soil and water conservation	
Schedule	ID	Title	Presenter
13:15-13:45	35560	Cross scale assessment of agricultural conservation practices for future erosion, soil carbon and crop yield in the Yangtze River Basin	Jichen Zhou China Agricultural University
13:45-14:00	31601	Soil Under Stress: Climate Change, Water Dynamics and Agricultural Resilience in Finland.	Kateryna Yuhai Doctorate Researcher", "Department of Economics and Management", "University of Helsinki
14:00-14:15	34185	Sustainability challenges of vegetation restoration on the Loess Plateau	Lei Han Chang' an University
14:15-14:30	32649	Mapping Gully Erosion Across the European Union	Pasquale Borrelli Department of Science, Roma Tre University
14:30-14:45	32535	Climate-change-induced Increase in Rain Erosivity in Germany	Karl Auerswald Technical University of Munich, School of Life Sciences

*Subject to change



Parallel Sessions

14:45-15:00	34484	From Free- Draining to Flood-Forming: How Compaction and Slaking Generate Runoff in Sandy Soils Under Extreme Rainfall	Paul Henry Lunt Faculty of Science and Engineering, School of Geography, Earth and Environmental Sciences, University of Plymouth, Plymouth PL4 8AA, UK
15:00-15:15	-	Discussion and questions	-
16:30-16:45	32036	Effects of testing non-AI autonomous precision deficit irrigation scheduling onto potato and raspberry crops in Poland	Rafal Wawer Institute of Soil Science and Plant Cultivation - State Research Institute
16:45-17:00	31808	Will supplemental fertigation benefit potato productions with a changing climate in Atlantic Canada?	Sheng Li Agriculture and Agri-Food Canada
17:00-17:15	35566	Dynamic shrinkage behavior of volcanic ash and organic (rich) soils in the Southern and Austral Macrozones of Chile	José Dörner Instituto de Ingeniería Agraria y Suelos, Facultad de Ciencias Agrarias y Alimentarias, Universidad Austral de Chile, Valdivia, Chile.", "Centro de Investigación en Suelos Volcánicos, Universidad Austral de Chile, Valdivia, Chile.
17:15-17:30	34086	Theory and Demonstration of Smart Water and Soil Management Technologies for Black Soil Cropland	Huanjun Liu Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
17:30-17:45	-	Discussion and questions	-

*Subject to change



Parallel Sessions

Tuesday, June 9		Room: Expo Center, Hall 8, 8202	
Thursday, June 11 Friday, June 12		Room: Convention Center Yangtze Room	
Session 302005		Soil Erosion and Conservation	
		Convener: Fengbao Zhang	
		Co-Conveners: Fang Nufang, Northwest A&F University, China Seyed Hamidreza Sadeghi, Tarbiat Modares University, IRAN Paolo Tarolli, University of Padova, Italy Shi Zhihua, Huazhong Agricultural University, China	
Schedule	ID	Title	Presenter
Tuesday, June 9			
09:00-09:15	319B96	Paleo-landscape features and their role for soil erosion initiation	Michael Maerker Working group on Soil Erosion and Feedbacks, Leibniz Centre for Agricultural Landscape Research (ZALF)
09:15-09:30	32789	Long slope erosion-deposition patterns under different tillage systems driven by multiple erosion forces in the Chinese Mollisol region	Fenli Zheng Northwest A & F University
09:30-09:45	31643	Porous Biochar Produced from Rice Waste Inhibits Soil Loss	Shr Sadeghi Tarbiat Modares University
09:45-10:00	32379	Development Characteristics and Influencing Factors of Gullies in Typical Region on the Qinghai-Xizang Plateau from 1970 to 2025	Juying Jiao Northwest A&F University

*Subject to change

Parallel Sessions

10:00-10:15	34955	Estimating Economic Damages of Soil Erosion in Iran: Conceptual Model, Methodology, and Estimation of Costs of Its Damages in Iran	Yahya Parvizi Professor, Soil Conservation and Watershed Management Research Institute, Agricultural Research, Education and Extension Organization, Tehran, Iran
10:15-10:30	36363	Study on the dynamic changes in soil erosion and the stability of the soil organic carbon pool in the surface layer of purple soil on the slopes implemented the Grain-for-Green project	Zhengan Su Institute of Mountain Hazards and Environment, Chinese Academy of Sciences
10:30-10:45	35111	Soil and Water Conservation Planning by Estimating Complex Soil Properties from Easily Measurable Soil Properties	Manmohanjit Singh Punjab Agricultural University, India
10:45-11:00	320B39	Risk assessment of soil erosion in Central Asia under global warming via NPV cover	Chengyi Zhao, Xin Dou, Zongwen Shi School of Geographical Sciences, Nanjing University of Information Science and Technology, Nanjing 210044, China
11:15-11:30	32575	Tillage erosion - the blind spot in soil conservation	Peter Fiener University of Augsburg
11:30-11:45	31900	Setting tolerable soil loss and land management targets across New South Wales, Australia	Xihua Yang University of Technology Sydney", "Northwest A&F University
11:45-12:00	33522	Check dams as a major terrestrial sink for eroded sediment and organic carbon on the Chinese Loess Plateau	Yi Zeng Northwest A&F University
12:00-12:15	34032	Temporal Dynamics and Mechanism Evolution of Biochar in Regulating Erosion Processes in China's Loess Plateau	Yuanyuan Li Zhengzhou University
12:15-12:30	32304	From regional to global tillage erosion mapping: challenges, solutions and a demonstration in Canada	Fengbao Zhang (Sheng Li) Fredericton Research and Development Center, Agriculture and Agri-Food Canada
13:30-13:45	34007	A Framework for Global Soil Erosion Mapping (GSERmap)	Rui Li Northwest A&F University
13:45-14:00	32648	Global Soil Erosion Dynamics and Drivers	Pasquale Borrelli Environmental Geosciences, University of Basel

*Subject to change



Parallel Sessions

14:00-14:15	33937	Regional Soil Erosion Survey and Mapping in the Pre-GIS Era	Qinke Yang Northwest University
14:15-14:30	33090	Soil Erosion in the European Union: A major threat for EU agriculture	Panos Panagos European Commission - Joint Research Centre
14:30-14:45	33589	Research on key algorithms for global erosion topographic factor extraction	Hongming Zhang Northwest A&F University
14:45-15:00	34785	Practical-measures investigation to achieve global soil erosion map by using sampling method	Xiaoping Zhang Northwest A&F University, Yangling, Shaanxi, 712100, China.
15:00-15:15	33665	Long-Term Dynamics and Driving Mechanisms of Wind Erosion Across China (2001-2024)	Wenyi Sun Northwest A&F University
16:30-16:45	35137	Simulation of Wind Erosion under the Influence of Topography in a Temperate Grassland Landscape	Zhuodong Zhang Beijing Normal University
16:45-17:00	34019	Global-Scale Mapping of the Non-Agricultural Cover-Management Factor (Cnon-crop) for Soil Erosion Modelling	Haijing Shi Northwest A&F University
17:00-17:15	34427	A Methodological Framework for Large-Scale Gully Erosion Assessment: Insights from Contrasting Landscapes of China	Chunmei Wang College of Urban and Environmental Sciences, Northwest University, Xi' an, 710127, China
17:15-17:30	34015	Improving Global Rainfall Erosivity by Using Regional Achievements	Bing Yin (Yun Xie) Beijing Normal University at Zhuhai
17:30-17:45	33673	Mapping and Analysis of the Global Soil Erodibility Factor (K)	Miaomiao Yang Ningxia University
17:45-18:00	33936	The Global Mapping and Analysis of Soil Structure Classes	Chenlu Huang School of Tourism V School of Artificial Intelligence, Xi'an International Studies University
18:00-18:15	33591	A topographic relief fitting mosaic method for eliminating seamlines of the SRTM and additional quasi-global DEM mosaics at 60°N latitude	Songyuan Li Northwest A&F University
18:15-18:30	34126	A Novel High-Resolution DEM Synthesis Method for Terraced Watersheds in the Loess Plateau	Xiaotian Yuan Northwest University

*Subject to change

Parallel Sessions

Thursday, June 11

11:15-11:30	34503	Influence of Soil Cover Properties on Shallow Landslides: insights from a Pilot Basin in Southern Italy	Simona Vingiani University of Naples Federico II, Department of Agricultural Sciences Portici (NA), Italy
11:30-11:45	32470	Comparative Erodibility of UK Soils Under Different Climate Change Scenarios	Johnson Oluwaseun Odukoya Faculty of Engineering and Applied Sciences, Cranfield University
11:45-12:00	33314	A Half-Century Intensification of Lateral Carbon Transfer along the Congo Basin's Land-Ocean Aquatic Continuum	Pengzhi Zhao Earth and Life Institute, Université catholique de Louvain, 1348 Louvain-la-Neuve, Belgium.", "Department Geoscience, Environment and Society-BGEOSYS, Université libre de Bruxelles, 1050 Brussels, Belgiume
12:00-12:15	36373	A Dynamic Gully Erosion Risk Assessment Framework Considering Rainfall Regime Shift in the Songnen Typical Black Soil Region	Dengnan Luo Beijing Normal University
12:15-12:30	34855	Spatial Distribution and Influencing Factors of Gully Erosion in China	Anran Liu YunNanUniversity
13:30-13:45	35365	From Aerosols to Soils: A Novel Pedological Framework for Identifying Aeolian Dust Hotspots in Dried Saline Lakebeds	Hesam Ahmady-Birgani Faculty of Natural Resources Urmia University, Urmia, Iran

*Subject to change

Parallel Sessions

13:45-14:00	35415	Hydrologic regime determines catchment-scale dissolved carbon export patterns	Jian Wang Huazhong Agricultural University
14:00-14:15	33795	Hydromechanical Drivers at Raindrop Scale Underpin Soil Erosion Resistance Driven by Carbon	Abdul Walid Salik School of Biological Sciences, University of Aberdeen
14:15-14:30	32492	Evaluation of Silt Socks and Wollastonite-Enhanced Socks in Sediment and Phosphorous Management	Emily Chiang University of Guelph
14:30-14:45	31883	Decoding impacts of slope length on sheet erosion based on calculus method	Zhongxuan Cao University of Chinese Academy of Sciences (UCAS)", "Institute of Soil and Water Conservation, Chinese Academy of Sciences and Ministry of Water Resources", "Research Center of Soil and Water Conservation and Ecological Environment, Chinese Academy of Sciences and Ministry of Education", "State Key Laboratory of Soil Erosion and Dryland Farming on the Loess Plateau
14:45-15:00	32830	Exploration of Multi-Scale Spatiotemporal Differentiation and Influencing Factors in Yuanmou County Based on SBAS-InSAR	Xuan Yang Yunnan University
15:00-15:15	36027	Response of soil erosion resistance to incorporated straw affected by different microbial inoculants in the black soil region of Northeast China	Yatong Zhang Beijing Normal University

*Subject to change

Parallel Sessions

16:30-16:45	34468	Regional-Scale Variability and Environmental Drivers of Soil Erodibility factor (K) in the NW Italian Alps	Valeria Cesarini University School for Advanced Studies IUSS, Piazza della Vittoria 15, 27100 Pavia, PV, Italy
16:45-17:00	34916	Extent of soil loss as affected by soil properties and geospatial characteristics in the banana and pineapple plantations in Malaybalay City, Bukidnon, Philippines	Jessie Gutierrez Suson City Environment and Natural Resources Office, Malaybalay City, Philippines
17:00-17:15	34496	Spatial Distribution and Erosional Significance of Hollows in Agricultural Landscapes of the European Russia	Andrei A. Stepanov Institute of Geography, Russian Academy of Sciences, Moscow, Russia
17:15-17:30	33998	The response mechanism of organic carbon loss on loess slopes to the process of soil erosion	Xuantian Li College of Soil and Water Conservation Science and Engineering, Northwest A&F University
17:30-17:45	32231	Early detection of runoff erosion as gully prevention strategy in sandy tropical soils, Kananga, Democratic Republic of Congo (DRC)	Arabela Vega-Aguilar Universitat Autònoma de Barcelona
17:45-18:00	32704	Effects of Straw Mulch in Hillslope Longitudinal Furrows on Soil Physicochemical Properties and Erosion Resistance in the Black Soil Region of Northeast China	Jialong Wu Jilin Agricultural University
18:00-18:15	32174	A study on soil erodibility and the applicability of estimation methods in Robinia pseudoacacia L. mixed forests on the Loess Plateau, China	Jinlong Ma Northwest A&F University
18:15-18:30	36032	Spatial variation of soil erosion resistance impacted by ephemeral gully on long gentle sloping cropland in the Mollisol region of China	Jun Jing Beijing Normal University

*Subject to change



Parallel Sessions

Friday, June 12

09:00-09:15	32705	Yield decline across soil types under progressive soil erosion: Basis for soil conservation criteria in the Sudan Savanna	Tomohiro Nishigaki Japan International Research Center for Agricultural Sciences
09:15-09:30	32939	Measuring tillage and water erosion under different tillage systems in a commercial potato farm in Atlantic Canada	Fangzhou Zheng Agriculture and Agri-Food Canada (Fredericton)
09:30-09:45	33101	Drainage network connectivity controls phosphorus transport and export	Ehsan Zarrinabadi Postdoctoral Research Fellow, Department of Soil Science, University of Manitoba
09:45-10:00	31774	A systematic identification of multi-scale relationship between sediment load and environmental factors in the Ten Tributaries region of the Yellow River Basin	Jian Luo Inner Mongolia University
10:00-10:15	36451	Effects of Farmland Shelterbelt Distribution on Wind-Water Compound Erosion in the Northeast Black Soil Region of China	Hanquan Cheng Beijing Normal University
10:15-10:30	36103	Morphological Development and Hydraulic Characteristics of Plunge Pools in the Gully Beds of Dry Red Soil in Yuanmou Dry-hot Valley	Jie Feng Yunnan University

*Subject to change

Parallel Sessions

10:30-10:45	33773	Gully runoff is the primary factor triggering gravity erosion: A case study in the Top Ten Tributaries Watershed, China	Taoyan Dai Dalian University of Technology
10:45-11:00	35862	Influence of land use change and increased rainstorm on shallow landslide sediment connectivity in a small watershed of the Chinese Loess Plateau based on remote sensing	Bingzhe Tang Xi'an University of Science and Technology
11:15-11:30	34075	Tracing soil redistribution rates following deforestation in Northern Hardwood Forests using 239+240Pu isotopes	Raquel Portes University of Northern British Columbia
11:30-11:45	33966	Coupled Wind-Rain Forcing Alters Runoff Generation and Soil Loss Dynamics Across Soil Surface Conditions	Sophia Bahddou UM6P
11:45-12:00	34803	Weakened role of check dams in reducing erosion-induced soil organic carbon transport in the Middle Yellow River Basin due to vegetation restoration	Yanzhang Huang Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
12:00-12:15	35171	Effects of grass structure on wind erosion using a wind tunnel simulation	Ahmad Sohail 1State Key Laboratory of Soil and Water Conservation and Desertification Control, Institute of Soil and Water Conservation, Northwest A&F University, 712100, Yangling, Shaanxi, China
12:15-12:30	31671	Slope aspect affects soil quality and its response to soil erosion on temperate gently sloping farmlands	Ziyi Gu Beijing Normal University

*Subject to change

Parallel Sessions

Monday, June 8		Room: Expo Center, Hall 7, 7203	
Session 302007		Soil-Water Interactions: From Saturation to Repellency, From Processes to Management	
		Conveners: Daniela Reineke, Soil Science Section, University of Kassel, Germany Stefania Cocco, Department of Agricultural, Food and Environmental Sciences, Università Politecnica delle Marche, Italy Lillian Øygarden. Chair of IUSS commission 3.2 Soil and water conservation Jiefei Mao, Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences Co-Conveners: Giuseppe Corti, Department of Agricultural, Food and Environmental Sciences, Università Politecnica delle Marche & Council for Agricultural Research and Economics, Centre of Agriculture and Environment, Italy Livia Vittori Antisari Department of Agricultural and Food Sciences University of Bologna, Bologna, Italy Giuseppe Lo Papa Department of Agricultural, Food and Forestry Sciences, University of Palermo, Palermo, Italy Dorota Dec. Vice chair of commission 3.2 Soil and water conservation D.A.L. Leelamanie, Faculty of Agriculture, University of Ruhuna Tobias K. D. Weber, Soil Science Section, University of Kassel, Germany	
Schedule	ID	Title	Presenter
13:15-13:30	31466	Changes in soil aggregates, pore characteristics, and their relationships with soil erodibility in periodically submerged soils. A case of the Water Level Fluctuation Zone in the Three Gorges Reservoir, China	Gratiem Nsabimana Key Laboratory of Mountain Surface Processes and Ecological Regulation, Institute of Mountain Hazards and Environment, Chinese Academy of Sciences", "University of Chinese Academy of Sciences

*Subject to change

Parallel Sessions

13:30-13:45	34953	The enhancement mechanism of exogenous iron addition on denitrification-based nitrogen removal in ditch wetland	Pengfei Xu NanjingNormalUniversity", "Jiangsu Academy of Agricultural Sciences
13:45-14:00	35288	Counteracting the trojan horse effect: Dual-Light-Driven Biochar/LaFeO ₃ /TiO ₂ for synchronous ARGs-Inactivation and Phosphorus-Adsorption	bei yang Jiangsu academy of agricultural sciences
14:00-14:15	32225	From Soil Morphology to Depression Hydrology: Diagnostic Criteria and Predictive Patterns in the Oka-Don Lowland	Smirnova M.A. Dokuchaev Soil Science Institute", "Faculty of Geography, Lomonosov Moscow State University
14:15-14:30	32472	Leptosols of Subarctic barrier islands: land - sea interface	Nikolay S. Sobolev M. V. Lomonosov Moscow State University (Faculty of Geography)
14:30-14:45	34911	Occurrence and assessment of water repellency in biochar and biochar- amended soils	Jiefei Mao Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences
14:45-15:00	32134	Management-Induced Changes in SOM Composition Control Soil Wettability and Hydrological Function	Felix Ogunmokun Tennessee State University
15:00-15:15	32485	Tree parasitism as a microclimatic amplifier: implications of Viscum album infection for soil moisture and repellency dynamics	Anna Klammerus-Iwan University of Agriculture in Krakow, Faculty of Forestry

*Subject to change



Parallel Sessions

16:30-16:45	32296	Sensor-Based Modeling of Soil-Water Dynamics for Irrigation and Subsurface Hydrology	Tejinder Singh Department of Plants, Soils and Climate, Utah State University
16:45-17:00	32476	A challenging prediction: The heterogeneous nature of preferential flow masked by homogeneous moisture sensor responses	Sebastián Bravo-Peña Department of Soil Physics and Land Management, Wageningen University", "Institute of Agricultural Engineering and Soils, Austral University of Chile
17:00-17:15	32455	Leveraging Multi-Temporal Environmental Data in a Long Short-Term Memory Model for Groundwater Nitrate Prediction	Elysia Lewis Department of Agronomy, Food, Natural Resources, Animals and Environment, University of Padova
17:15-17:30	36550	Transport Pathways of Nitrate in Stormwater Runoff Inferred from High-frequency Sampling and Stable Water Isotopes	Jian Wang Huazhong Agricultural University
17:30-17:45	32821	Salinity-Tile Drainage Linkages and their Impacts on Soil Health in the Red River Valley (United States)	Kang Liang North Dakota State University
17:45-18:00	35756	Tracing Water Use Sources in Rubber Monoculture and Rubber-Alpinia Oxyphylla Agroforestry Systems Using Hydrogen and Oxygen Isotopes	Weiqing Lin Hainan University
18:00-18:15	36436	Optimizing and Validating a Correction Formula for Xylem Water Deuterium Offsets in Field-Grown Apple Trees	Yining Liu Ludong University

*Subject to change



Parallel Sessions

Monday, June 8 Tuesday, June 9		Room: Convention Center Nanjing 303B	
Session 303001		Advances in Soil Fertility Management Through the Utilization of Organic Waste	
		Convener: William R Horwath, Distinguished Professor of Soil Biogeochemistry, Department of Land, Air and Water Resources, University of California, Davis, Davis, 95616	
		Co-Convener: Ji Li, Dean of Organic Recycling Research Institute at China Agricultural University, College of Resources and Environmental Science, Beijing Key Laboratory of Biodiversity and Organic Farming, China Agricultural University, Beijing 100193, China	
Schedule	ID	Title	Presenter
Monday, June 8			
13:15-13:30	36198	The potential of organic waste recycling to replace mineral fertilizers in EU Member States	Donghao Xu Earth Systems and Global Change Group, Wageningen University and Research, PO Box 47, 6700AA Wageningen, the Netherlands
13:30-13:45	36167	Safeguarding global nitrogen sustainability by managing organic waste throughout the food supply chain	Zhan Jingfang Zhejiang University
13:45-14:00	32646	Partial organic substitution enhances ecosystem services in agricultural soils	Quan Tang Yangzhou university

*Subject to change



Parallel Sessions

14:00-14:15	33065	Agronomic and Environmental Effects of Straw Incorporation in the Rice-Wheat Rotation Region of the Yangtze River Delta: Research and Application Demonstration	Yan Ma Institute of Agricultural Resources and Environment, Jiangsu Academy of Agricultural Sciences", "Liuhe Agro-Environment Field Scientific Observation and Research Station, Ministry of Agriculture and Rural Affairs
14:15-14:30	32656	Optimizing management of organic inputs to improve biomass production and nitrogen efficiency in Danish organic cropping systems	Yiwei Shang Department of Agroecology, Aarhus University", "CBIO Aarhus University Centre for Circular Bioeconomy
14:30-14:45	31545	Optimizing nutrient balance in livestock waste to enhance soil organic fertilization and reduce environmental losses	Alice Boarino Department of Agricultural, Forest and Food Sciences, University of Turin
14:45-15:00	31907	Conservation Agriculture Impacts Soil Organic Carbon Sequestration, GHG reduction and Sustainable Crop Production	M. Jahiruddin Department of Soil Science, Bangladesh Agricultural University
15:00-15:15	34773	Closing the Loop in Agriculture: Biochar for Soil Restoration and Productivity	Binh Thanh Nguyen Industrial University of Ho Chi Minh City
16:30-16:45	35993	From Organic Waste to Soil Fertility: Innovative Compost and Nanobiochar Solutions for Sustainable Nutrient Management	Muhammad Imtiaz Rashid Center of Excellence in Environmental Studies, King Abdulaziz University, Jeddah, Saudi Arabia

*Subject to change

Parallel Sessions

16:45-17:00	35338	Harnessing Typha australis biochar for enhanced soil fertility and pearl millet productivity in semi-arid systems	Andre A. DIATTA Department of Agronomy, Faculty of Agronomy, Aquaculture, and Food Technology (S2ATA), Gaston Berger University, Saint-Louis, BP 234, Senegal
17:00-17:15	34690	Beyond Porosity: Dual-Mode Nitrogen Fertilizers from Metal-Modified Biochar	Ettore Madonia Monash University/ University of Palermo
17:15-17:30	34584	Nutrient enriched biochar reduces chemical fertiliser requirements for forestry seedling growth	Bianca Das Tasmanian Institute of Agriculture, Launceston
17:30-17:45	34175	Integrating biochar co-compost application in regenerative agriculture improves soil fertility, nutrient use efficiency, and crop yields in a low-nutrient tropical soil	Kwame Agyei Frimpong University of Cape Coast", "University of Cape Coast
17:45-18:00	32730	Torrefied biomass (biotorr) as soil amendment: insights from multivariate and temporal analysis	Julia Queiros Vieira AGHYLE UP 2018- C101, UniLaSalle", "Avril SCA
18:00-18:15	33448	Development of sisal seedlings with solid organic substrates, based on sisal residues, in Brazil	Risely Ferraz Almeida Universidade do Estado da Bahia
18:15-18:30	31938	Short-term interaction between earthworms, compost and biochar on GHG emissions and N mineralization	Thiago M. Inagaki Norwegian Institute of Bioeconomy Research

*Subject to change

Parallel Sessions

Tuesday, June 9

09:00-09:15	34614	Organic Waste Recycling in paddy:Enhancing Soil Health and Crop Quality - A case in Suzhou	Ji Li China Agricultrual University
09:15-09:30	34135	Comparison of organic and inorganic amendments for conserving soil moisture and increasing crop yield in wheat under water limited conditions	Amara Khan Department of Biosciences Sciences, COMSATS University Islamabad
09:30-09:45	34317	Decomposition characteristics of different organic materials and their effects on the carbon fractions of soil organic carbon in arable black soils	Wanying Lei Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences, Harbin, China
09:45-10:00	33649	Biogeochemical and Isotopic Responses on Soil Health Following Dairy Manure Compost Application in an Almond Orchard	Adolfo Coyotl University of California
10:00-10:15	33510	Use of organic viticulture wastes as soil amendments to improve the function of clay soil in the Waipara region, New Zealand	Phuc Nguyen (preferred name Luna) Department of Soils and Physics Sciences, Lincoln University, Lincoln, New Zealand
10:15-10:30	34375	The soil rhizosphere metabolome's regulating mechanism on microbial communities depending on straw application depths	Xiaoyu Li Shenyang Agricultural University
10:30-10:45	34048	Assessment of physical, chemical properties and proposed solutions to protect and restore the fertility of coastal sandy soils in Khanh Hoa province, Vietnam	Nguyen Thanh Trung Faculty of Natural Resources and Environment, Vietnam National University of Agriculture
10:45-11:00	32515	Soil Biogeochemical Responses to Composting and Organic Waste Application Across Agricultural Systems	Xia Zhu-Barker University of Wisconsin-Madison

*Subject to change

Parallel Sessions

11:15-11:30	31996	Innovative Nutrient Recycling through Black Soldier Fly (<i>Hermetia illucens</i>) Rearing: Comparison of three Organic Waste Substrates—Food Waste, Bread, and their Mixture.	Moussa Bouray Mohammed 6 Polytechnic University
11:30-11:45	33509	Fermentation Characteristics of Sawdust-Bokashi and its Effect on Soil Fertility and Pepper (<i>Capsicum spp.</i>) Performance.	Ahukaemere, Chioma Mildred Department of Soil Science and Technology, Federal University of Technology Owerri, Imo State, Nigeria
11:45-12:00	35132	Soil Nutrient Management in Oil Palm Plantation: The Application of Palm Oil Mill Effluent (POME) for Sustainable Agriculture	Fransisca Simanjuntak Astra Agro Lestari Tbk
12:00-12:15	34754	In-Vessel Composting of Poultry Litter with Lignite Granules: A Strategy for Emission Mitigation	Zelong Liu School of Agriculture, Food & Ecosystem Sciences, Faculty of Science, The University of Melbourne, Parkville, Victoria, 3010, Australia
12:15-12:30	35023	From Waste to Resource: Stabilizing Nitrogen in Broiler Litter Using Granulated Lignite	Clayton R Butterly The University of Melbourne
13:30-13:45	33440	Effects of Bio-slurry and Inorganic Nitrogen Fertilizer Rates on Wheat Yield Components, Yield, and Soil Properties	Ashenafi Nigussie Wondo Genete Agricultural Research Center, Ethiopian Institute of Agricultural Research
13:45-14:00	33534	Nitrogen waste in cropping and livestock systems of Darusa village, Bangladesh	Md. Mahmodol Hasan Department of Agronomy and Agricultural Extension, University of Rajshahi, Rajshahi-6205, Bangladesh
14:00-14:15	32191	Straw return facilitates the availability of soil nitrogen by altering the metabolic distribution and nitrogen cycling processes	Chao Yan Northeast Agricultural University

*Subject to change

Parallel Sessions

14:15-14:30	319B32	Integrated NP Management for Sustainable Soil Fertility and Crop Productivity	Muhammad Adnan Department of Agriculture, University of Swabi
14:30-14:45	32164	Clay-stabilised Composts to Enhance Soil Health and Carbon Storage in Sandy Soils.	Zahra Nizbat UWA School of Agriculture and Environment, The University of Western Australia
14:45-15:00	33083	The Influence of Organomineral Fertilizers and Biopreparations on Yield, Fruit Quality, and Soil Microbiological Properties under Golden Delicious Apple Orchards in Irrigated Light Chestnut Soils of Southeastern Kazakhstan	Maira Kussainova Kazakh National Agrarian Research University", "Kazakh-German University (DKU)", "Kyoto University, Graduate School of Agriculture
15:00-15:15	32376	Organic management effect on soil characteristics: a comparison between vineyard and field crop rotation	Maria Giordano University of Padua-Department of Agronomy, Food, Natural Resources, Animals and Environment - DAFNAE
16:30-16:45	36488	Repurposing Lake Sediments as a Sustainable Phosphorus Source for Spring Barley: A Case Study in Denmark	Andressa Morato Freitas University of Florida (Agronomy Department, Institute of Food and Agricultural Sciences, Gainesville, United States) ", "University of Southern Denmark
16:45-17:00	35508	Plant Available Nutrient Contributions from Steer Manure Compost in Semi-Arid Agricultural Systems	Jeanette M. Norton Dept. Plants, Soils and Climate, Utah State University, Logan UT USA
17:00-17:15	34933	Enhancing Phosphorus Availability in Acidic Soils through a Participatory Approach: Roles of Biochar, PGPR, Lime, and Farmyard Manure	Esther Mwende Muindi Department of Crop Sciences, Pwani University, Kilifi, Kenya

*Subject to change

Parallel Sessions

17:15-17:30	32456	Regulation of Aggregate Nutrients and Microbial Processes by Organic Materials Incorporation to Enhance Soil Quality and Crop Yield	Wenxiu Zou Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
17:30-17:45	32416	Organic Waste Amendments as Drivers of Soil Fertility and Microbial Activity in the Strawberry Rhizosphere	Mohammed Gamal College of Natural Resources and Environment, Northwest A&F University, Key Laboratory of Green and Low Carbon Agriculture on Dryland in Northwest China, Ministry of Agriculture and Rural Affairs", "Department of Soil Science and Plant Nutrition, Ondokuz Mayıs University", "Department of Soil and Agricultural Chemistry, Alexandria University, Faculty of Agriculture
17:45-18:00	34679	Comparing Waste- Derived Compost and Chemical NPK Fertilization: Pathways to Enhanced Soil Fertility and Tomato Growth in Nutrient- deficient Calcareous Soils	Abolfazl Mostafa Department of Soil Science, College of Agriculture, University of Tehran, Karaj, Iran
18:00-18:15	34547	Revitalizing Sandy Soils: Organo-Mineral Inputs Enhance Drought Resilience in Wheat and Microbes	Muhammad Kamran The School of Agriculture, Food and Wine, Adelaide University, Waite Campus, Glen Osmond, SA, 5064, Australia
18:15-18:30	34202	Long-term field trials as a tool to evaluate the potential of compost to maintain grain yield and soil carbon persistence	JiLi China agricultrual university
18:30-18:45	33983	Investigating the importance of solid piggery sludge application to manage soil fertility under grain production under humid lowland agroclimatic conditions in Papua New Guinea	Patrick Michael The Papua New Guinea University of Technology

*Subject to change



Parallel Sessions

Tuesday, June 9		Room: Convention Center Nanjing 207	
Session 303002		Global and Regional Trends in Cropland Nutrient Balance and Use Efficiency	
		Convener: Achim Dobermann, International Fertilizer Association (IFA), Paris, France	
		Co-Convener: Francesco N. Tubiello, Statistics Division, Food and Agriculture Organization of the United Nations (FAO), Rome, Italy	
Schedule	ID	Title	Presenter
09:00-09:25	33177	Cropland nutrient use efficiency: recent trends and targets for sustainable agriculture	Achim Dobermann International Fertilizer Association
09:25-09:40	32541	The role of fertilizers for feeding the world	Renske Hijbeek Wageningen University & Research
09:40-09:55	32594	Emerging soil nutrient limitations for global crop production	Walter D. Carciochi University of Nebraska-Lincoln
09:55-10:10	32525	Fertilizer Use and Nutrient Management in Indian Agriculture	Suresh Kumar Chaudhari The Fertiliser Association of India

*Subject to change



Parallel Sessions

10:10-10:25	33994	A meta-analysis and monte carlo simulation of nitrogen management strategies on balancing yield and environmental impact	Pongsathorn Sukdanont School of Agriculture, Food and Ecosystem Sciences, Faculty of Science, The University of Melbourne
10:25-10:40	36366	Trends and geographic variation in adverse impacts of nitrogen use in Europe on human health, climate, and ecosystem	Gerard Ros Wageningen University, the Netherlands
11:15-11:30	35242	Modelling the effect of soil nutrient and carbon mitigation measures in European agriculture	Chantal Hendriks Wageningen Environmental Research
11:30-11:45	31862	Precision Nitrogen Management in Rice: Appraising Smartphone-Based Fertilizer Apps and Evaluating the Efficacy of Selected Nitrogen Management Strategies	Md. Mizanur Rahman Department of Soil Science, Gazipur Agricultural University
11:45-12:00	32006	Effects of Annual Co-ordinated Phosphorus Fertilization under Wheat/Maize Rotation on Crop Phosphorus Uptake and Soil Phosphorus Content	Pingping Zhu Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences
12:00-12:15	32367	Organic Fertilizer Substitution Boosts Maize Yield in Upland Acidic Red Soils by Enhancing Soil Quality and Nutrient Availability: Insights from a 7-Year Study	Xinmei Zhao Agricultural Environment and Resources Institute, Yunnan Academy of Agricultural Sciences
12:15-12:30	33340	Calcium in peanut production	Rui Yang Institute of Urban Agriculture, Chinese Academy of Agricultural Sciences

*Subject to change



Parallel Sessions

Thursday, June 11 Friday, June 12		Room: Convention Center Nanjing 303B	
Session 303003		Global Phosphorus Stewardship: Innovations and Strategies for Sustainable Soil Systems and Food Security	
		Convener: Mohamed EL MAZLOUZI, Global Phosphorus Institute (GPI)	
		Co-Conveners: Mamou EHUI, Global Phosphorus Institute (GPI)	
		Terry ROBERT, Global Phosphorus Institute (GPI)	
Schedule	ID	Title	Presenter
Thursday, June 11			
11:15-11:35	33695	An insight on best management practices for phosphorus fertilization in cereal-based cropping systems	Robert Michael Norton National University of Mar del Plata
11:35-11:50	33762	Managing Legacy Phosphorus for Sustainable Soil Fertility	Mohamed EL MAZLOUZI The Global Phosphorus Institute
11:50-12:05	33219	Soybean-cotton rotation and soil phosphorus dynamics under long-term management and cover crops	Paulo Sergio Pavinato 1 Department of Soil Science, “Luiz de Queiroz” College of Agriculture, University of Sao Paulo, Piracicaba, SP, Brazil.", "2 “SLC Agrícola SA” , Porto Alegre, RS, Brazil
13:30-13:45	32234	Blended Amendments to Reduce Soil Phosphorus Solubility and Mitigate Phosphorus Loss with Snowmelt Flooding	D. Kumaragamage University of Winnipeg", "University of Manitoba
13:45-14:00	33498	Tracking of residual soil phosphorus pools using phosphate oxygen isotopes	Deb Jaisi University of Delaware

*Subject to change

Parallel Sessions

14:00-14:15	34565	From Phenotyping to Molecular Signaling: Mapping Pathways of Wheat Adaptation to Phosphorus Deficiency	Ghalia BOUAOUI Plant Stress Physiology Laboratory, AgroBioSciences, Mohammed VI Polytechnic University, Benguerir, 43150, Morocco
14:15-14:30	32338	Soil Phosphorus dynamics in a Vertosol with a long cropping history	Sushila Joshi School of Agriculture and Food Sustainability (The University of Queensland)
14:30-14:45	33899	Domestication of intercropping soil microorganisms: Legacies from a Long-Term Field Experiment	Yuhong Lin Yunnan Agricultural University
14:45-15:00	34950	Phosphorus Status and Management Implications for Sustainable Crop Production in Nigeria	AHMAD Abba Hussain Ahmadu Bello University, Zaria
15:00-15:15	34332	Al-sensitive cultivar perform better under Phosphate Deficiency	Ping Lan Institute of Soil Science, Chinese Academy of Sciences
16:30-16:45	35346	Phosphorus source addition modulates P-related biochemical processes in the rhizosphere of <i>Lupinus albus</i> grown in alkaline soils	Salma Qetrani Plant Stress Physiology Laboratory, College of Agriculture and Environmental Sciences, Mohammed VI Polytechnic University, Benguerir, 43150, Morocco
16:45-17:00	34857	Phosphorus acquisition and pathogen defense: synergies versus trade-offs	Wenli Ding Beijing Forestry University
17:00-17:15	32958	Scale-dependent limitation of the Mehlich-3 method for evaluating soil phosphorus across heterogeneous paddy soils in Japan	Miku Ikeda Graduate School of Life and Environmental Sciences, Kyoto Prefectural University

*Subject to change

Parallel Sessions

17:15-17:30	33413	Phosphorus sorption in acidic soils following the application of Calciprill and sodium silicate	Ng Ji Feng Department of Crop Science, Faculty of Agricultural Science and Forestry, Universiti Putra Malaysia Sarawak, Nyabau Road, 97008 Bintulu, Sarawak, Malaysia", "PS Global Sdn. Bhd., No. 12-5, Block 2, Jln Setia Prima S U13VS, Setia Alam, 40170 Shah Alam, Selangor, Malaysia
17:30-17:45	34325	Root hair gene activity and the underlying molecular mechanism of phosphate deficiency-induced root hair growth in Arabidopsis	Ping Lan Institute of Soil Science, Chinese Academy of Sciences
17:45-18:00	34307	RHDI: a key gene involved in phosphate deficiency — induced increase of root hair density in Arabidopsis	Ping Lan State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences, Nanjing 211135, China", "University of Chinese Academy of Sciences, Beijing 100049, China", "University of Chinese Academy of Sciences, Nanjing, 211135, China
18:00-18:15	34615	Higher leaf phosphorus and nitrogen concentrations and greater allocation of phosphorus to lipids in Helicia and Heliciopsis than in other genera within the Proteaceae	Patrick Finnegan Xishuangbanna Tropical Botanical Garden, Yunnan, China", "Key Laboratory for Improving Quality and Productivity of Arable Land of Yunnan Province, College of Resources and Environment, Yunnan Agricultural University, Kunming, 650201, China", "School of Biological Sciences, University of Western Australia, Perth, Western Australia, Australia

*Subject to change



Parallel Sessions

Friday, June 12

09:00-09:15	32922	Differential contributions of rare and abundant phosphate-solubilizing bacteria to organic phosphorus mineralization under long-term fertilization	Tongyu Feng ISSAS, CAS
09:15-09:30	34514	Sustainable Phosphorus Recovery Using Modified Olive Pomace Biochar	Moussa Bouray Mohammed 6 Polytechnic University (UM6P)
09:30-09:45	34301	Acidic Phosphorus-Rich Biochars Promote the Growth of Okra in Coastal Salt-Affected Soil: The Critical Role of Phosphorus-Transforming Bacteria	Qiang Liu Ocean University of China
09:45-10:00	35045	Endophytic fungi as a biotechnological approach to increase phosphorus use efficiency	Sofia Maria Muscarella Department of Agricultural, Food and Forest Sciences, University of Palermo, Palermo, Italy
10:00-10:15	31361	Simultaneous aerobic stabilisation of sewage sludge and chelator-assisted removal of toxic metals in a closed-loop process	Barbara Fojkar University of Ljubljana

*Subject to change



Parallel Sessions

Thursday, June 11 Friday, June 12		Room: Convention Center Nanjing 302A	
Session 303004		Novel Fertilizer Research and Industrial Development	
		Convener: Yuechao Yang, Shandong Agricultural University	
		Co-Conveners: Changwen Du, Institute of Soil Science, Chinese Academy of Sciences Lili Zhang, Institute of Applied Ecology, Chinese Academy of Sciences	
Schedule	ID	Title	Presenter
Thursday, June 11			
11:15-11:20	-	Opening speech	Yuechao Yang
11:20-11:40	320B30	Innovative Approaches to Sustainable Nutrient Management	Ping He Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences
11:40-12:00	33229	Chemical Gradients in the Fertosphere: Rethinking Fertiliser-Soil Interactions	Enzo Lombi Adelaide University
12:00-12:20	320B31	Controlled-release fertilizer application: Coupling with an AI- designed maize system for more grain and lower emission	Xinping Chen Affiliation of the C. Author (Department, Institute, City, Country) 1 State Key Laboratory of Nutrient Use and Management, China Agricultural University

*Subject to change



Parallel Sessions

13:30-13:50	34926	Improving Nitrogen Use Efficiency: Novel Enhanced Efficiency Urea Fertilisers	Antonio F Patti Monash University", "School of Chemistry", "Clayton 3800", "Victoria", "Austlrila
13:50-14:10	320B34	Research Progress and application of Slow/Controlled-Release Fertilizers	Yuechao Yang Shandong Agricultural University
14:10-14:30	34440	Unravelling the dissolution pathways and transformation of polyhalite fertilisers in contrasting soils through multi-scale imaging and elemental analysis	Rodrigo Coqui da Silva Adelaide University
14:30-14:50	320B35	Development and application of rapeseed specific fertilizer based on soil nutrient supply and crop nutrient demand	Jianwei Lu
14:50-15:10	34558	A Co-granulated Urea and Sulphur Fertilizer Reduces Soil N ₂ O Emissions while Increasing Crop Yields	Min Yuan Department of Renewable Resources, Faculty of Agricultural, Life and Environmental Sciences, University of Alberta, Edmonton, AB T6G 2E3, Canada; China-New Zealand Belt and Road Joint Laboratory on Kiwifruit, Sichuan Provincial Academy of Natural Resources Sciences, Chengdu, Sichuan 610015, China
15:10-15:30	320B36	Development and Application of NBPT Slow-Release Suspension (Urease Inhibitor) for Tower Compound Fertilizer	Qiang Gao

*Subject to change

Parallel Sessions

16:30-16:50	320B33	Research on Creation and Application of Microbial Inoculants for Soil Conservation in Protected Tomato Production	Hongtao Zou/Bin Liu College of Land and Environment, Shenyang Agricultural University
16:50-17:10	33851	Synthesis of N-Zn Composite Synthetic Controlled Release Fertilizers	Abhinav Aditya Das Division of Soil Science, ICAR - Indian Agricultural Research Institute - Hyderabad Hub, ICAR - Central Research Institute for Dryland Agriculture (Nodal Institute)
17:10-17:30	320B32	Carbon-Based Functional Fertilizers: Effective Strategies for Decreasing Antibiotics and Antibiotic Resistance Genes During the Aerobic Treatment Process of Livestock Manure and Controlling Their Spread in Soil-Cucumber Systems	Fenwu Liu College of Resources and Environment, Shanxi Agricultural University
17:30-17:50	34903	Comparison Evaluation of Nitrogen and Sulfur Release from Sulfur- and Polymer-Coated Controlled-Release Fertilizers	Pragyan Gautam Graduate School of Agricultural Science, Tohoku University, Miyagi, Japan
17:50-18:10	33810	Microwave-assisted Synthesis of Multi-metal MOFs as Controlled-released Fertilizers	Changwen Du/Lianjie Wan Institute of Soil Science Chinese Academy of Sciences
18:10-18:30	32029	Integrated Biofertilizer and NPK Application Enhances Soil Quality and Productivity of Onion and wheat in semi-arid Environment	Garba Aliyu Abubakar Department of Soil Science and Land Resources Management, Faculty of Agriculture, Usmanu Danfodiyo University

*Subject to change

Parallel Sessions

Friday, June 12

09:00-09:20	32851	Nitrogen Release and Greenhouse Gas Emission From soils Treated with Biodegradable Polymer-Coated Urea Fertilizer	Ye-Eun Lee Chungbuk National University
09:20-09:40	36125	Technological Breakthroughs for Enhancing Nutrient Use Efficiency in Bio-based Coated Controlled-Release Fertilizers	Shugang Zhang Shandong Agricultural University
09:40-10:00	35621	Biogenic Zinc Nanoparticle Fertilization Enhances Drought Tolerance in Maize	Zuhair Hasnain PMAS Arid Agriculture University
10:00-10:20	34204	Exudate pulses throughout the entire growth period trigger the increase in maize phosphorus use efficiency by modifying soil keystone microbial taxa	Yuying Yan Shandong Agricultural University
10:20-10:40	35063	Binary Polymer-Humic Soil Amendments as a Tool to Remediate Degraded Soils	Olga Yakimenko Soil Science Faculty, Lomonosov Moscow State University, Moscow, Russia
10:40-11:00	36274	Potential of Mg-Fe Layered Double Hydroxide as a Slow-Release Phosphorus Fertilizer Compared with Commercial Recycled Sources	Roselle E. Madayag Division of Soil Science, Agricultural Systems Institute, College of Agriculture and Food Science, University of the Philippines Los Baños, College, Laguna, Philippines 4031", "Division of Soil and Water Management, Department of Earth and Environmental Science, KU Leuven, Kasteelpark Arenberg 20, Heverlee B-3001 (Belgium)
11:15-11:35	32468	Dissolution of Ca-Mg-K Based Mineral Fertilisers at the Immediate Soil Surface and Impacts on Soil Erodibility and Soil Surface Crusting	Robert Simmons/Johnson Oluwaseun Odukoya Faculty of Engineering and Applied Sciences, Cranfield University
11:35-11:55	32399	Nanotechnology-based strategies for enhancing phosphorus and nitrogen delivery and utilization efficiency by crop species	Jason C. White The Connecticut Agricultural Experiment Station
11:55-12:00	-	Closing speech	Yuechao Yang

*Subject to change



Parallel Sessions

Thursday, June 11 Friday, June 12		Room: Convention Center Nanjing 303A	
Session 303005		Plant nitrogen utilization: from cell to field	
		Convener: Weiming Shi, Institute of Soil Science, Chinese Academy of Sciences Co-Convener: Yufang Lu, Institute of Soil Science, Chinese Academy of Sciences Toru Fujiwara, The University of Tokyo Herbert J. Kronzucker, The University of Melbourne Eiko Kuramae, Netherlands Institute of Ecology	
Schedule	ID	Title	Presenter
Thursday, June 11			
11:15-11:20	-	Opening Remarks	Weiming SHI, Eiko KURAMAE
11:20-11:40	36507	Crop improvement for nitrogen and phosphorus use efficiency in rice	Nandula Raghuram Guru Gobind Singh Indraprastha University, New Delhi
11:40-11:55	32313	Responses of Rice Production, NH ₃ and N ₂ O Losses to Biochar Application at Different Growth Season of Rice-Wheat Rotation	Haijun Sun Nanjing Forestry University

*Subject to change

Parallel Sessions

11:55-12:10	34106	Short term impacts of biochar on vine tissues total carbon and nitrogen and their stable isotope compositions as well as berry yield in two vineyards in Southeast Queensland of subtropical Australia	Kate Kingston School of Environment and Science, Griffith University (Nathan campus, Brisbane, Australia)", "Australian Research Centre for Human Evolution, Griffith University (Nathan campus, Brisbane, Australia)
12:10-12:25	31481	Fertilizer- Driven Nitrate Availability and Waterlogging Resilience in Canola: Benefits and Micronutrient Trade- offs	"Haochen Zhao "Tasmanian Institute of Agriculture, University of Tasmania""
13:30-13:50	32749	Harnessing Biological Nitrification Inhibitors from Rice for Sustainable Nitrogen Management	Lu Yufang Institute of Soil Science, Chinese Academy of Sciences", "University of Chinese Academy of Sciences
13:50-14:10	34504	Temporal dynamics of biological nitrification inhibition efficiency in wheat under varying degrees of plant growth realism	Cecile Gubry-Rangin Aberdeen University
14:10-14:25	34545	Rooting for the future: How Biological Nitrification Inhibition improves soil quality and beneficial microbial interactions	Gabriel Silvestre Rocha Netherlands Institute of Ecology (NIOO-KNAW)
14:25-14:40	36259	Effects of plant hormone on microbial community in soil under conservation tillage	Jingjing Ma Northeast Institute of Geography and Agroecology, CAS
14:40-14:55	32618	Phenolic BNIs suppress nitrification by steering the nitrifier community toward enhanced nitrogen retention in contrasting soils	Zedong Chen Institute of Soil Science, Chinese Academy of Sciences", "University of Chinese Academy of Sciences
14:55-15:15	-	Amway	Amway

*Subject to change

Parallel Sessions

Friday, June 12

09:00-09:20	32971	Rice promotes abundance of nitrogen fixing bacteria in paddy field soils	Toru Fujiwara The University of Tokyo
09:20-09:35	32454	MGP1-mediated Mitochondrial ROS Homeostasis Couples Carbon Metabolic Switching with Nitrate Adaptation	Baohai Li Zhejiang University
09:35-09:50	32220	Rapid induction of NH ₄ ⁺ efflux in rice roots under high-ammonium stress and its association with varietal differences in ammonium tolerance and ammonium-utilization efficiency	Dongwei Di Institute of Soil Science, Chinese Academy of Sciences
09:50-10:05	32286	Regulation of the GS-GOGAT-GDH Pathway under Ammonium Nutrition: Mechanistic Insights into Nitrogen Assimilation and Utilisation Efficiency in Oil Palm Seedlings	Muhammad Syafiq bin Mohd Zaludin Plantation Research & Advisory, SD Guthrie Research
10:05-10:20	319B33	Soil nitrogen deficiency and heat stress drive tissue-specific metabolic reprogramming governing nitrogen utilization in soybean	Hamza Tariq Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences
10:20-10:35	35879	Nitrogen-induced modulation of whole-plant transpiration under atmospheric drought	Qiushi Ning Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences

*Subject to change

Parallel Sessions

10:35-10:50	33758	Functional Complementarity in Cover Crop Mixtures Shapes Subsoil Carbon-Nitrogen Partitioning via Maize Reuse of Root Channel Legacies	Yijie Shi Institute of Plant Nutrition and Soil Science, Christian-Albrechts-University Kiel
10:50-11:05	35539	Variation Patterns and Influencing Factors of Fine Root Uptake of Different Nitrogen Forms with Stand Age in <i>Cunninghamia lanceolata</i>	Xiaodong Yao, Zhengyi Huang, and Guangshui Chen School of Geographical Science, Fujian Normal University, Fuzhou, China", "Fujian Sanming Forest Ecosystem National Observation and Research Station, Sanming, China
11:20-11:40	36502	Towards Smart Fertilization: Building a Dynamic Rhizosphere $\text{NH}_4^+/\text{NO}_3^-$ Model under the GiP Framework for Drastically Improved NUE	Yue Jeff Xu Zhongguancun Xuyue Non-invasive Micro-test Technology Industrial Alliance", "Xuyue (Beijing) Sci. &Tech. Co.,Ltd.", "YoungerUSA, LLC
11:40-11:55	31122	Enhancing Nitrogen Utilization and Profitable Corn Production While Minimizing Environmental Impact	Fabian G. Fernandez University of Minnesota
11:55-12:10	36049	Developing an AI-based Precision Nitrogen Management Strategy for Corn	Yuxin Miao University of Minnesota
12:10-12:25	33435	Developing Machine Learning Protocol for Optimizing Nitrogen Nutrition in Rice	P. Kannan Professor (Soil Science) Centre for Agricultural Nanotechnology, Tamil Nadu Agricultural University, Coimbatore, India

*Subject to change



Parallel Sessions

Friday, June 12		Room: Convention Center Nanjing 209	
Session 303006		Rhizobiont for High Nutrient Use Efficiency	
		Convener: Fusuo Zhang, China Agricultural University	
		Co-Conveners: Jianbo Shen, China Agricultural University Lin Zhang, China Agricultural University Oene Oenema, Wageningen University & Research	
Schedule	ID	Title	Presenter
09:00-09:15	34550	Rhizobiome Partners to Optimize Nutrient Transfers from Soil to Plants	Joann K. Whalen McGill University
09:15-09:30	32158	Maintaining sulfur supply to rhizobia delays nodule senescence in soybean	Zhichang Chen Institute of Soil Science, Chinese Academy of Sciences
09:30-09:45	34342	Soybean meal fertilizer and Bacillus subtilis synergistically regulate root rot caused by Rhizoctonia solani in tomato	Ping Lan Institute of Soil Science, Chinese Academy of Sciences
09:45-10:00	33008	Genotype-Specific Rhizosphere Strategies for Phosphorus Acquisition in Tea Plants under Organic Substitution	Lizhi LONG Tea Research Institute, Chinese Academy of Agriculture Sciences
10:00-10:10	31978	The power of the less productive: understanding the links between diversity and belowground traits of wild, landrace and modern crops	Llorenç Cerdà IRTA (Sustainability in Biosystems)
10:10-10:20	33204	Diversified cropping systems with complementary root growth strategies improve crop adaptation to and remediation of hostile soils	Wei-Ping Zhang China Agricultural University

*Subject to change

Parallel Sessions

10:20-10:30	35008	Bioprospecting soil bacteria to increase sulfate release from elemental sulfur in tropical soil	Fernanda Miotti Department of Soil Science, Luiz de Queiroz College of Agriculture, University of São Paulo, São Paulo, Brazil
10:30-10:40	34927	Mycorrhizal solubilization of phosphate rock increases arsenic accumulation in <i>Pteris vittata</i> : Trade-off root strategies and dual P-transporter pathways	Songge Deng Zhejiang University
10:40-10:50	36182	Soil C:P stoichiometry regulating microbial-mediated phosphorus turnover fluxes in calcareous soil	Yi Peng Xinjiang Agricultural University
10:50-11:00	35813	Nitrogen use efficiency of intercropping and its drivers: a global meta-analysis	Yalin Liu Ningbo University
11:15-11:30	34652	Screening groundnut genotypes for their nutrient efficiency in calcareous soils	Chitdeshwari Professor (SS&AC), Department of Soil Science and Agricultural Chemistry, DNRM Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India
11:30-11:45	33519	Cross-kingdom nutrient exchanges in the plant-arbuscular mycorrhizal fungi-bacteria continuum	Lin Zhang China Agricultural University
11:45-12:00	34330	The different cultivation methods affect the secretion of coumarins under iron deficiency	Ping Lan Institute of Soil Science, Chinese Academy of Sciences
12:00-12:15	34705	Drivers of Potassium Efficiency in Sweet Potato: Genotypic Variation, Partitioning Dynamics, and AMF-Mediated Rhizosphere Optimization	Jidong Wang Jiangsu Academy of Agricultural Sciences
12:15-12:30	35544	Nitrogen form-induced spatiotemporal coupling of root growth and phosphorus uptake	Lidong Qi China Agriculture University

*Subject to change



Parallel Sessions

Thursday, June 11 Friday, June 12		Room: Convention Center Nanjing 302B	
Session 303007		Sustainable Phosphorus Use in Agroecosystems: New Approaches to Optimizing Nutrient Management and Ecosystem Functionality	
		Convener: Klaus Jarosch, Agroscope, Agroecology and Environment, Zurich, Switzerland	
		Co-Conveners: Hao Chen, Sun Yat-sen University, School of Agriculture and Biotechnology, Shenzhen, China Owen Fenton, Teagasc, Environmental research Centre, Wexford, Ireland Wenxuan Shi, Teagasc, Environmental research Centre, Wexford, Ireland	
Schedule	ID	Title	Presenter
Thursday, June 11			
11:15-11:30	34012	Phosphorus in agricultural soils: status and dynamics	Enqing Hou South China Botanical Garden, Chinese Academy of Sciences
11:30-11:45	34045	Optimizing global cropland management to advance phosphorus sustainability	Yishen Sun Institute of Soil Science, Chinese Academy of Sciences
11:45-12:00	32348	Rainfall thresholds and scale-dependent hydrological dynamics of phosphorus speciation in nested purple soil catchments	Xinyu Liu Institute of Mountain Hazards and Environment, Chinese Academy of Sciences", "Key Laboratory of Mountain Surface Processes and Ecological Regulation, Chinese Academy of Sciences
13:30-13:45	34158	Impact of Combined Manure and Mineral Fertilizer on Phosphorus Dynamics in Paddy and Drained Paddy Systems: Transitioning to Soybean Cultivation	Lakmini T. Godagedara Division of Applied Life Science (BK21 Four), Gyeongsang National University, Jinju 52828, Korea

*Subject to change

Parallel Sessions

13:45-14:00	35403	Enhancing Phosphorus Use Efficiency of Phosphate Rock via Phospho-Composting: Evidence from Faba Bean Grown in Alkaline Soils	Mohamed Chtouki College of Agriculture and Environmental Sciences, Mohammed VI Polytechnic University
14:00-14:15	35790	Exploring characterization methods and thresholds of carbon-phosphorus ratio for promoting crop growth and microbial phosphorus activation	Qiaoling Pu Xinjiang Agricultural University
14:15-14:30	33215	Enhancing the functionality of agricultural soils in Mediterranean regions with biobased P fertilizers: nutrient cycling and soil microbial communities	Antonio Rafael Sánchez-Rodríguez University of Córdoba (Spain)
14:30-14:45	36353	Recycling lake sediment for use in agriculture: insights from laboratory and field experiments	Antonio M. M. Silva University of Southern Denmark
14:45-15:00	36290	Phosphorus cycling in paddy soils	Yu Wang Institute of Soil Science, Chinese Academy of Sciences
15:00-15:15	35460	Simulating the Fate of Phosphorus by Using Hydrus Model: An Incubation Study	Ashir Institute of Soil and Environmental Sciences, University of Agriculture Faisalabad-38000, Pakistan
16:30-16:45	33776	Effects of organic fertilizer substitution on soil inorganic phosphorus (P) fractions and dynamics at the aggregate level: evidence from P fractionation and ³³ P isotopic exchange kinetics	Hao Chen Sun Yat-Sen University
16:45-17:00	34807	Molecular-level understanding transformation mechanisms of P in the calcareous agricultural soils	Jianjun Yang Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences
17:00-17:15	34725	Land use controls soil phosphorus pools but not sorption mechanisms: insights from piecewise structural equation modelling	Gilles Colinet Water Soil Plant exchanges Department, TERRA, University of Liege, Belgium

*Subject to change



Parallel Sessions

17:15-17:30	33703	Innovative Biochar Approaches for Reducing Non-Point Phosphorus Loss in Agroecosystems	Debolina Chakraborty Auburn University
17:30-17:45	34769	Long- term biochar application influences phosphorus and associated iron and sulfur transformations in the rhizosphere	Jiahui Yuan Institute of Soil Science
17:45-18:00	34905	Sulphur Impregnated Biochar Synchronizes Phosphorus Release from Occluded Pools while Enhancing Carbon Stabilization	Muhammad Ahmed 1 Key Laboratory of Plant Nutrition and the Agri-environment in Northwest China, Ministry of Agriculture and Rural Affairs, Northwest A&F University, Yangling 712100, China", "2 Key Laboratory of Low-carbon Green Agriculture in Northwestern China, Ministry of Agriculture and Rural Affairs, P. R. China, Yangling 712100, China", "3 College of Natural Resources and Environment, Northwest A & F University, Yangling 712100, Yangling, China
18:00-18:15	35928	Long-term Biochar Application Enhances Carbon-Phosphorus Co-stabilization and Mitigates Methane Emissions in Flooded Rice Systems	Hao Chen Institute of Soil Science, Chinese Academy of Sciences

*Subject to change

Parallel Sessions

Friday, June 12

09:00-09:15	35662	Seabirds Bearing Light	Roland Bol Institute of Bio- and Geosciences, Agrosphere Institute (IBG-3), Forschungszentrum Jülich, Germany
09:15-09:30	34868	An innovative approach for measuring soil microbial biomass P	Vito Armando Laudicina Department of Agricultural, Food and Forest Sciences, University of Palermo, Palermo, Italy
09:30-09:45	32675	The Art of Breeding Microbial Communities: Unlocking Soil Phosphorus through Artificial Selection	Lena Faller Netherlands Institute of Ecology (NIOO-KNAW)", "Utrecht University
09:45-10:00	31931	Phosphate rock and microorganisms as a sustainable alternative to soluble P fertilizers in tropical soil	Fernanda Miotti Luiz de Queiroz College of Agriculture, University of São Paulo
10:00-10:15	31857	Enhancing soil phosphorus activation and microbial phosphorus cycling via increasing soil moisture stability in maize production	Mengze Xu Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences
10:15-10:30	35886	Long-term green manuring increases phosphorus availability in soil by modifying microbial functional genes and enzyme activities	Xiaodong Chen Zhejiang Academy of Agricultural Sciences

*Subject to change



Parallel Sessions

Tuesday, June 9		Room: Convention Center Nanjing 208	
Session 304003		Can Enhanced Rock Weathering Capture and Store Atmospheric CO₂? Its Expectations and Limitations	
		Convener: Taku Nishimura, Professor, Laboratory of Soil Physics and Soil Hydrology, The University of Tokyo	
		Co-Convener: Songlin Wu, Professor, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences	
Schedule	ID	Title	Presenter
13:30-13:45	36629	Constraints in Measuring Carbon Sequestration by Enhanced Rock Weathering and the Way Forward	Balwant Singh The University of Sydney
13:45-14:00	32103	Reframing Carbon Accounting in Enhanced Rock Weathering: Counterfactuals, stoichiometry, and MRV implications	Rafael M. Santos Department of Civil, Environmental, and Water Resources Engineering, University of Guelph
14:00-14:15	33796	The Impact of Enhanced Rock Weathering on Soil Carbon Dynamics: A Global Meta-Analysis of Environmental and Soil Factors	Yunsi Duan Northeastern University
14:15-14:30	33040	Reconnecting geology and soil science for a broader One Health framework: Insights from Enhanced Rock Weathering	Atsushi Nakao Kyoto Prefectural University
14:30-14:45	31991	Direct evidence for basaltic mineral weathering in cropland revealed by X-ray powder diffraction analysis	Kohei Kurokawa Graduate School of Life and Environmental Sciences, Kyoto Prefectural University, Kyoto, Japan; Environmental and Biochemical Sciences, The James Hutton Institute

*Subject to change

Parallel Sessions

14:45-15:00	32693	Can Silicate Rock Powder Replace Agricultural Lime and Sequester Carbon in Acid Soils? - Field and Lab Studies	Ray R Weil Department of Environmental Science and Technology, University of Maryland, College Park
15:00-15:15	33000	Synergistic acidification control and carbon sequestration through enhanced silicate weathering in acidified soils	Congbin Xu, Tianran Sun Chinese Academy of Sciences, Research Center for Eco-environmental Sciences,
16:30-16:45	33238	Exploring Basalt Weathering for Mitigating Greenhouse Gas Emissions in Rice Paddy System	Chia-Yu Yang Life and Environmental Sciences, Kyoto Prefectural University
16:45-17:00	33263	Impact of soybean cultivation on basalt weathering in agricultural system	Hiroshi Uchibayashi Plant Imaging Research Unit, Fukushima Institute for Research, Education and Innovation, Takasaki, Japan
17:00-17:15	34954	Coupling CO ₂ Sequestration and Nutrient Release through Enhanced Rock Weathering with Organic Inputs	Juan Antelo CRETUS, Universidade de Santiago de Compostela
17:15-17:30	33794	Wollastonite reshapes soil organic carbon fraction dynamics and enhances carbon sequestration potential	Zhifang Zhao Northeastern University
17:30-17:45	34231	Research on the Mechanism of Enhancing Rock Weathering to Regulate the Priming Effect in Drought and Paddy Soils	Gefeng Zhang Yangzhou University
17:45-18:00	35858	Mechanisms of Carbon Sequestration through Bacillus-Enhanced Basalt Weathering on the Soil Priming Effect	Gaoyang Qiu Zhejiang Academy of Agricultural Sciences
18:00-18:15	32255	Subsurface and surface transport of crushed basalt	Taku Nishimura The University of Tokyo

*Subject to change

Parallel Sessions

Thursday, June 11		Room: Expo Center, Hall 8, 8203	
Session 304004		Engineering Technology System for Efficient Quality Improvement of Obstructed Soil	
		Convener: Yuanfang Huang, China Agricultural University	
		Co-Convener: Qiuju Wang, Heilongjiang Academy of Black Soil Conservation and Utilization, China	
		Taku Nishimura, University of Tokyo, Japan	
		Xiaogang Li, Nanjing Forestry University, China	
		Yunjia Liu, China Agricultural University	
Schedule	ID	Title	Presenter
16:30-16:45	32056	Soil Re-engineering - A New Approach to Improve Crop Productivity on Constrained Sandy Soils in Water-Limited Environments in Western Australia	Gausul Azam Principal Research Scientist
16:45-17:00	34087	Engineering Technology and Practice of Microbial-Synergized Organic Material Amelioration in Albic Soil	Jie Liu Heilongjiang Agricultural Academy of Sciences Heilongjiang University
17:00-17:15	34592	Ecological Prevention and Control of Early-Stage Gully Erosion in Black Soils: Concepts, Mechanisms, and Integrated Technologies	Enheng Wang Northeast Forestry University

*Subject to change



Parallel Sessions

17:15-17:30	35742	The effects of continuous monocropping and intercropping with appropriate nitrogen reduction on soil biological health based on nematode communities	Xiaoke Zhang Institute of Applied Ecology, Chinese Academy of Sciences
17:30-17:45	34729	Bacterial richness enhances the thermostability of soil organic matter: long-term perspective	meng wu Institute of Soil Science, Chinese Academy of Sciences
17:45-18:00	34658	Tillage and straw return alleviate soil compaction in Northeast China: From pore structure to root development and crop productivity	Jing An Shenyang Agricultural University
18:00-18:10	34884	Bacterial rrn copy numbers linked to soil function and crop yield in long-term manure-fertilized soils	Shuikuan Bei Nanjing Forestry University
18:10-18:20	34119	Research Progress on Bioremediation and Agronomic Control Techniques for Phthalate Contaminated Soil	Lei Wang Northeast Agricultural University
18:20-18:30	34123	Subsoil Mixed Profile Reconstruction Technology	Qingying Meng Heilongjiang Academy of Agricultural Sciences

*Subject to change

Parallel Sessions

Tuesday, June 9		Room: Expo Center, Hall 8, 8203	
Session 304007		Frontier Technologies for Soil Analysis: From Single-Cell to Nanosensors	
		Conveners: Jian Xu, Qingdao Institute of Bioenergy and Bioprocess Technology Haoye TANG, Institute of Soil Science, Chinese Academy of Sciences Yasin Orooji, Distinguished Professor, College of Geography and Environmental Sciences, Zhejiang Normal University Co-Conveners: Yuting Liang, Institute of Soil Science, Chinese Academy of Sciences Wei Huang, University of Oxford Li Cui, Institute of Urban Environment, Chinese Academy of Sciences Hailin ZHANG, Department of Plant and Soil Sciences, Oklahoma State University Youzhi Feng, Nanjing Forestry University Hassan Karimi-Maleh, Professor in Biosensing Technologies, affiliated with multiple collaborative institutions	
Schedule	ID	Title	Presenter
13:30-13:45	32737	The Soil iMAPS Initiative: a global network to map the single-cell in-situ metabolic atlas for soil	Xu Jian Qingdao Institute of Bioenergy and Bioprocess Technology, Chinese Academy of Sciences
13:45-14:00	32712	Single-cell exploration of the microbiota driving soil phosphorus mobilization: from single-cell Raman to high-throughput fluorescence profiling	Li Cui Institute of Urban Environment (IUE), Chinese Academy of Sciences (CAS)
14:00-14:15	32944	Raman-based flow cytometry for single-cell microbial phenotyping	Kang Soo Lee Department of Mechanical Engineering, UNIST

*Subject to change

Parallel Sessions

14:15-14:30	33717	Designing drought-resilient plant microbiomes using single-cell Raman spectroscopy	Qinglin Chen Institute of Urban Environment, Chinese Academy of Sciences
14:30-14:45	33815	Single-Cell Analysis of Microbial Degradation Mechanisms and Remediation Potential for Emerging Pollutants: A Case Study on Methylanthalene	Jibing Li State Key Laboratory of Advanced Environmental Technology, Chinese Academy of Sciences", "University of Chinese Academy of Sciences
14:45-15:00	34324	Quinolone-mediated metabolic cross-feeding develops aluminium tolerance in soil microbial consortia	Zhiyuan Ma Institute of Soil Science, Chinese Academy of Sciences
15:00-15:15	33868	Climate Warming Enhances Diversity and Resilience of Soil Phosphorus-Cycling Microbial Community	Zijian Wang Cornell University
1 min	-	Part 2 Introduction & Housekeeping	Feng Youzhi
16:30-16:45	36424	Nitrogen- fixing seed endophytes synergize with soil functional microbiota to enhance rice nitrogen supply	Kai Sun Nanjing Normal University
16:45-17:00	31570	Monitoring Ecological Rehabilitation of Degraded Soils by Human Activities Using Thermal Indicators of Soil Organic Matter	Maria-Fernanda Romero-Sarmiento IFP Energies Nouvelles
17:00-17:15	32360	Developing a diffusive gradients in thin films (DGT) technique for large-scale and high-resolution mapping of labile potassium in soils	Jiayin Huang The University of Queensland, School of Agriculture and Food Sustainability

*Subject to change

Parallel Sessions

17:15-17:30	32891	Loosely bound mobile metal ions distribution across arid landscapes	Silaev Makar Aramco Innovations LLC
17:30-17:45	33157	Evaluation of ion selective electrodes for monitoring plant nutrients	Ayodele Oluseyi Fabiyi University of Lincoln, Lincoln, United Kingdom
17:45-18:00	33730	Micro-CT scanning as a tool for analysing comparative root architecture of pasture species	Haoran Fan School of Agriculture, Food and Ecosystem Sciences (Faculty of Science, The University of Melbourne)
18:00-18:15	36484	In situ Non-destructive Imaging of Roots from GFP-Expressing Plants Using a Novel Fluorescence Minirhizotron with Automated Intensity Measurement and CNN-based TRL Estimation	Xinze Xu French Associates Institute for Agriculture and Biotechnology of Drylands, The Jacob Blaustein Institutes for Desert Research, Ben-Gurion University of the Negev, Sede Boqer, Israel
18:15-18:30	34528	From lab to field: An open-source, low-cost toolkit for soil CO ₂ respiration research	Thuc T. Nguyen The Jacob Blaustein Institutes for Desert Research, Ben-Gurion University of the Negev, 84990, Israel

*Subject to change



Parallel Sessions

Thursday, June 11 Friday, June 12		Room: Convention Center Nanjing 207	
Session 305001		Deciphering the Soil-Pollutant Nexus: Biogeochemical Frontiers for Soil Health and Sustainable Ecosystems	
		Convener: Yan He, Zhejiang University	
		Co-Conveners: Yurong Liu, Huazhong Agricultural University Guodong Fang, Institute of Soil Science, Chinese Academy of Sciences Cheng-Hua Liu, Feng Chia University Ashley Edwin Franks, La Trobe University Guofang Xu, Zhejiang University	
Schedule	ID	Title	Presenter
Thursday, June 11			
11:15-11:35	33590	Microalgae enhance the ameliorative effects of organic materials on soil treated by thermal desorption	Hua Li Shanxi University
11:35-11:50	33058	Rethinking Restoration: Functional Trajectories of Soil-Vegetation Systems in Restored vs. Spontaneously Colonized Metalliferous Mine Tailings under a Changing Climate	M. Nazaret González-Alcaraz Universidad Politécnica de Cartagena
11:50-12:05	34924	Speciation Distribution, Transformation, and Interfacial Interaction Mechanisms of Heavy Metals and Phosphate in Contaminated Farmland Soils	Xiaoming Wang Huazhong Agricultural University

*Subject to change



Parallel Sessions

12:05-12:20	31431	Contrasting soil functional responses to climate change in restored and spontaneously colonized mine tailings	Ceacero-Moreno, Matías Department of Agricultural Engineering of the E.T.S.I.A., Technical University of Cartagena member of European University of Technology EUT+, 30203 Cartagena, Spain.
12:20-12:30	34031	The genesis of nano-colloid-bound Cd and As: from climatic and pedogenic controls to global projections	Kengbo Ding Sun Yat-sen University
13:30-13:50	32204	Microbial Methylation of Mercury Mediated by Soil Organic Matter: Progress and Prospects	Xujun Liang Northwest A&F University
13:50-14:10	34355	Response and functional restructuring of micro-food webs in heavy metal-contaminated soil	Xiuli Hao Huazhong Agricultural University
14:10-14:25	34404	Effects of methane oxidation on microbial mercury methylation in typical paddy soils	Kanghua Chen Northwest A&F University
14:25-14:40	33830	Long-Term Ecological consequences of the Proton Launch Vehicle First Stage Falling: Preliminary Results of the Comprehensive Case Study in Central Kazakhstan	Ivan Semenov Lomonosov Moscow State University
14:40-14:55	33832	Analysis of Traits and Prediction of Angiosperm Species of Plant-Hyperaccumulators of 17 Heavy Metals and Metalloids: Initial Results	Galya V. Klink Isaev Centre for Problems of Forest Ecology and Productivity of the Russian Academy of Sciences ", "Higher School of Education

*Subject to change

Parallel Sessions

16:30-16:50	33764	The Passivation Remediation of Weakly Alkaline Cadmium-Contaminated Farmland Soil	Yanhong Lou Shandong Agricultural University
16:50-17:10	31988	From Collieries to Continents: Deciphering the Soil-Pollutant Nexus in Coal Mine Landscapes	Alexey V. Alekseenko United Nations University
17:10-17:30	34956	pH-Dependent Overestimation of Heavy Metal Mobility Risk in Alkaline Soils: Implications for Soil Quality Assessment	Jiang Yu Sichuan University
17:30-17:40	34645	MICROBIAL REFUGEE UNDER SHRUBS LIMITS SOIL COPPER CONTAMINATION EFFECTS	Pedro Mondaca Institute of Ecology & Biodiversity, Chile", "Facultad de Medicina Veterinaria y Agronomía, Universidad de Las Américas, Santiago, Chile
17:40-17:50	31683	Intensified Production of Hydroxyl Radical from Iron-Manganese Synergistic Coupling during Soil Oxygenation: Driven by Iron-Induced Manganese Redox Cycling and Peroxo Complex Formation	Kexin Chen Shanghai Jiao Tong University
17:50-18:00	35408	One Health Implications of Treated and Untreated Wastewater Irrigation: Evidence from farmer-managed systems in Northern India	Sumita Chandel Department of Soil Science, Punjab Agricultural University, Ludhiana, Punjab
18:00-18:10	32722	Elucidating Arsenic-Soil Mineral Interactions at the Microscopic Interface: Insights into Arsenic Geochemistry based on mechanistic speciation	Yuhong Huang Nanjing university
18:10-18:20	32714	Micro-scale redox heterogeneity governs chromium mobility and reoxidation in flooded industrial soils with contrasting properties	Danxing Yang Hunan Agricultural University

*Subject to change

Parallel Sessions

Friday, June 12

09:00-09:20	34878	Specific metabolites modulate core microbes and microbial interactions to drive fomesafen dissipation in the soybean rhizosphere	Wenjie Ren Institute of Soil Science, Chinese Academy of Sciences
09:20-09:40	34353	Inhibition mechanism of hexachlorocyclohexane isomers on different methanogen metabolism	Yaqing Liu Guangxi University
09:40-09:55	35550	Coupling Pollution Screening with Ecotoxicological Response: Critical Thresholds, Aromatic Stress, and Dominant Degraders in the Loess Plateau	Min Hu Xi'an University of Architecture and Technology
09:55-10:05	32527	Overlooked Ecological Risks of Chlorinated Pollutants in Anaerobic Soils: Coupling Microbial Dehalogenation with Methanogenesis	Shuyao Li, Yan He State Key Laboratory of Soil Pollution Control and Safety, College of Environmental and Resource Sciences, Zhejiang University", "Zhejiang Provincial Key Laboratory of Agricultural Resources and Environment, Zhejiang University
10:05-10:15	32433	From Pollution to Solution: Microbial Insights and Novel Bacteria for Biodegradation of Organochlorine in Coastal Wetland Soil	Meng Liu Zhejiang University
10:15-10:25	32504	Mapping soil deposition of antibiotics at municipality-scale in Brazil	Ricardo Canal Filho Laboratory of Precision Agriculture - Luiz de Queiroz College of Agriculture, University of São Paulo

*Subject to change



Parallel Sessions

10:25-10:35	32915	Neglected contributions of residual herbicides at various levels on soybean root rot: links with time-series changes in non-target soil microbial communities and functions	Yuxuan Chen Zhejiang University
10:35-10:45	32791	Multi-Omics Metabolic Models of Coupled Dechlorination and Methanogenesis Enhance Pollution and Carbon Reduction in Anaerobic Soils	Yifan Song Zhejinag University
10:45-10:55	32624	Enhanced Fomesafen Microbial Degradation in Anaerobic Soils by Glucose: Degradation Characteristics Under Different Redox Conditions	Shixiang Dai State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences", "University of Chinese Academy of Sciences
11:15-11:35	33888	Environmental Prevalence and Application of Organohalide-respiring Bacteria in Remediation	Guofang Xu Zhejiang University
11:35-11:50	33449	Photochemical characterization of paddy water: Formation of reactive intermediates for micropollutant degradation	Yu Zeng Institute of Soil Science, Chinese Academy of Sciences
11:50-12:05	32647	Elevated CO ₂ enhanced PFOA removal and reduced N ₂ O emissions in soil: evidence from a FACE experiment	Jiaxin Li Zhejiang University
12:05-12:20	34178	Divergent responses of alfalfa-soil nitrogen cycling to PE and PLA microplastics: A metabolic and microbial perspective	Zhanling Wang Nanjing University

*Subject to change

Parallel Sessions

Tuesday, June 9		Room: Expo Center, Hall 8, 8201	
Session 305002		Enhanced In Situ Bioremediation for Contaminated Sites	
		Conveners: Song-Hu Yuan, State Key Laboratory of Biogeology and Environmental Geology, China University of Geosciences Chunling Luo, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences	
		Co-Convenor: Timothy M. Vogel, Université de Lyon	
Schedule	ID	Title	Presenter
09:00-09:15	32628	Nitrogen Transfer and Cross-feeding Between Azotobacter chroococcum and Paracoccus aminovorans Promotes Pyrene Degradation	Ying Teng Institute of Soil Science Chinese Academy of Sciences
09:15-09:30	36019	Effects of Amendments on the Anaerobic Bioremediation of Organohalides in Contaminated Soil and Groundwater	Sydney Kennedy-Flynn University of Alberta
09:30-09:45	36057	In Situ Enhanced Reductive Dechlorination for Chlorinated Aliphatic Hydrocarbon Contaminated Sites	Liu Wuxing Institute of Soil Science, Chinese Academy of Sciences
09:45-10:00	35466	Sequential Causal Machine Learning Assisted Design of Biochar for Laccase Immobilization	Yin Lu Beijing University of Civil Engineering and Architecture
10:00-10:15	35407	Bioremediation Meets Biofertilization: Plant Growth Promotion and Heavy metal Remediation by Soil Bacteria	Muhammad Shahid Department of Bioinformatics and Biotechnology, Government College University Faisalabad, Pakistan
10:15-10:30	36064	Dual inhibition mechanisms drive antagonistic effects during phenanthrene and pyrene co-degradation by Pseudoxanthomonas: Pathway competition and substrate preference	Chao Cai Institute of Urban Environment, Chinese Academy of Sciences

*Subject to change

Parallel Sessions

10:30-10:45	34534	Remediation potential of oil-contaminated soils, under biochar and mineral salts influence	N.Manucharova Lomonosov State University", "Lomonosov Moscow State University
10:45-11:00	34071	Rhizosphere Phosphorus Cycling Controls Microbial Degradation of Organophosphate Esters in Soil	Longfei Jiang Guangzhou Institute of Geochemistry, Chinese Academy of Sciences
11:15-11:30	33943	Influence of Microbial Community Structure and OHRB Diversity on Trichloroethylene Bioremediation	Siying Yang Zhejiang University
11:30-11:45	34644	Characterizing Temperature-Dependent Dissipation Kinetics of Co-Mingled Contaminated Soils	Theresa O. Adesanya University of Northern British Columbia
11:45-12:00	33829	Thermally Enhanced Biodegradation Mechanisms of Chloroethenes and BTEX Co-Contaminants in Groundwater: Insights into Microbial Functional Gene Enrichment and Biogeochemistry	Zhuanxia Zhang Nanjing Institute of Environmental Sciences, Ministry of Ecology and Environment of China
12:00-12:15	320B60	Opportunities, Challenges, and Practices of Soil Remediation in the AI Era	Li Yanxi Center Environmental Protection Technology Co., Ltd.
13:30-13:45	33890	Estimating Petroleum Hydrocarbon Plume Volume and Mass from Sparse and Zero-Inflated Soil Data Using INLA-SPDE	Lulu Peng The University of Saskatchewan
13:45-14:00	33504	Evaluation of Biological Soil Mulch for Dust and Wind Erosion Control in Arid Regions of Iran	Davood Namdar Khojasteh Associate Professor
14:00-14:15	33290	Sulfate-Amended In Situ Bioremediation of Chloroethene-Heavy Metal Co-Contamination: Mechanisms, Microbial Responses, and Pilot-Scale Validation	Zheng-Tao Li Zhejiang Gongshang University", "Zhejiang University

*Subject to change

Parallel Sessions

14:15-14:30	33117	Root foraging for metals as a key trait of hyperaccumulators may be obscured in soil systems: Evidence from experiments and a meta-analysis	Lanfang Hu Sun Yat-sen University
14:30-14:45	32903	Transforming Spent Coffee Grounds (SCG) into an Environmental Asset- Its Characterization and Optimization for Soil Amendment and Remediation Applications	Mhlophe, Prudence University of Glasgow
14:45-15:00	32833	Phytoremediation of heavy metals in soils of the Christchurch Red Zone	Mingyuan Liu University of Canterbury
15:00-15:15	32795	Variations in root functional traits facilitate the adaptation of pioneer plants to rare earth element mine tailings	Shi-Chen Zhu Guangdong Academy of Forestry
16:30-16:45	32072	Earthworms and Crop Varieties Mediate the Effects of Nano-Hydroxyapatite on Soil Biochemical Characteristics and Cadmium Uptake by Plant	Cevin Tibihenda SOUTH CHINA AGRICULTURAL UNIVERSITY
16:45-17:00	33917	Potential bacterial resource for bioremediation of organochlorine pesticides and flame retardants recognized from forest soil across China	Jiayu Liu South China University of Technology
17:00-17:15	32557	Root acid phosphatases and microbial biomass phosphorus induced Cd tolerance and P acquisition in wheat inoculated with P solubilizing bacteria.	Ammar Ibnyasser College of Agriculture and Environmental Sciences, Mohammed 6 Polytechnic University
17:15-17:30	32977	Metabolic complementary Between Cupriavidus and Pseudomonas Facilitates 2,4,6-Trichlorophenol Degradation	Lei Zhang Shanghai Jiao Tong University
17:30-17:45	320B38	Methane-dependent arsenate reduction in paddy soil	Xianjin Tang Zhejiang University

*Subject to change



Parallel Sessions

Thursday, June 11		Room: Expo Center, Hall 8, 8203	
Session 305003		Integrated Remediation and Utilization Strategies for Degraded Soils in Mined Lands	
		Convener: Yuanfang Huang, China Agricultural University	
		Co-Convener: Qiuju Wang, Heilongjiang Academy of Black Soil Conservation and Utilization, China	
		Taku Nishimura, University of Tokyo, Japan	
		Hongtao Zou, Shenyang Agricultural University, China	
		Enheng Wang, Northeast Agricultural University, China	
Schedule	ID	Title	Presenter
13:30-13:45	35636	Root acquisition-defense strategies of pioneer plants in heavy metal contaminated mining areas	De-Xiang Xu Sun Yat-sen University
13:45-14:00	33455	Phytoremediation modelling and utilization	Junye Wang Athabasca University
14:00-14:15	35016	From Mine Lands to Food Systems Unlocking the Agricultural Potential of Post-Mined Lands	Esther Mwende Muindi Department of Crop Sciences, Pwani University, Kilifi, Kenya

*Subject to change

Parallel Sessions

14:15-14:30	34932	Vetiver Grass Induced Changes in Soil Acidity, Electrical Conductivity and Soil Organic Carbon in Mine-Affected Soils over two Rehabilitation Periods	Ntimbane Patience Department of Plant Production, Soil Science and Agricultural Engineering", "University of Limpopo", "Private Bag X 1106, Sovenga, 0727", "South Africa
14:30-14:45	32929	The dependency of spontaneous vegetation growth on soil and tailing material properties of mine residue deposits at different climates in Namibia	Stefan Norra Potsdam University
14:45-15:00	32182	Comparison for physico-chemical properties of restored soil with two types of vegetation at abandoned coal mine in Gangwon province, South Korea	Kitae Jo Department of Agriculture, Forestry and Bioresources, Seoul National University
15:00-15:15	31754	Ecological restoration of semi-arid, PTE-enriched toxic mine tailings through organic amendments and microclimatic regulation via fascines	Antonio Aguilar-Garrido Department of Agricultural Engineering of the ETSIA, Technical University of Cartagena member of European University of Technology EUT+
15:15-15:30	32086	Ultrafast and high-capacity gold retrieval via cascade reduction	Yilin Lu Nanjing University

*Subject to change



Parallel Sessions

Monday, June 8 Tuesday, June 9		Room: Convention Center Nanjing 303A	
Session 305005		Micro-and Nano-Plastics in the Soil: From Pollution to Solution	
		Convener: Rong Ji, Nanjing University, China	
		Co-Conveners: Thilo Hofmann, University of Vienna, Austria	
		Yongming Luo, Institute of Soil Science, Chinese Academy of Sciences	
		Matthias C. Rillig, Free University of Berlin, Germany	
		Chen Tu, Institute of Soil Science, Chinese Academy of Sciences	
		Yuanyuan Tang, Southern University of Science and Technology	
		Fei Dang, Institute of Soil Science, Chinese Academy of Sciences	
		Cheng Peng, East China University of Science and Technology	
Schedule	ID	Title	Presenter
Monday, June 8			
13:15-13:30	319B64	High-Throughput Detection Method for Microplastics Based on Fluorescence Spectroscopy and Machine Learning	Cheng Gu State Key Laboratory of Water Pollution Control and Green Resource Recycling, School of Environment, Nanjing University
13:30-13:45	36146	Before You Measure: How Sampling Strategies Shape Microplastics Quantification in Soils	Samuel J. Cusworth ETH Zurich
13:45-13:57	35243	Development of a protocol for the extraction and quantification of nanoplastics in agricultural soils	Quynh Nhu Phan Le Laboratory for inorganic and organic analysis, Flemish Institute for Technological Research, Mol, Belgium

*Subject to change



Parallel Sessions

13:57-14:09	32850	Characterization of microplastics using pyr-GC/MS and their leaching and runoff behavior in soil	Jeong Yeon Kim Chungbuk National University
14:09-14:21	33507	Temporal Dynamics of Microplastic Accumulation and Soil Quality under Plastic Mulching in Mediterranean Soils	Muhittin Onur Akca Ankara University (Department of Soil Science and Plant Nutrition, Faculty of Agriculture, Ankara, Turkey)
14:21-14:33	32178	From snowpack to soil: microplastic pathways in alpine ecosystems	Benech Andrea University of Turin, Department of Agricultural, Forest and Food Sciences
14:33-14:45	34963	Ten years of microplastics in the soil-plant system research-what have I learned?	Yueling Qi Anhui University
14:45-14:57	34526	Impact of Microplastic Pollution in U.K. Woodland Soil: Evidence from a Long-Term Soil Burial Experiment	Abbie Rogers Northumbria University
14:57-15:09	31769	Migration Behaviors of Typical Microplastics in Soil with Different Textures by Rainfall Induced Surface Runoff	Hui Liu Hohai University
16:30-16:45	36009	Interfacial Colloidal Behavior of Microplastic-Pollutant Complexes and Its Regulation by Environmental Conditions	Jie Han Xi'an Jiaotong University
16:45-17:00	319B93	Weathered microplastics trigger metal transformation	Fei Dang State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences

*Subject to change

Parallel Sessions

17:00-17:15	33512	Interaction Mechanism Between Micro-/Nano-plastics and Mineral Phases	Yuanyuan TANG Southern University of Science and Technology
17:15-17:30	32196	Mineralization determines microplastic effects on soil organic carbon	Jie Wang China Agricultural University
17:30-17:42	32844	Mineralization and transfer of polymer-derived carbon from biodegradable mulch into the soil microbial biomass and organic matter pool	Fan Ding Shenyang agricultural university
17:42-17:54	33295	Microplastic Weathering impacts Adsorption with PFAS	Soleil A. Sklencar Auburn University
17:54-18:06	31885	Microplastic transport in soil by nematodes	Yin Liu Department of Environment, Faculty of Bioscience Engineering, Ghent University, 9000 Ghent, Belgium.
18:06-18:18	34520	Changes in the dispersivity of soil substrates after contamination with microplastic polystyrene	Svetlana Klushina Faculty of Soil Science, Lomonosov Moscow State University, Moscow, Russia
18:18-18:30	34961	Oxidized Residues Accelerate Phosphorus Immobilization via Enhanced Surface-induced Nucleation	Hang Zhai Southwest University

*Subject to change

Parallel Sessions

Tuesday, June 9

09:00-09:15	32400	Micro-nanoscale polystyrene and polyvinyl chloride co-exposure impacts the uptake and translocation of toxic elements and pesticides by lettuce and wheat	Jason Christopher White The Connecticut Agricultural Experiment Station
09:15-09:30	319B94	Precise tracking of nanoparticles in plant roots	Xian-Zheng Yuan School of Environmental Science & Engineering, Shandong University
09:30-09:45	36500	How does plastic pollution influence soils and soil fungal communities in temperate alluvial forests	Žaklina Marjanović University of Belgrade - Institute for Multidisciplinary Research, National Institute of the Republic of Serbia, Belgrade, Serbia
9:45-10:00	35945	Particle Size-Dependent Effects of Microplastics on Cadmium Migration and Toxicity in Soil-Plant Systems: Regulation via Microbial Recruitment and Soil Fauna	Na Zheng JilinUniversity
10:00-10:12	319B95	Impact of microplastics on nitrate reduction in agricultural soils	Xiaofang Ma State Key Laboratory of Soil and Sustainable Agriculture, Changshu National Agro-Ecosystem Observation and Research Station, Institute of Soil Science, Chinese Academy of Sciences
10:12-10:24	33184	Harnessing Trichoderma spp. to Enhance Foliage Yield and Quality of Lettuce (Lactuca sativa L.) in Microplastic-Contaminated Soils: A Sustainable Strategy for Global Soil Health and Food Security	P. K. .SHARMA Banaras Hindu University, Varanasi-221005, India

*Subject to change



Parallel Sessions

10:24-10:36	36123	Soil microplastic risk from microcosms to field surveys: nematode bioindicators across scales from individuals to micro-food webs	Xuchao Zhang 1 Humboldt-Universität zu Berlin
10:36-10:48	34491	Ecological risk and machine-learning prediction of microplastic pollution in peatlands	Huu-Tuan Tran Kansas State University
10:48-11:00	33399	Short-Term Exposure to Polystyrene Micro- and Nanoplastics modifies Soil Nutrient Availability without affecting Lettuce Productivity in Tropical Climate	Meththa Gimhani School of Environmental and Natural Sciences, Bangor University, Bangor, Gwynedd, LL57 2UW, UK", "Sri Lanka Institute of Nanotechnology, Nanotechnology and Science Park, Mahenwatta, Pitipana, Homagama, Sri Lanka
11:15-11:30	32797	Microplastics disrupt nitrogen-fixing bacterial community with consequences for plant growth	Tingting Zhao Freie Universität Berlin
11:30-11:45	34103	Earthworms Mediated Fate of Microplastics in Soil	Ke Meng Wageningen University & Research", "Nanjing University
11:45-12:00	35665	Soil metabolome impacts the formation of the eco-corona and adsorption processes on microplastic surfaces	Yang Song Institute of Soil Science, Chinese Academy of Sciences
12:00-12:15	31979	From field to greenhouse: evaluating microplastics pollution and its potential impact on Mediterranean agricultural soils	Irene Mandrini IRTA (Sustainability in Biosystems)

*Subject to change



Parallel Sessions

13:30-13:45	32237	Environmental Microplastics: Occurrence, Surface Changes and Bioaccumulation	Chen Tu Institute of Soil Science, Chinese Academy of Sciences
13:45-14:00	32671	Impacts and degradation of microplastics (MPs) in agricultural soil	Xiao-San Luo Nanjing University of Information Science & Technology
14:00-14:15	319B92	Beyond Detection: An Intelligent Raman-Based Exploration of the Microplastic Full-Lifecycle	Bei Li State Key Laboratory of Advanced Manufacturing for Optical Systems, Changchun Institute of Optics, Fine Mechanics and Physics, Chinese Academy of Sciences
14:15-14:30	32733	Ecological Risk Assessment of Microplastics in Soil Based on Probability Distribution and Machine Learning	Cheng Peng East China University of Science and Technology
14:30-14:45	32093	Comparative Degradation and Environmental Impacts of Biodegradable Mulch Films in Agricultural Soils of the United States and China: Toward Sustainable Plastic Management	Xueyu Zhou Washington State University
14:45-15:00	33415	Determining a Carbon Mass Balance and Active Degradation of Isotopically Labeled Polylactic Acid (PLA) in Soil	Jacob W. Clements University of Tennessee-Knoxville
15:00-15:15	31918	Friend or foe? Can microplastics ever be our ally?	Julia Feeth University of Sydney

*Subject to change



Parallel Sessions

Monday, June 8 Tuesday, June 9		Room: Convention Center Nanjing 302B	
Session 305006		New Pollutants in Soils & Agro-Environmental Health	
		Convener: Yanzheng Gao, Nanjing Agricultural University, China	
		Co-Conveners: Hui Li, Michigan State University, USA Dongqing Zhu, Peking University, China	
Schedule	ID	Title	Presenter
Monday, June 8			
13:30-13:45	32236	Phototransformation of New Organic Contaminants and Associated Biological Effects as Mediated by Smectite Clays	Dongqiang Zhu College of Urban and Environmental Sciences, Peking University
13:45-14:00	31854	Boron in Soil: Linking Microbial Responses and Plant Performance	Felipe Bastida CEBAS-CSIC
14:00-14:15	32627	Spatial Compartmentalization Overrides Antibiotic Effects in Shaping Plant-Associated Bacterial Communities: Insights from the Lettuce Microbiome	Oluwaseyi Samuel Olanrewaju Unit for Environmental Sciences and Management, North-West University, Potchefstroom Campus
14:15-14:25	35196	Isotopic Techniques to Assess the Fate of Antimicrobials and Implications for Antimicrobial Resistance in Agricultural Systems	Leilei Xiang Institute of Soil Science, Chinese Academy of Sciences, "University of Chinese Academy of Sciences"
14:25-14:35	32682	Distribution and Fate of Per- and polyfluoroalkyl Substances in Sludge and Biosolids from Municipal Wastewater Treatment Plants across the United States	Zhiliang Xu Department of Plant, Soil and Microbial Sciences, Michigan State University

*Subject to change

Parallel Sessions

14:35-14:45	32585	Can Machine Learning Predict Plant Uptake of Per- and Polyfluoroalkyl Substances from Soils?	Rui Li Michigan State University
14:45-14:55	32549	Global ecological and health risks of PFAS in surface soil	Min Wei Zhejiang University
16:30-16:45	36243	Effects of Pharmaceuticals Exposure in Soil-Plant Systems	Laura J. Carter School of Geography, University of Leeds, Leeds, UK LS2 9JT
16:45-17:00	34944	Legacy Phosphorus and the Environmental Health of Agricultural Soils in South Korea	Benjamin L. Turner College of Resources and Environment, Shandong Agricultural University, Tai'an, China", "Institute of Agriculture and Life Sciences, Gyeongsang National University, Jinju, South Korea
17:00-17:10	33910	Adsorption of antibiotics by natural clay minerals	Leonid Perelomov Tula State Lev Tolstoy Pedagogical University
17:10-17:20	33402	Biochar effects on soil physicochemical properties and biological activity in Mediterranean agricultural soils	Irene Ortiz-Bernad Universidad de Granada
17:20-17:30	35827	Remediation of Prometryn-Contaminated Soil through Microbial-Phytoremediation Synergy: An Integrated Strategy for Soil Degradation Control and Sustainable Reclamation	yunpeng wu Southwest Forestry University
17:30-17:40	32884	Soil Biogeochemical Responses to Acid Mine Pollutants in Coal-Mined Inceptisols of Assam, India	Lumbini Kalita PhD scholar, Department of Soil Science, Assam Agricultural University
17:40-17:50	36381	Contrasting effects of arsenic and cadmium on PFAS sorption and transport in soils: Mechanistic insights and mathematical models	Wei Zhang Nanjing University

*Subject to change

Parallel Sessions

Tuesday, June 9

09:00-09:15	32068	Evaluation of nano-PbO and macro-PbO transformation in soil-plant system based synchrotron methods	Minkina Tatiana Southern Federal University
09:15-09:30	34958	Ligand-to-Metal Charge Transfer Driven Transformation of Ferrihydrite and its Effect on Arsenic Repartitioning	Xionghan Feng College of Resources and Environment, Huazhong Agricultural University
09:30-09:40	32032	Environmental risk of geoaccumulation and transmission of heavy metals in tailing dams with radioactive elements	Inom Normatov Tajik National University
09:40-09:50	33687	Fractional composition of Pb in medicinal plants of impact areas	Mandzhieva Saglara Southern federal university
11:15-11:30	32254	Biochar downsizing: From bulk to nanoscale solution in soil remediation and contaminants immobilization	Patryk Oleszczuk Maria Curie-Skłodowska University in Lublin
11:30-11:45	31886	Chemical characterization, fluorescence properties, and photochemical reactivity of natural dissolved organic matter	Davide Vione University of Turin
11:45-11:55	33397	Occurrence of pesticide residues under different land uses across Europe	Andres Rodriguez Seijo Department of Plant Biology and Soil Science, Area of Soil Science and Agricultural Chemistry, Faculty of Sciences, University of Vigo
11:55-12:05	36156	Persulfate activation by Schwertmannite degrading phenanthrene in soil	Yanyan Wang Shanxi Agricultural University
12:05-12:15	33958	Dissolved organic matter reduces overall abundance but promotes selective migration of antibiotic resistance genes in soil-rice systems	Xuli Zhao Institute of Environment and Sustainable Development in Agriculture, Chinese Academy of Agricultural Sciences, "Wageningen University

*Subject to change

Parallel Sessions

12:15-12:25	33309	Biotransformation of tire-derived 6PPD and 6PPD-Q and metabolism alteration in rice plants under different exposure routes	Jinlin Jiang Nanjing Institute of Environmental Science of the Ministry of Ecology and Environment
13:30-13:45	32428	Risk Ranking of Antimicrobial Resistance Across One Health Sectors: Leveraging Long-Read Sequencing and Methylation Analysis	Antti Karkman Department of Microbiology, University of Helsinki
13:45-14:00	33901	Antibiotic Residues, Microbial Ecology, and Greenhouse Gas Production in Manure: An Integrated One Health Perspective	Fredrick Gudda International Livestock Research Institute (ILRI), "Department of Population Health, Aga Khan University
14:00-14:10	34605	Ecological Risks of Antibiotic Residues and Bioremediation in Agricultural Soils	Lixia Zhao Agro-Environmental Protection Institute, Ministry of Agriculture and Rural Affairs
14:10-14:20	34159	Effects of predator-prey interactions on driving the evolution of bacterial antibiotic resistance	Hangwei HU The University of Melbourne
14:20-14:30	35215	Antimicrobials in Australian wastewater influent, effluent and biosolids, and potential implication for soils	Jake O' Brien Queensland Alliance for Environmental Health Sciences (QAEHS), 20 Cornwall Street, Woolloongabba, Brisbane, QLD 4102, Australia", "ARC Training Centre for Hyphenated Analytical Separation Technologies (HyTECH), School of Natural Sciences, Sandy Bay Campus, University of Tasmania, Sandy Bay TAS 7005, Australia", "Van't Hoff Institute for Molecular Sciences (HIMS), University of Amsterdam, 1090 GD Amsterdam, The Netherlands
14:30-14:40	33318	Migration and Mitigation of Manure-borne Antibiotic Resistance Genes in Soil-vegetable Systems	Zhi Mei Catalan Institute for Water Research

*Subject to change

Parallel Sessions

14:40-14:50	34257	Mitigation of antibiotic resistance genes in agricultural soil by Fe/Mn oxides functionalized biochars via suppressing horizontal gene transfer	Yuxin Li Ocean University of China
16:30-16:45	35081	Advancing Microplastics Research and Mitigation through Nuclear Science and Case Studies	Fang Wang Joint FAO/IAEA Centre of Nuclear Techniques in Food and Agriculture, Department of Nuclear Sciences and Applications, International Atomic Energy Agency
16:45-17:00	33521	Sulfamethoxazole Transformation by Heat-Activated Persulfate: Linking Transformation Products Patterns with Compound-Specific Isotope Analysis	Xiao Liu Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences
17:00-17:15	35334	Synthesis and isotope analysis of labelled sulfamethoxazole to trace persistence and natural degradation in the field	Martin Elsner Technical University of Munich (TUM)
17:15-17:25	34757	Climate-Driven Soil Processes Controlling the Fate of Sulfamethoxazole and Environmental Antimicrobial Resistance in Tropical Agro-Riverine Systems of Vietnam	Ha Lan Anh Isotope Hydrology Laboratory, Institute for Nuclear Science and Technology, VINATOM, Hanoi, Vietnam
17:25-17:35	34677	Adsorption Study of Sulfamethoxazole and Ciprofloxacin on Soil and Biochar Composite	Santanu Mukherjee MS Swaminathan School of Agriculture, Shoolini University of Biotechnology and Management Sciences, Solan 173229, India
17:35-17:45	36238	Fate of Di(2-ethylhexyl) Phthalate (DEHP) in Agricultural Soil: The Role of Environmentally Characteristic Microplastics	Lili Tian Jiangsu Academy of Agricultural Sciences
17:45-17:55	34400	Plastic and Non-Plastic Microfibre Biodegradation in Soil: Monitoring the Impact	Emily Patricia Donaghy Northumbria University
17:55-18:05	34127	Nationwide Screening and Priority Ranking of Plastic Additives in Agricultural Soils of China	Jiamin Zeng Institute of Tibetan Plateau Research, Chinese Academy of Sciences

*Subject to change



Parallel Sessions

Tuesday, June 9		Room: Convention Center Nanjing 206	
Session 305007		Organohalide Biogeochemical Cycling and Remediation in Soil	
		Convener: Shanquan Wang, Sun Yat-Sen University	
		Co-Conveners: Jun Yan, Institute of Applied Ecology, Chinese Academy of Sciences Lorenz Adrian, Helmholtz Centre for Environmental Research (UFZ) Michael Manefield, University of New South Wales (UNSW Sydney)	
Schedule	ID	Title	Presenter
09:00-09:20	35546	Microbial Processes Impacting Fate and Transport of PFASs	Frank Löffler Frank E. Loeffler Department of Civil & Environmental Engineering, Department of Biochemistry & Cellular and Molecular Biology, Department of Biosystems Engineering and Soil Science The University of Tennessee, Knoxville
09:20-09:40	33962	Interactions of Zero-Valent Iron with Groundwater Environmental Components and Their Effects on Dechlorination	Feng He Jiangnan University
09:40-10:00	35622	Combined Processes for the Remediation of Trichloroethylene-Contaminated Groundwater: Biological Reductive Dechlorination Coupled with Biochar Adsorption and Supported by Polyhydroxyalkanoates from Organic Wastes	Marco Petrangeli papini Department of Chemistry, Sapienza University of Rome, Italy
10:00-10:15	33884	Community Diversity Determines Colonization and Performance of Organohalide-respiring Bacteria	Guofang Xu Zhejiang University
10:15-10:30	34356	Applying Compound Specific Stable Isotope Analysis for Characterizing the Biotransformation of Hexachlorocyclohexane Isomers by Different Methanogens	Yaqing Liu Guangxi University

*Subject to change

Parallel Sessions

10:30-10:45	32403	Insights into anaerobic biotransformation of Polychlorinated Biphenyls and Tris(2-chloroethyl) Phosphate	Yanhong Zeng Guangzhou Institute of Geochemistry, Chinese Academy of Sciences
10:45-11:00	33791	Organic Carbon Availability for Sulfate-Reducing Bacteria Governs the Dechlorination Reactivity of Biogenic Sulfidated Nanoscale Zero-Valent Iron	Binbin Wang Zhejiang University of Technology
11:15-11:35	33889	Hotspots for Microbial Dehalogenation of Persistent Organohalide Pollutants	Jianzhong HE National University of Singapore
11:35-11:55	33472	Mapping the Co-Occurrence of Organohalides and Microbial Dehalogenation: A Microbial Biochemistry Framework for "减污降碳" and One Health	Yan He Zhejiang University
11:55-12:10	34315	Enhancing Electrochemical Reductive Defluorination of PFASs Using ZIF-67 Modified Cathode: Mechanistic Insights and Performance Optimization	Zhuobiao Ni South China Agricultural University
12:10-12:25	32350	Microbial Communities and Metabolic Potential for Reductive Debromination of 2,4,6-Tribromophenol in Deep-Sea Cold Seep Sediments	Zhaochao Deng Zhejiang Ocean University
13:30-13:50	33457	Microbial defluorination of PFASs by native consortia enriched from PFASs and CAHs co-contaminated sites	Xin Song Institute of Soil Science, Chinese Academy of Sciences
13:50-14:10	33297	The Marine Environment as a Rich Source of Diverse Anaerobic Organohalide-Respiring Bacteria	Max Häggblom Rutgers University - New Brunswick
14:10-14:30	33086	Design of effective materials to collaborate with microorganisms in reductive remediation of chlorinated organic pollutants	Jingchun Tang Nankai University
14:30-14:45	35600	Nitrous Oxide Modulates Reductive Dechlorination and other Biogeochemical Processes	Frank E. Löffler University of Tennessee
14:45-15:00	32151	Co-remediation of Halogenated Organic Pollutants: Dehalogenation Coupled with Carbon Mitigation in Soil-Water Environment	Lingyu Meng Institute of Soil Science, Chinese Academy of Sciences (Nanjing)

*Subject to change

Parallel Sessions

15:00-15:15	33579	N-enriched biochar-iron cobalt mineral system for biomimetic reductive dehalogenation	Weizhao Yin Jinan University (Guangzhou)
16:30-16:50	33175	Anaerobic biochemistry at the core of reductive dehalogenation in soil and groundwater	Lorenz Adrian Helmholtz Centre for Environmental Research - UFZ", "Chair of Geobiotechnology, Technische Universität Berlin, Berlin, Germany
16:50-17:10	32843	Microbial reductive dehalogenation of emerging organohalides and its application in bioremediation	Qihong Lu Sun Yat-sen University
17:10-17:25	34147	Concerted microbial synergy and syntrophy facilitates anaerobic mineralization of 2,4-dichlorophenoxyacetic acid	Xiuying Li Institute of Applied Ecology, Chinese Academy of Sciences
17:25-17:40	32966	Soil Organic Carbon Prediction Based on Vis-NIR Spectral Classification Data Using GWPCA-FCM Algorithm	Haoyu Wang Shandong Agricultural University
17:40-17:55	31610	Amendment of Organic Acids Significantly Enhanced Hydroxyl Radical Production during Oxygenation of Paddy Soil Slurries	Yixuan Wang State Key Laboratory of Pollution Control and Resource Reuse, School of the Environment, Nanjing University
17:55-18:10	32969	A Novel Sample Selection Strategy for Instance-based Transfer Learning in Local Soil Organic Carbon Estimation	Jiayi Zhang Shandong Agricultural University
18:10-18:25	33611	Demonstration Verification of Characterization Technology for DNAPLs in Typical Chemical Sites	Le Yu Nanjing Institute of Environmental Sciences, Ministry of Ecology and Environment of China

*Subject to change



Parallel Sessions

Monday, June 8 Tuesday, June 9		Room: Convention Center Nanjing 302A	
Session 305009		Soil Pollution by Heavy Metals and Risk Control	
		Convener: Peng Wang, Nanjing Agricultural University, China	
		Co-Conveners: Longhua Wu, Institute of Soil Science, Chinese Academy of Sciences Peter Kopittke, The University of Queensland, Australia Enzo Lombi, University of South Australia	
Schedule	ID	Title	Presenter
Monday, June 8			
13:15-13:30	320B37	Novel approaches for examination of traceelements in the soil-plant continuum	Peter Kopittke The University of Queensland
13:30-13:45	32156	Soil and human health	Peng Wang Nanjing Agricultural University
13:45-13:56	36590	Continental-Scale Soil Mercury Mapping in Australia to Refine Global Frameworks	Larissa Schneider Australian National University
13:56-14:07	36584	Eco-Restoration and Phytoremediation of Metal-Contaminated Soils in Arid Landscapes Using Mycorrhized Lygeum spartum	Ines Terwayet Bayouli Key Laboratory of Soil, Environment and Pollution Remediation, Institute of Soil Science, Chinese Academy of Sciences, No. 298, Chuangyou Road, Qilin Street, Jiangning District, Nanjing, Jiangsu, 211135, China

*Subject to change

Parallel Sessions

14:07-14:18	36170	Pollution Status and Source Identification of Potentially Toxic Elements (PTEs) in Paddy Fields of a Typical Pb-Zn Mining Area in Southern China	Li Zhang Institute of Geophysical and Geochemical Exploration, Chinese Academy of Geological Sciences
14:18-14:29	36115	Arbuscular mycorrhiza orchestrates phenotypic plasticity of a critical suite of functional traits in plants under vanadium stress	Ziwei Cao Nanjing Tech University, Nanjing
14:29-14:40	36022	Mechanism informed soil washing strategy for synchronized remediation of As, Cd, and Pb	Zhao Liu Institute of Urban Environment, Chinese Academy of Sciences
14:40-14:51	35877	Restricting roles of arbuscular mycorrhizal fungi in cadmium uptake and translocation in rice	Junli Liu Zhejiang Academy of Agricultural Sciences
14:51-15:02	35613	Electrochemical and molecular mechanisms underlying aluminum-enhanced copper homeostasis in maize roots within acidic copper-contaminated soils	Linyu Guo Institute of Soil Science, Nanjing
15:02-15:13	35606	INFLUENCE OF IRRIGATION WATER MANAGEMENT ON ARSENIC ACCUMULATION BY RICE	Hamza Yousaf State Key Laboratory of Nutrient Use and Management, College of Resources & Environmental Science, China Agricultural University, Beijing, China
16:30-16:41	35170	Core microbiomes of Cd-hyperaccumulators and its contribution to plant performance	Tingqiang Li Zhejiang University
16:41-16:52	35406	Phosphate-modified biochar attenuates cadmium availability in contaminated soil and reduces its transfer to tomato fruits	Rachida NACIRI College of Agriculture and Environmental Sciences, Mohammed VI Polytechnic University

*Subject to change

Parallel Sessions

16:52-17:03	35337	Content of trace elements and polycyclic aromatic hydrocarbons in soils of polar regions: variability across landscapes	Ivan Alekseev Karelian Research Centre RAS
17:03-17:14	35252	Aqueous and colloidal dynamics in size-fractionated paddy soil aggregates with multiple metals contaminants under redox alternations	Ming Zhou Sinopec Research Institute of Petroleum Processing
17:14-17:25	35227	Spectral Signatures of Iron and Manganese in Soil Biological Crusts from the Brazilian Semi-Arid Region	Maria Eugenia Escobar Universidade Federal do Ceará
17:25-17:36	35144	Accumulation of Heavy Metals in Macro- and Nanodisperse Forms in the Soil-Plant System	Chernikova Natalia Petrovna Southern Federal University
17:36-17:47	35095	Dual Roles of Corticiaceae Sp. ZJ 06 In Synergetic Soil Heavy Metal Immobilization and Soil Fertility Enhancement	Lixun Zhang Tsinghua University
17:47-17:58	34951	Efficacy of Agricultural Waste-Derived Engineered Biochar on Arsenic/Iron Dynamics and Alleviating Arsenic Risk in Waterlogged Paddy Soil	Saha Shatabdi Graduate School of Agricultural Science, Tohoku University, Sendai, Japan
17:58-18:09	34892	Iron (hydr)oxide-enriched Biochar for Arsenic Immobilization under Microbial Iron Reduction and Fluctuating Redox Conditions	Yihao Wang Institute of Agricultural Resources and Regional Planning
18:09-18:20	34747	Impact of human activities on soil heavy metal pollution and its potential ecological risks of hills within Guangzhou	Miao Wang South China Normal University

*Subject to change

Parallel Sessions

Tuesday, June 9

09:00-09:15	35913	Tracing Cadmium Migration and Transformation from Atmospheric Deposition to Rice via Isotopic Fingerprinting	Jun Zhou Institute of Soil Science, Chinese Academy of Sciences
09:15-09:26	35502	Potential role of Salicylic acid in morphological, physiological and biochemical attributes of wheat under Copper toxicity	Zainab Tariq Department of Botany, University of Agriculture, Faisalabad-38000, Pakistan
09:26-09:37	33255	Spatial Patterns and Predictive Controls of Heavy Metals in Agricultural Ditch Network Across China	Waqas Mohy-Ud-Din Tianjin University
09:37-09:48	34316	Quantitative Analysis of Heavy Metal Pollution Sources, Influencing Factors, and Delineation of Pollution Risk Areas in Mining Area Soil: A Combined machine learning and Application of Receptor Models	Jia Guo South China Agricultural University
09:48-09:59	34153	Colloidal Cd Mobilization During Reductive Dissolution of Cd-Birnessite by Organic Matter: Role of pH-Dependent Mineral Transformation and Organic Fractionation	Jiangyanjun Sun Yat-sen University
09:59-10:10	34133	Source-risk-driver analysis of heavy metal pollution in karst soils: An integrated assessment in eastern Yunnan, China	Li Bao Yunnan Agricultural University
10:10-10:21	34128	Distinct assembly processes and ecological strategies of bacterial and fungal communities during the aging of Cd and As in soils: Fungi play a predominant role in microbial resistance	Ting Yang Minzu University of China
10:21-10:32	34062	Bioavailability and Mobilization of Colloidal Cd in Alkaline Soils of Wheat Field	Chang Liu Sun Yat-sen University
10:32-10:43	34021	Accumulation characteristics and risk prediction of Cu and Zn contents in typical facility soils in China	Zhang Naiming Yunnan Agricultural University

*Subject to change

Parallel Sessions

10:43-10:54	33990	α -ketoglutarate mitigates Cd accumulation and enhances Cd tolerance in rice	Qi Tao Sichuan Agricultural University
11:15-11:30	33916	Metallomes in Soil-Crop Systems: Integrating Nutrition and Food Safety	Wei Zhang Department of Plant, Soil and Microbial Sciences, Michigan State University
11:30-11:45	33819	Mechanism of Auxin Regulation on Cadmium Uptake in Roots of Different Cadmium-Accumulating Rice Lines	Yan Zhou sichuan agricultural university
11:45-12:00	33643	Phytoremediation of Multi-Metal Contaminated Mine Soils: Native Species Screening and Chelate-Assisted Phytoextraction	Ngoc Son Hai Nguyen Faculty of Resource Management, Thai Nguyen University of Agriculture and Forestry
12:00-12:15	33500	Simultaneous immobilization of arsenic and cadmium in paddy soil with co-application of birnessite and lime	Jianyu Lin Nanjing University
12:15-12:30	33358	Organic Matter Regulates Soil Cadmium Bioavailability	Chenchen Qu Huazhong Agricultural University
13:30-13:45	32745	IAA-producing and Cd-tolerant endophyte <i>Bacillus</i> sp. RE35 enhance Cd trap in rice roots via root cell wall remodeling during colonization	Yan Gao Jiangsu Academy of Agricultural Sciences
13:45-13:56	33246	Reduction of lead bioavailability and phytotoxicity in Pb-slag contaminated soil using soil mixing and compost-modified biochar	Sifau A. Adejumo University of Ibadan, Ibadan, Nigeria
13:56-14:07	33096	Microbial Induced Carbonate Precipitation (MICP) for Cadmium Contamination Remediation coupled with Life Cycle Carbon Sequestration	Mingping Sheng Nanjing University

*Subject to change

Parallel Sessions

14:07-14:18	33037	Quantitative Insights into Phosphate-Enhanced Lead Immobilization on Goethite	Wanli Lian Henan Normal University
14:18-14:29	32942	Stabilizing Urban Soil Lead: Long-Term Effects of Soil Amendments on Bioaccessibility and Speciation	Ganga Hettiarachchi Kansas State University
14:29-14:40	32906	Chemical Remediation of Multi metal Contaminated Inceptisol by Valorizing Calcitic and Lignocellulosic Wastes	Puspita Mookerjee Department of Soil Science & Agricultural Chemistry, Palli Siksha Bhavana Visva-Bharati
14:40-14:51	32898	Pedo-geochemical background values of trace metals in the soil of the Katangan Copperbelt, DR Congo	Gloire Mulaja Chang Bureau de Protection de l'Environnement Minier, Division de Mines
14:51-15:02	32752	A Basin-Scale Synthesis of Inorganic Contamination Across Slovenia's Major Floodplains	Nejc Golob University of Ljubljana, Biotechnical faculty, Department of Agronomy
15:02-15:13	32715	Combining multiple high-resolution in-situ techniques to understand the metals mobilization at anoxic-oxic interfaces in flooded industrial soils	Danxing Yang Hunan Agricultural University
16:30-16:41	32312	Quantification of chromium and nickel lateral migration in serpentine soils via ion, colloid and particulate pathways	Shengsheng Sun Institute of Quality Standard and Monitoring Technology for Agro-products of Guangdong Academy of Agricultural Sciences
16:41-16:52	34685	Mining-induced arsenic contamination: cascading effects on soil biogeochemistry, microbial community structure and human health risks	Shreya Chakraborty Agricultural and ecological research Unit, Indian Statistical Institute, Giridih, India
16:52-17:03	34402	Machine learning-supported determination for site-specific natural background values of soil heavy metals	Jian Wu Sichuan University

*Subject to change

Parallel Sessions

17:03-17:14	34396	Land use shapes air-surface Hg ⁰ exchange in karst areas	Jicheng Xia Guizhou University
17:14-17:25	32137	Particle-nanoparticle transformations in metal-contaminated soils	Michael Schindler University of Manitoba
17:25-17:36	31946	Atmospheric Deposition and Trace Element Contamination in Urban Garden Soils and Vegetables in Kingston, New York (US)	Salvatore Engel-Di Mauro SUNY New Paltz
17:36-17:47	31912	Flavonoid Steering Bacterial-Fungal-Soybean Tripartite Symbiosis: Facilitating Cadmium Stress Defense and Growth Enhancement in Soybean	Qingliang Cui Wuhan University of Technology", "University of Chinese Academy of Sciences
17:47-17:58	31697	The Effect and Mechanism of Large-Scale Polymer Materials in the Remediation of Soil Chromium Pollution	Jia Wen,Zhixuan Gong,Zhifei Qi Hunan University
17:58-18:09	31127	Mineral-organic matter association controls colloidal arsenic mobility from soil to lake	Xinyang Li Department of Earth Sciences, University of Manitoba
18:09-18:20	319B36	Comprehensive Assessment of Soil Heavy Metal Pollution in the Historic Center of Krakow, Poland: Geostatistical and Machine Learning Study	Michał Gąsiorek University of Agriculture in Krakow
18:20-18:31	34935	Large-scale nutrient management strategies shape acidification-induced risks for crop yields and food quality by cadmium	Donghao Xu Wageningen University and Research, Earth Systems and Global Change Group, PO Box 47, 6700AA Wageningen, the Netherlands

*Subject to change



Parallel Sessions

Friday, June 12		Room: Convention Center Nanjing 208	
Session 305011		Novel Techniques in Molecular Environmental Soil Science	
		Convener: Yujun, Wang Institute of Soil Science, Chinese Academy of Sciences	
		Co-Convener: Dongmei Zhou, Nanjing University	
		Wei Li, Nanjing University	
		Mengqiang Zhu, University of Maryland	
Schedule	ID	Title	Presenter
09:00-09:25	35881	Role of Molecular Environmental Science in Addressing a Changing Climate	Donald L. Sparks University of Delaware", "University of Delaware
09:25-09:40	34688	Visualization of Organic Carbon Distribution in Soil Minerals	Zhenqing Shi School of Environment and Energy, South China University of Technology, Guangzhou, Guangdong 510006, People's Republic of China
09:40-09:55	34638	Iron, sulfur, and carbon dynamics collectively regulate the fate of cadmium over the sulfidation-reoxidation cycle	Yujun Wang Institute of Soil Science, Chinese Academy of Sciences
09:55-10:10	34612	Interaction mechanisms of Cr with organo-mineral complexes : Past achievements and future perspective	Jianjun Yang Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences

*Subject to change



Parallel Sessions

10:10-10:25	34464	Influence of Soil Properties on the Extraction of Active Contaminant-Degrading Enzymes	Justin M. Hutchison University of Kansas
10:25-10:40	34697	Freeze-thaw driven colloid release from soils: Roles of aggregate turnover and pore network	Quanying Wang Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
10:40-10:55	35011	Elucidating the Molecular Mechanisms of Microplastics in Heavy Metal Transformation	Fei Dang Institute of Soil Science, Chinese Academy of Sciences
11:15-11:30	33490	Sample preparation and characterize of soil dissolved organic matter	Qing-Long Fu China University of Geosciences, Wuhan
11:30-11:45	34906	Molecular Mechanism of Mn Oxides driven Oxidative Decomposition and Polymerization of Litter-Derived DOM at Different pH Revealed by FT-IC	Xionghan Feng College of Resources and Environment, Huazhong Agricultural University
11:45-12:00	35667	Solid Phase Molecular Diversity Enhances Soil Organic Matter Persistence	Zhen Yang Research Center for Eco-environmental Sciences, Chinese Academy of Sciences
12:00-12:15	35615	Using an inexpensive RGB color sensor for field quantitative assessment of soil accessible Cu(II)	Guo Linyu Institute of Soil Science, Nanjing
12:15-12:30	36236	Application of liquid chromatography coupled with FT-ICR MS for analysis of soil dissolved organic matter	Xiudi Lv China University of Geosciences

*Subject to change



Parallel Sessions

Thursday, June 11		Room: Convention Center Nanjing 206	
Session 305012		Soil Pollution and Remediation: Investigation, Mechanisms, and Remediation	
		Conveners: Hua, ZHANG. Institute of Geochemistry, Chinese Academy of Sciences Jing Song, ISSCAS Yasin Orooji, Distinguished Professor, College of Geography and Environmental Sciences, Zhejiang Normal University Co-Conveners: Huan ZHONG, School of Environment, Nanjing University Ruyi YANG, School of Ecology and Environment, Anhui Normal University Xuefeng YANG, Institute of Geochemistry, Chinese Academy of Sciences Roger Brewer, TOS Environmental, tosbrewer Xinyi Cui, Nanjing University Asif Hayat, Researcher in Materials Science, Lishui University	
Schedule	ID	Title	Presenter
11:15-11:30	32827	Methods for Assessment of Risk Posed to Agricultural Lands and Food Crops by PFAS-Contaminated Sludges and Irrigation Water	Roger Brewer TOS Environmental, CAS Institute of Soil Science
11:30-11:45	33874	Arbuscular mycorrhizal fungi suffer from perfluorooctanoic acid in soil but ameliorate negative effects on plant performance	Tingting Zhao Freie Universität Berlin
11:45-12:00	34181	United Nations action under the Stockholm Convention to protect soil health and food system from PFAS contamination	Sergejus Ustinov Food and Agriculture Organization of the United Nations

*Subject to change



Parallel Sessions

12:00-12:15	34537	Soybean Management of PFAS Contaminated Agricultural Lands	Ariana Lazo Department of Agronomy, Purdue University, West Lafayette, Indiana, USA
12:15-12:30	36242	PFAS Composition in Irrigation Water Dictates PFAS Uptake by Lettuce: Evidenced by Field Sampling and Laboratory Simulation	Rui Liu Institute of Soil Science, Chinese Academy of Sciences, Nanjing, China
13:30-13:45	35075	Spatial Differentiation Pattern and Driving Mechanisms of Co-enrichment of Selenium and Cadmium in Soils from a Typical Indigenous Zinc Smelting Area	Chaobo Wang College of Agriculture, Guizhou University, Guiyang, 550025, China", "Key Laboratory of Karst Georesources and Environment of Ministry of Education, Guizhou University, Guiyang, 550025, China
13:45-14:00	32935	From Enrichment to Digestion: Risk-Benefit Evaluation of Selenium-Enriched Foods Under Arsenic Co-Exposure	Hind BELARBI UM6P & UGent
14:00-14:15	33744	Soil Cadmium Immobilization and Selenium Activation: A Strategy to Enhance Health in High Geological Background Areas	Xingmei Liu State Key Laboratory of Soil Pollution Control and Safety, Zhejiang Provincial Key Laboratory of Agricultural Resources and Environment, College of Environmental and Resource Sciences, Zhejiang University
14:15-14:30	34097	Occurrence and Transformation of Selenium and Cadmium in Porewater During Flood and Drainage: Implications for Safe Production of Rice in Cadmium-Contaminated Seleniferous Paddy Soils	Xin Liang Sun Yat-sen University

*Subject to change



Parallel Sessions

14:30-14:45	34218	Selenium-Based Rapid Health Risk Diagnosis and Green Remediation of Heavy Metal Pollution	Hua Zhang Institute of Geochemistry, Chinese Academy of Sciences
14:45-15:00	31753	Interactions of selenium and heavy metals in paddy systems: Mechanisms and risk assessment	Xuefeng Yang Institute of Geochemistry, Chinese Academy of Sciences
15:00-15:15	35856	Recent Strategies in Cadmium Translocation Control in Rice Plants: Mechanisms and Integrated Model	Bin Guo Zhejiang Academy of Agricultural Sciences
16:30-16:45	34806	In Situ Removal of Heavy Metals from Farmland Using Lignin Hydrogel-Based Nanocomposites: A Sustainable Strategy for Simultaneous Crop Production and Soil Remediation	Jianbin Deng South China Agricultural University
16:45-17:00	32192	Model-based Rescue: Phytotoxicity Threshold and Control Strategy of Fluridone Residue on Herbicide-sensitive Rotation Maize	Chi Wu Institute of Plant Protection, Chinese Academy of Agricultural Sciences
17:00-17:15	34054	Engineering Iron-Microbe Interfaces on Biochar to Regulate Phosphate Fixation and Ibuprofen Retention across Soil-Water Continua	Selly Maisyarah National Chung Hsing University
17:15-17:30	31675	Enhanced Remediation of Herbicide-Contaminated Soils Using Phosphate-Modified Biochar	Xingang Liu Institute of Plant Protection, Chinese Academy of Agricultural Sciences
17:30-17:45	35117	Biogeochemical Features of the Composition of Soils and Wild Plants in the Technogenic Zone	Chernikova Natalia Petrovna Southern Federal University

*Subject to change



Parallel Sessions

Monday, June 8 Tuesday, June 9		Room: Convention Center 6202	
Session 306003		Understanding, Managing, and Innovating for Salt-Affected Soils	
		Conveners: Rongjiang Yao, State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences, Nanjing 210008, China Maria Konyushkova, FAO, Global Soil Partnership secretariat Jorge Batlle-Sales. President Commission 3.6 IUSS. University of Valencia	
		Co-Conveners: Elia Scudiero, Department of Environmental Sciences, University of California Riverside, Riverside, California 92521, USA Xuan Yu, State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences, Nanjing 210008, China Sanjay Arora, Vice-President Commission 3.6 IUSS. ICAR-Central Soil Salinity Research Institute. Lucknow 226002 (UP) India	
Schedule	ID	Title	Presenter
Monday, June 8			
13:15-13:28	31575	“Reshaping soil structure”: A systems engineering mode for ecological management of Salt-Affected Land	Shuwen Hu China Agricultural University
13:28-13:41	31614	Reclamation of saline-alkali soils using fulvic acid: mechanisms and field effects	Wentai Zhang Xinjiang Agricultural University
13:41-13:54	31686	Salinity management when irrigating with non-conventional water sources	Alon Ben-Gal Agricultural Research Organization - Volcani Institute
13:54-14:07	32366	Managing saline soil to boost crop yield and halve nitrogen losses	Wen Wen Zhejiang University

*Subject to change

Parallel Sessions

14:07-14:20	32664	Hybrid CNN-LSTM Model for Predicting Nitrogen, Phosphorus, and Potassium (NPK) Fertilization Requirements: Integrating Satellite Spectral Indices with Field Microclimate Data	Abdellatif Moussaid Center for Sustainable Soil Sciences (C3S), College of Agriculture and Environmental Sciences (CAES), University Mohammed VI Polytechnic (UM6P)
14:20-14:33	33414	Soil salinization reduces belowground multifunctionality and crop yield at large spatial scale	Shang Wang Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences", "Department of Ecology of Agroecosystems, Helmholtz Centre for Environmental Research - UFZ
14:33-14:46	32292	Phosphorus Dynamics in Salt-Affected Drylands Soils: Influence of Parent Material and Agricultural Management	Andrea Salvucci Department of Agriculture, Food and Environmental Sciences, Polytechnic University of Marche
14:46-14:59	34760	Effect of salinity on soil water vapor sorption and associated hysteresis	Fangjin Dong China Agricultural University
14:59-15:12	32199	Impact of neglected and underutilized species (NUS) on marginal lands: a potential tool for the recovery of soil functionality	Tiziana Danise Department of Environmental, Biological, Pharmaceutical Sciences and Technologies, University of Campania "Luigi Vanvitelli"
16:30-16:42	36135	Research on Salt-Alkali Tolerance Mechanisms of Characteristic Plants and Saline-Alkali Land Agriculture in Hetao-Ningxia Irrigation District	Xing Xu Ningxia University
16:42-16:54	31977	Quinoa as a Food Security Crop for Salt-affected and Dry Land Farming Systems	Ghulam Abbas COMSATS University Islamabad
16:54-17:06	319B69	Effects of Organic Materials on Nitrification Process in Saline-Alkali Farmland Soil	Ju Zhao Inner Mongolia Academy of Agricultural and Animal Husbandry Sciences

*Subject to change



Parallel Sessions

17:06-17:18	35657	Application of biochar in saline soils enhances soil resilience and reduces greenhouse gas emissions in arid irrigation areas	Qin'ge Dong Northwest A&F University
17:18-17:30	32071	Identification of Salt-Tolerant Barley Genotypes Using Multiple Traits Index and Nutritional Performance at Early Growth Stages	Saira Azmat School of agriculture and environment, University of Western Australia
17:30-17:42	33956	Spatial Distribution, Underlying Mechanisms, and Management Strategies of Soil Salinity in North China Cultivated land: A Soil Profile Perspective	Enyi Xie China Agricultural University
17:42-17:54	35339	Saltwater intrusion impact on coastal agricultural soils of Los Lagos Region, Chile	Osvaldo Salazar Universidad de Chile
17:54-18:06	33524	Coupling relationship between soil salinity, nutrients, and yield during reclaiming for planting rice in saline-sodic soils	Lihua Huang Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
18:06-18:18	35907	Advances in Amelioration Technologies for Sodic and Saline-Sodic Rice Paddy Fields with emphasis on the Songnen Plain of Northeast China	Mingming Wang National Key Laboratory of Black Land Protection and Utilization (Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences, Changchun, China)", "Jilin Da'an Farmland Ecosystem National Field Scientific Observation and Research Station (Da' an, China)", "Northeast Saline-Alkali Land Sub-Center (National Saline-Alkali Land Comprehensive Utilization Technology Innovation Center, Dongying, China)
18:18-18:30	35284	Determination of Irrigation Depth for Tomato considering the Cost for Water under a Saline Condition	Haruyuki Fujimaki Tottori University

*Subject to change

Parallel Sessions

Tuesday, June 9

13:30-13:40	31897	Enhancement of Organic Matter in Saline-Alkali Soils: Mechanisms and Technologies	Yuping Zhuge Shandong Agricultural University
13:40-13:50	33858	Spatial Synergies and Trade-offs between Soil Salinity and Organic Carbon in the Yellow River Delta	Xinyu Liu Yantai Institute of Coastal Zone Research, Chinese Academy of Sciences
13:50-14:00	34637	Synergistic Effects of Magnetoelectric Brackish Water and Microbial Amendments <i>Bacillus Subtilis</i> on Pakchoi Production in Saline Arid Regions	Qingyuan Lei Xi'an university of technology
14:00-14:10	35927	Rice Reclamation Activates Mineral Phosphorus and Alleviates Phosphorus Limitation in Saline-Alkali Soils	Qilin Lv Beijing Academy of Agriculture and Forestry Sciences
14:10-14:20	33850	Soil Nitrogen Transformation under Organic Residue Management in Salt-Affected Soils of the Vietnamese Mekong Delta	Nguyen Thi Kim Phuong Soil Science Department, Can Tho University
14:20-14:30	36014	Halophyte Salt Absorption Characteristics and Biological Remediation Pathways for Saline-Alkali Lands	Yuan Su Ningxia Institute of Water Resources Research (Yinchuan, Ningxia, China)
14:30-14:40	35237	Spatio-temporal analysis of soil salinity dynamics and its relationship with Urmia Lake desiccation and dust event frequency using remote sensing techniques	Maryam Fathi Master's Student", "Watershed Management", "Faculty of Natural Resources", "Urmia University", "Iran

*Subject to change

Parallel Sessions

14:40-14:50	36055	Wenyao: A Domain-Specific Large Language Model for AI-Driven Saline-Alkali Land Reclamation	Congcong Zheng Institute of Computing Technology, Chinese Academy of Sciences
14:50-15:00	36448	Identification of the maior constraint factors in sodic saline-alkali paddy soils	XueQingMeng Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
15:00-15:10	33520	Formation Mechanism of Salt Patches and Quantitative Relationship Between Water and Salt in Coastal Salinized Farmland	Wei Zhu Institute of Soil Science Chinese Academy of Sciences", "Chuzhou University
15:10-15:20	319B68	Removal Mechanism and Process Application of Soil Washing Technology for Heavy Metals and Salt Ions in Contaminated Soil	Congyanghui Wu Zhengzhou Desen Environmental Technology Co., Ltd..
16:30-16:40	33792	Desalination of sabkha soils as potential source of strategic metals	Makar Silaev Aramco Innovations LLC
16:40-16:50	31929	Escaping Salinity, Cyclone and other Coastal Hazards for Crop Production through Early Sowing in Wet Soils with Strip Tillage	Mohammad Asadul Haque Patuakhali Science and Technology University
16:50-17:00	36512	Global Salt-affected Soils Crisis: FAO's Latest Report and Strategic Responses	Peirou Zhen Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences

*Subject to change

Parallel Sessions

17:00-17:10	35020	Construction of an Integrated Improvement Technology Model of "Top Promotion, Middle Modification, and Bottom Drainage" for Severe Saline-Alkaline Land in Arid Areas	Jianjun Han Macau University of Science and Technology", "Research Institute for Environmental Innovation (Suzhou), Tsinghua
17:10-17:20	33737	The improvement of yield potential through amendment of saline-alkali soils in China: from plot to regional scales	Wenjiao Shi Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences
17:20-17:30	35953	Synergistic Effect of the Compound Conditioner of Humic Acid, Zeolite and Phosphate Rock Powder on Soil Quality and Rice Yield of Coastal Saline Soil	Junbo Zhang Zhejiang Academy of Agricultural Sciences
17:30-17:40	36621	Biologically Driven Remediation of Saline-Alkali Soils Using Soil Bio-activation Technology in Arid Regions	Abdul Sami GreenTech (Shanghai) Agricultural Technology Co., Ltd
17:40-17:50	33871	The spatial variation of soil quality across land-use and depth in salt-affected coastal soils: evidence from the former Go Cong Dong, Vietnam	Tung Xuan Tan Nguyen Department of Informatics, Natural Resources and Environment (DINRE), Institute for Environment and Resources (IER), Vietnam National University Ho Chi Minh City (VNU-HCM)
17:50-18:00	34478	Aquaculture impoundment reduces salt leaching efficiency of subsurface drainage systems in neighboring farms	Shuangshuang Yu State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences, Nanjing, China
18:00-18:10	34449	Effects of Different Amendment Measures on the Properties of Coastal Saline-Alkali Soil and Cotton Growth in the Yellow River Delta	Jinyi Yu Shandong Normal University

*Subject to change



Parallel Sessions

Monday, June 8		Room: Expo Center, Hall 8, 8202	
Session 307001		Past, Present, and Future of SUITMA (Soils of Urban, Industrial, Traffic, Mining and Military Areas)	
		Convener: Kye-Hoon John Kim, The University of Seoul	
		Co-Convener: Przemysław Charzyński, Nicolaus Copernicus University	
Schedule	ID	Title	Presenter
13:15-13:30	33636	Challenges for SUITMA posed by the 2025-2034 Decade of Soil Sciences for Sustainable Development	Edoardo A.C. Costantini CNR-IBE; Academy of Georgofili; National Academy of Agriculture
13:30-13:45	35549	Urban Soils of Nanjing City	Jin-Ling Yang Institute of Soil Science, Chinese Academy of Sciences
13:45-14:00	32222	Urban environmentally sensitive areas (U-ESA) in the city of Bratislava	Jaroslava Sobocka National Agricultural and Food Centre, Soil Science and Conservation Research Institute
14:00-14:15	36358	Effect of solar panel installation on past agricultural soils	Masayuki Kawahigashi Tokyo Metropolitan University
14:15-14:30	31869	Cultural layer in urban soils of Saint Petersburg, Russia	Anastasia Sheshukova Saint Petersburg State University
14:30-14:45	32923	Do local non-statutory habitat designations reflect differences in below-ground biodiversity and functioning in urban green space?	Peng Huang University of Manchester
14:45-15:00	35160	Characterization, hazards assessment and remediation of heavy metals-explosives contaminated soil in military training ranges	Yongbing Zhu, Sanping Zhao, Mengwei Han, Songhao Luo, Bin Dong, Bin Xing State Key Laboratory of Chemistry for NBC Hazards Protection

*Subject to change

Parallel Sessions

15:00-15:15	35905	Underestimation of soil organic carbon by global spatially explicit soil datasets in Chinese urban greenspaces	Yiming Xu School of Grassland Science, Beijing Forestry University, Beijing, China
16:30-16:45	35139	Environmental behavior of rare earth elements (REEs) in mining area: Occurrence, release, and transport	Miaoyue Zhang Sun Yat-sen University
16:45-17:00	33174	Assessment of trace elements mobility in Technosols developed on heaps of historical polymetallic ore mining in the Sudety Mts., SW Poland	Damian Murach Department of Soil Science, Institute of Agriculture, Warsaw University of Life Sciences - SGGW, Warsaw, Poland
17:00-17:15	33434	Who Bears the Burden? Trace Element Contamination and Environmental Justice in Chicago's Urban Parks	Anna Paltseva Purdue University
17:15-17:30	32273	Soil Diversity in the City of Moscow as a Mirror of Evolutionary Trends in Urban Pedogenesis	Prokofeva T. V. Lomonosov Moscow State University
17:30-17:45	32676	Healthy Soils for Healthy Communities - A Community-based Urban Soil Initiative from Los Angeles	Yujuan Chen Tennessee State University
17:45-18:00	36189	Metabolic resilience of <i>Allium cepa</i> L. in urban technosols: the role of soil sealing and compaction on raffinose family oligosaccharides accumulation	Sara Di Lonardo Research Institute on Terrestrial Ecosystems (IRET), National Research Council (CNR), Via Madonna del Piano 10, 50019 Sesto Fiorentino, Italy", "National Biodiversity Future Center (NBFC), Piazza Marina 61, 90133 Palermo, Italy
18:00-18:15	33804	Carbon and metal patterns in anthropogenic sealed urban soils: a pilot study	Mariana Dos Santos Moreno Facultad de Agronomía y Sistemas Naturales, Pontificia Universidad Católica de Chile", "Programa de Posgrado en Geografía, Facultad de Ciencias y Tecnología de la Universidad Estatal Paulista (FCTV/UNESP)
18:15-18:30	36272	Realising the value of urban soils	Hadee Thompson-Morrison Bioeconomy Science Institute

*Subject to change



Parallel Sessions

Monday, June 8		Room: Convention Center Nanjing 403B	
Session 308001		Health Maintenance and Sustainable Management of Acidified Soils	
		Convener: Renfang Shen, Institute of Soil Science, Chinese Academy of Sciences	
		Co-Conveners: Zhihong Xu, Griffith University	
		Ying Teng, Institute of Soil Science, Chinese Academy of Sciences	
		Wenju Zhang, Institute of Agricultural Resources and Regional Planning CAAS	
		Jiuyu Li, Institute of Soil Science, Chinese Academy of Sciences	
		Xueqiang Zhao, Institute of Soil Science, Chinese Academy of Sciences	
		Jing Che, Institute of Soil Science, Chinese Academy of Sciences	
		Ming Liu, Institute of Soil Science, Chinese Academy of Sciences	
Schedule	ID	Title	Presenter
13:15-13:25	35551	Rice Husk Biochar-based Fertilizers in Sustainable Management of Acid Soils	Nagabovanalli B. Prakash Department of Soil Science and Agricultural Chemistry, University of Agricultural Science, Bangalore, India
13:25-13:35	33454	Mechanisms for Plants to Adapt to Toxicities of Aluminum and Manganese in Acidic Soil/Root Interfaces	Renkou Xu Institute of Soil Science Chinese Academy of Sciences
13:35-13:45	32559	Diverse organic amendments mitigate soil acidification and enhance crop productivity in acid soil area over four decades	Wenju Zhang Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences
13:45-13:55	35010	Mechanisms of periphyton-induced carbonate precipitation and its role in regulating soil acidity in paddy soils	Jiuyu Li Institute of Soil Science, Chinese Academy of Sciences

*Subject to change

Parallel Sessions

13:55-14:05	35028	Synergistic Amelioration Effects of Dolomite-Based Composite Conditioner on Soil Acidification: Mechanisms and Long-Term Buffering Performance	Chunhui Zhou Research Group for Advanced Materials & Sustainable Catalysis (AMSC), State Key Laboratory of Green Chemical Synthesis and Conversion, College of Chemical Engineering, Zhejiang University of Technology, Hangzhou 310032, China", "Anhui International Exchange and Cooperation Base, Qing Yang Institute for Industrial Minerals, Youhua, Qingyang, Anhui 242804, China.
14:25-14:35	33837	Liming increases Phosphorus Use Efficiency and Maize Productivity in Acidic Soils of Southwestern Ethiopia	Getahun Dereje Walbira Ethiopia Institute of Agricultural Research (EIAR)
14:35-14:45	31935	The contribution of natural and anthropogenic causes to soil acidification rates under different fertilization practices and site conditions in southern China	Zejiang Cai State Key Laboratory of Efficient Utilization of Arid and Semi-arid Arable Land in Northern China, Key Laboratory of Arable Land Quality Monitoring and Evaluation, Ministry of Agriculture and Rural Affairs/Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences
14:45-14:55	32534	Biochar Mitigates the Kinetic Release of Aluminum from Soil Driven by Exogenous Acid	Renyong Shi Institute of Soil Science, Chinese Academy of Sciences
14:55-15:05	34369	Spatio-temporal Variation Characteristics and Driving Mechanisms of Soil pH in Farmland of the Changbai Mountain-Liaodong Region	Runxue Bi Shenyang Agricultural University
15:05-15:15	32814	Co-application of lignosulfonate and calcium-magnesium phosphate fertilizer, an effective liming strategy for acidic purple soils in southwest China	Debo He Institute of Mountain Hazards and Environment, CAS

*Subject to change



Parallel Sessions

Tuesday, June 9		Room: Convention Center Nanjing 209	
Session 308002		Wetland Soils, Acid Sulfate Soils and Sulfidic Materials	
		Convener: Anton Boman, Geological Survey of Finland	
		Co-Conveners: Vanessa Wong, Monash University Chaolei Yuan, Sun Yat-sen University	
Schedule	ID	Title	Presenter
13:30-13:45	34972	Improved sampling and laboratory methods using chip-trays for assessment and classification of acid sulfate soils	Robert Fitzpatrick Acid Sulfate Soils Centre, Adelaide University, Urrbrae, South Australia, Australia
13:45-14:00	33055	Peat in Australia - Diversity, Values, Risks and the Universal Occurrence of Acid Sulfate Soils in South Australia	Christopher Auricht Auricht Projects and Adelaide University
14:00-14:15	33042	The Effects of Pyrite on Soil Organic Carbon Storage in a Temperate Wetland Coastal Acid Sulfate Soil	Vanessa Wong Monash University
14:15-14:30	31916	Differences in life history strategies of bacteria between paddy and upland soils and implications for carbon sequestration	Chaolei Yuan Sun Yat-sen University

*Subject to change

Parallel Sessions

14:30-14:45	35261	Iron oxyhydroxides, oxyhydroxysulfates and efflorescent sulfate salts as indicators of biogeochemical processes at low pH in acid sulfate weathering environments	Robert Fitzpatrick Acid Sulfate Soils Centre, Adelaide University, South Australia, Australia
14:45-15:00	34157	Neutralisation of Acid Sulfate Soils with Industrial Side Streams	Thomas Kronberg Åbo Akademi University
15:00-15:15	34262	Geophysical Methods for Mapping Acid Sulfate Soil Properties	Anton Boman Geological Survey of Finland (GTK), P.O. Box 97, FI-67101 Kokkola, Finland
15:15-15:30	31994	Cross-regional transfer learning to predict acid sulfate soils in Finland using Random Forest	Virginia Estévez Arcada University of Applied Sciences
15:30-15:45	32241	The Acid Sulfate Soil Distribution Mapping in The Buffer Area of Nusantara Capital City, Kalimantan, Indonesia	Wirastuti Widyatmanti Universitas Gadjah Mada
16:30-18:30	-	Acid Sulfate Soils Working Group Business Meeting	Anton Boman

*Subject to change

Parallel Sessions

Monday, June 8		Room: Expo Center, Hall 8, 8201	
Session 309001		Forest and Grassland Soil Functions and Sustainable Utilization under Global Change	
		Convener: Qiwu Sun, Research Institute of Forestry Chinese Academy of Forestry	
		Co-Conveners: Yunting Fang, Institute of Applied Ecology, Chinese Academy of Sciences Yongfu Li, Zhejiang A&F University Zhihong Xu, Griffith University	
Schedule	ID	Title	Presenter
13:15-13:30	31681	The regulation of soil microbial diversity and life-history strategies on ecosystem functions	Zhenghu Zhou Northeast Forestry University
13:30-13:45	35414	Tree functional diversity enhances forest carbon and nitrogen storage across gradients	Xinli Chen Zhejiang A&F University
13:45-14:00	34435	Effect of past vegetation shift toward C4-dominated landscape on the soil organic carbon in the Northwestern Madagascar	Lovafitia Ratovoarimanana Laboratoire des Radioisotopes, University of Antananarivo, Madagascar
14:00-14:15	33329	Forest methane sink under climate change	Xiaoqi Zhou East China Normal University
14:15-14:30	35580	Microbial intra- and extracellular phosphorus recycling in response to global imbalanced soil nutrient changes	Jie Chen Research Institute of Tropical Forestry, Chinese Academy of Forestry
14:30-14:45	34014	Phosphorus in (semi-)natural soils: concentration, stock, dynamics, and drivers	Enqing Hou South China Botanical Garden, Chinese Academy of Sciences
14:45-15:00	32098	Coupling and decoupling of soil carbon, nitrogen, phosphorus and potassium stocks along a 6000 km northeast-southwest temperature gradient in China	Qiqi TAN China Agricultural University

*Subject to change

Parallel Sessions

15:00-15:15	35481	Soil-plant silicon cycle and climate change	Zhihao Pang Beijing Forestry University
16:30-16:42	32054	Heatwaves increase greenhouse gas emissions from different ecosystems	Scott X Chang Department of Renewable Resources, University of Alberta
16:42-16:54	35430	Biochar mitigates the effects of nitrogen deposition on soil greenhouse gas emissions via microbial regulation in a subtropical forest	Yongfu Li Zhejiang A&F University
16:54-17:06	35524	Land-use change mediated associations among soil environmental factors, microbial networks, and soil multifunctionality: A case study of the Changchong River small watershed in Chaohu Lake	Lingyu Hou Research Institute of Forestry, Chinese Academy of Forestry
17:06-17:18	35202	Southern urban forest converted from orchard abandonment: a potentially important N ₂ O source driven by warm-humid climate	Lifang Wu Tsinghua university
17:18-17:30	35049	Mechanisms regulating soil multifunctionality during vegetation restoration: contrasting pathways of moss and litter in the Loess Hilly Region, China	Jianqing Wang Shanxi University
17:30-17:42	319B97	Why the Effects of Vegetation Restoration on Soil Properties May Be Overestimated: Evidence from 30 Years of Long-Term Monitoring on the Loess Plateau, China	Tonggang Zha College of Soil and Water Conservation, Beijing Forestry University
17:42-17:54	34960	Influence of Forest Stand Age on Soil Water Dynamics in Semi-Arid Forests of the Loess Plateau	Muhammad Waseem Rasheed Research center for Eco environmental sciences, CAS, China", "University of Chinese Academy of Sciences, Beijing, 100049, China
17:54-18:06	34699	Study on the Influencing Mechanisms of Mercury Accumulation Characteristics in Grassland Soils of Guizhou Province Under the Context of Ecological Restoration	Yanmei Zhou GuizhouUniversity
18:06-18:18	34407	Grazing Modulates the Allelopathic Impact of an Invasive Shrub on Soil Seed Bank Diversity and Function: Implications for Grassland Soil Health	Qiqi Li Lanzhou University", "Lanzhou University
18:18-18:30	34213	Effects of nitrogen deposition on plant community structure and niche characteristics in typical steppe	SiYuan Bao Inner Mongolia Agricultural University

*Subject to change

Parallel Sessions

Thursday, June 11		Room: Expo Center, Hall 8, 8201	
Session 309002		Forest Soil Management: Processes, Challenges, and Sustainable Production	
		Convener: Wenfa Xiao, Distinguished Professor of Forest Ecology, Deputy Dean of the Chinese Academy of Forestry, Ecology and Nature Conservation Institute, Chinese Academy of Forestry	
		Co-Convener: William R. Horwath, Distinguished Professor of Soil Biogeochemistry, Dept. of Land, Air and Water Resources, University of California, Davis	
Schedule	ID	Title	Presenter
11:15-11:30	35996	Soil Carbon Sequestration in forest soils: Limits and Potential versus Potential	William Horwath Department of Land, Air and Water Resources, University of California, Davis, USA
11:30-11:45	35399	Cessation of nitrogen addition increased organic matter stability by decoupling carbon input and stabilization in a subtropical forest soil	Xinzhang Song Zhejiang A&F University
11:45-12:00	35404	The effects of N deposition on the decomposition of C rhizodeposits and its underlying microbial mechanism in Moso bamboo forest	Shi Man Zhejiang A&F University
12:00-12:15	31735	Aggregate-mediated mechanisms of soil carbon and greenhouse gas emission under green manure cover in citrus orchard	Lei Lei Ecology and Nature Conservation Institute, Chinese Academy of Forestry

*Subject to change

Parallel Sessions

13:30-13:45	33540	Managing Forest Soil Carbon to Preserve Climate and Biodiversity	Lydie-Stella KOUTIKA Soil Care and Environmental Studies (SCES)
13:45-14:00	32065	Multi-trophic biodiversity regulates decomposition and mitigates drought effect	Junwei Luan International Centre for Bamboo and Rattan
14:00-14:15	33800	Use of agrifood by-products to improve the fertility of acid forest soils: case study in the NW of Spain	Ana Barreiro University of Santiago de Compostela
14:15-14:30	31902	Sensitivity of biochar-root interaction on the subtropical forest increase of sink and reduction of emission	Xiaogai Ge; Benzhi Zhou Chinese Academy of Forestry (Research Institute of Subtropical Forestry)
14:30-14:45	35364	Burn history and residue solubility influence the transformation of pine litter in forest soils	Andrew J. Curtright University of California, Davis
14:45-15:00	31689	Mechanisms of soil organic carbon accumulation under green manure cover in citrus orchard	Jiajia Zhang Ecology and Nature Conservation Institute, Chinese Academy of Forestry
15:00-15:15	35519	Compartmentalized Homeostasis Drives High Bamboo Forest Productivity Under Nutrient Imbalance	Zhikang Wang Zhejiang A&F University
16:30-16:45	31688	Spatial Characteristics of Soil Organic Carbon in Forests of China	Wenfa Xiao Ecology and Nature Conservation Institute, Chinese Academy of Forestry

*Subject to change

Parallel Sessions

16:45-17:00	34442	Responses of selected soil physical properties to early stages of active ecological restoration in the Mistbelt forest of South Africa	Alen Manyevere Department of Agronomy. University of Fort Hare
17:00-17:15	31706	Fire-derived charcoal enhances soil ecological functions and recovery in subtropical forest plantations	Yuzhe Wang Fujian Agriculture and Forestry University
17:15-17:30	34739	Variation of soil physicochemical properties across forest types in Singapore	Edgar Raeben George National Parks Board
17:30-17:45	36505	Forest Development Determines the Compositions and Structures of Soil Invertebrate Communities in Reclaimed Coastal Lands	Lili Cao Nanjing Forestry University
17:45-18:00	34833	Resistance and Resilience of Soil Microbial Communities to Forest Degradation and Their Role in Carbon Sequestration in Dry Tropical Forests	Luis Merino Martín Departamento de Biología y Geología, Física y Química Inorgánica, Universidad Rey Juan Carlos (URJC), Móstoles, Spain.", "Instituto de Investigación en Cambio Global (ICG-URJC), Universidad Rey Juan Carlos, Móstoles, Spain.
18:00-18:15	319B91	Geographic variations and multiple drivers of soil organic carbon stability in larch plantations	Haiyan Wang State Key Laboratory of Efficient Production of Forest Resources, Key Laboratory of Forest Cultivation and Protection, Ministry of Education, College of Forestry, Beijing Forestry University

*Subject to change

Parallel Sessions

Tuesday, June 9		Room: Convention Center Nanjing 208	
Session 309004		Soil Microbial Diversity and Functions in Carbon and Nitrogen Cycling in Response to Tree Diversity, Wildfires and Climate Change	
		Convener: Zhihong Xu, School of Environment and Science, Griffith University, Brisbane, Queensland 4111, Australia	
		Co-Conveners: Chirs Johnson, Department of Civil & Environmental Engineering, Syracuse University, Syracuse, New York, USA Zhiqun Huang, Fujian Normal University, China	
Schedule	ID	Title	Presenter
09:00-09:30	34595	Nitrogen enrichment weakens tree diversity effects on productivity	Zhiqun Huang Fujian Normal University
09:30-09:45	32386	Forest plant community and fire control on soil microbial diversity and functions related to C and N cycling and GHG fluxes	Castaldi Simona Department of Environmental, Biological and Pharmaceutical Science and Technologies, University of Campania Luigi Vanvitelli
09:45-10:00	33739	Global wildfire effects on soil bacteriome and recovery trajectories	Yuying Jiang Sun yat-sen University
10:00-10:15	33642	The Resilience to Climate Change and Human Activities of the Forest Ecosystems in Central Africa, South America, Southeast Asia and European Union	Lydie-Stella KOUTIKA Soil Care and Environmental Studies (SCES)

*Subject to change



Parallel Sessions

10:15-10:30	33341	Functional Sensitivity to Environmental Conditions Exceeds Community Composition in Forest Soils	Guoting Shen Helmholtz-Centre for Environmental Research - UFZ
10:30-10:45	35704	Shifts in soil microbial resource limitation along a natural gradient of ECM tree dominance in a subtropical montane forest	Qiuxiang Tian Wuhan Botanical Garden, Chinese Academy of Sciences
10:45-11:00	31905	Long-term throughfall exclusion decreased soil organic carbon components by higher soil CUE and lower microbial enzyme activities on <i>Phyllostachys edulis</i>	Xiaogai Ge Research Institute of Subtropical Forestry, Chinese Academy of Forestry
11:15-11:30	35440	Effects of dead lying trunks of deciduous and coniferous trees on soil microbial communities in old-growth broadleaved forests after windthrows	Kristina Ivashchenko IMPB RAS, branch of the Keldysh IAM RAS
11:30-11:45	34692	Soil depth outweighs environmental change in shaping microbial diversity-multifunctionality relationships	Kaikai Min Institute of Applied Ecology, Chinese Academy of Sciences
11:45-12:00	34649	MICROBIAL RECOLONIZATION DYNAMICS AND ECOLOGICAL SUCCESSION IN POST-FIRE SOILS	Pedro Mondaca Institute of Ecology & Biodiversity, Chile", "Facultad de Medicina Veterinaria y Agronomía, Universidad de Las Américas, Santiago, Chile

*Subject to change



Parallel Sessions

Thursday, June 11		Room: Convention Center Nanjing 208	
Session 309005		Soil Organic Matter Dynamics and Nutrient Cycling in Global Forests under Climate Change	
		Convener: Zhihong Xu, School of Environment and Science, Griffith University, Brisbane, Queensland 4111, Australia	
		Co-Conveners: Chirs Johnson, Department of Civil & Environmental Engineering, Syracuse University, Syracuse, New York, USA Scott Chang, University of Alberta	
Schedule	ID	Title	Presenter
11:15-11:45	34023	Nature-based solutions for mitigating climate change: from rangelands to forests	Scott X Chang Department of Renewable Resources, University of Alberta
11:45-12:00	33892	Land-use intensity restructures soil organic matter pools and stabilization pathways across forest-agriculture landscapes	Louis-Pierre Comeau Agriculture and Agri-Food Canada, Government of Canada
12:00-12:15	33953	How tree-throw disturbances reshape geochemical controls on soil carbon and nitrogen in temperate forest ecosystems	Mohammad Tashin Karimi Nezhad Department of Forest Ecology, Landscape Research Institute", "Department of Forest Ecology, Landscape Research Institute", "Department of Forest Ecology, Landscape Research Institute
13:30-13:45	35482	Nitrogen deposition enhances microbial carbon pump-mediated soil organic carbon formation and stabilization	Huihui Han Northwest A&F University
13:45-14:00	35331	Optical Properties of Dissolved Organic Matter of Albic Retisols (Middle Taiga, Komi Republic, Russia)	Sofia A. Ogorodniaia Federal Research Centre V.V. Dokuchaev Soil Science Institute, Moscow, Russia
14:00-14:15	34829	Global-Scale Land Use Change Will Become a Huge Potential Carbon “Source” in the Future: Mechanism Analysis and Spatial Projections to 2100	Youbin Liu Central South University of Forestry and Technology

*Subject to change

Parallel Sessions

14:15-14:30	33630	Icelandic old birch woodlands have valuable soil carbon reserves	Solveig Sanchez Land and Forest, Iceland
14:30-14:45	34783	Deciphering the key role of core microbe in the decomposition of eucalyptus harvest residue	Lijun Chen Central South University of Forestry and Technology
14:45-15:00	34372	Depth-resolved controls on phosphorus bioavailability across forest soil profiles in Northeast China	Yaqi Zhang Northeast Forestry University
15:00-15:15	32577	Impacts of Mistletoe Infection on Soil Hydrology and Chemistry in Abies and Pinus Ecosystems	Lizardo Reyna-Bowen Faculty of Forestry, University of Agriculture in Kraków
16:30-16:45	33925	Rubber-Based Agroforestry Ecosystems Enhance Soil Enzyme Activity but Exacerbate Microbial Nutrient Limitations	Wenxian Xu Rubber Research Institute, Chinese Academy of Tropical Agricultural Sciences", "Yunnan Institute of Tropical Crops
16:45-17:00	35804	Contrasting effects of roots and arbuscular mycorrhizal fungi on soil carbon storage reveal divergent pathways in forest carbon cycling	Xin Guan Nanjing Forestry University
17:00-17:15	32948	Subsequent Fire Alters Jack Pine Pyrogenic Organic Matter Persistence	Mengmeng Luo Department of Soil and Environmental Sciences, University of Wisconsin-Madison
17:15-17:30	33671	Ecological Stoichiometry of Plant-Soil Systems in Pinus sylvestris var. mongolica Plantations in the Semi-Arid Region of Northeast China	Yi Yang Shenyang Agricultural University
17:30-17:45	34872	Soil Organic Carbon Stocks and Controlling Factors in Planted and Natural Mangrove Forests Developed on Acid Sulfate Soils	Nghia Van Nguyen Faculty of Technology, Dong Nai Technology University, Bien Hoa City, Vietnam
17:45-18:00	33022	The decomposition and stabilization of microbial residues in forest soil	Chao Wang Institute of Applied Ecology, Chinese Academy of Sciences
18:00-18:15	35308	Elevated CO ₂ levels promotes the global forest phosphorus cycle	Yijin Lu Zhejiang University

*Subject to change



Parallel Sessions

Tuesday, June 9		Room: Convention Center Nanjing 209	
Session 310002		Soil Health-Water-GHG Nexus for Sustainable Crop Production in Paddy Soils	
		Convener: Mizuhiko NISHIDA, Chair, Paddy Soils Working Group, Tohoku University, Japan	
		Co-Convener: Kazumichi FUJII, Fukushima Institute for Research, Education and Innovation, Japan	
Schedule	ID	Title	Presenter
09:00-09:15	35625	Pedogenesis Shapes the Basis of Sustainability of Paddy Soils	Ganlin Zhang Institute of Soil Science, Chinese Academy of Sciences
09:15-09:30	33271	Persistence and controls of soil organic carbon in paddy fields across Asian countries: a soil physicochemical fractionation approach	Junta YANAI Kyoto Prefectural University
09:30-09:45	33431	Decades of intensive rice cropping alter tropical soil fertility	Kazuki Saito International Rice Research Institute (IRRI)
09:45-10:00	32747	The Effects of Paddy-Upland Rotation on the Six-Year Nitrogen Dynamics of ¹⁵ N-labeled Cow Manure Compost	Sota Kojima Tohoku University

*Subject to change



Parallel Sessions

10:00-10:15	34816	Feeding the world while mitigating climate change: a global meta-synthesis of agronomic pathways for low-emission rice	Jean-Martial Johnson International Rice Research Institute (IRRI)
10:15-10:30	31716	Effects of Alternate Wetting and Drying (AWD) on Driving Factors Controlling CH ₄ Emissions from Rice Paddy Soils	Lucia Crosetto Department of Agricultural, Forest and Food Sciences, University of Torino
10:30-10:45	35001	Alternate Irrigation Reduces Methane Emissions in Malaysian Rice Paddies	Muhammad Firdaus Sulaiman Faculty of Agriculture, Universiti Putra Malaysia", "Institute of Tropical Agriculture and Food Security, Universiti Putra Malaysia
10:45-11:00	33955	Dry direct seeding rice and water saving irrigation reduce root exudation of organic acids and methane emission from paddy soils	Kazumichi Fujii Fukushima institute for Research, Education and Innovation
11:15-11:30	34741	Transplanting Date Potentially Modulates Post-Season Methane Emissions via Residual Root Carbon Inputs in a Mono-Rice Paddy Field	Sang Yoon Kim Department of Agricultural Chemistry & Interdisciplinary Program in IT-Bio Convergence System, Suncheon National University, Suncheon 57922, Republic of Korea", "Department of Agricultural Life Sciences, Suncheon National University, Suncheon 57922, Republic of Korea

*Subject to change

Parallel Sessions

11:30-11:45	32053	Impact of Rising Tropospheric Ozone Concentrations on Rhizospheric Carbon Pools vis-à-vis Methane Emission in Tropical Rice Soil	Ziom Adam Michael Department of Soil Science and Agricultural Chemistry, Institute of Agricultural Sciences, Faculty of Agriculture, Banaras Hindu University", "Department of Soil Science and Agricultural Chemistry, College of Agriculture, Odisha University of Agriculture and Technology", "Division of Crop Production, ICAR-Central Rice Research Institute
11:45-12:00	35220	Soil carbon budgets under three different fertilizer management in paddy fields, Japan.	Chie Hayakawa Graduate School of Regional Development and Creativity Utsunomiya University, Utsunomiya, Japan", "School of Agriculture, Utsunomiya University, Utsunomiya, Japan
12:00-12:15	31594	Effect of Iron Materials on Methane Emission from Paddy Field	Kazuuki INUBUSHI Tokyo University of Agriculture
12:15-12:30	35409	Hybrid machine-learning and process-based regional crop modelling to improve rice production strategies in data-limited conditions: a case study of Lao PDR	Qiang Li State Key Laboratory of Efficient Utilization of Arid and Semi-arid Arable Land in Northern China, Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences, Beijing 100081, China", "School of Agriculture, Food and Ecosystem Sciences, The University of Melbourne, Victoria 3010, Australia", "National Agriculture and Forestry Research Institute, Ministry of Agriculture and Environment, Lao PDR

*Subject to change



Parallel Sessions

Tuesday, June 9		Room: Expo Center, Hall 6, 6201	
Session 310004		Understanding Paddy Soil Microbiomes for Food and Climate Security	
		Convener: Yahai Lu, Peking University	
		Co-Conveners: ASAKAWA Susumu, Nagoya University, Japan NISHIDA Mizuhiko, Chair, Paddy Soils Working Group, IUSS. Tohoku University, Japan MURASE Jun, Nagoya University, Japan BOWATTE Saman, AgResearch, Grasslands Research Centre, New Zealand WANG Guanghua, Northeast Institute of Geography and Agroecology, CAS	
Schedule	ID	Title	Presenter
13:30-13:50	34860	Microbial background for mitigating methane emission from rice fields	Ralf Conrad Max-Planck-Institute for Terrestrial Microbiology, Department of Biogeochemistry, 35043 Marburg, Germany
13:50-14:05	33675	Isolation, characterization and identification of culturable methane-oxidizing bacteria inhabiting paddy field ecosystem	Susumu Asakawa Graduate School of Bioagricultural Sciences, Nagoya University
14:05-14:20	34619	Impact of microbial interactions on aerobic methanotrophs and methane oxidation activity in soils	Yong Li Zhejiang Provincial Key Laboratory of Agricultural Resources and Environment, Zhejiang University, Hangzhou 310058, China

*Subject to change



Parallel Sessions

14:20-14:35	34713	From Genes to Gas: Dynamics of Active Methanogenic Food Webs in Rice Paddies	Jingjing Peng College of Resources and Environmental Sciences, State Key Laboratory of Nutrient Use and Management; Key Laboratory of Plant-Soil Interactions; National Academy of Agricultural Green Development, China Agricultural University, Beijing, China
14:35-14:50	34957	Effects of light on microbial community in the surface soil of a paddy field	Jun Murase Nagoya University
14:50-15:05	34968	Beyond Nutrients: Minerals as Evolutionary Architects and Signaling Hubs in Soil Microbial Communities	Jianchao Zhang Tianjin University
15:05-15:20	32788	Response of Rhizosphere Sulfur Utilization Microbiome to Rice Domestication	Changji Wang Netherlands Institute of Ecology (NIOO-KNAW)", "Utrecht University
15:20-15:30	33503	Rare earth elements reshape the methanotrophs community to enhance the CH ₄ oxidation in paddy fields	Yalin Yin Sun Yat-sen university
16:30-16:45	33954	Coordinated Action of Firmicutes and Bacteroidetes in Rice Straw Decomposition	Yahai Lu Peking University
16:45-17:00	35333	Responses of autotrophic nitrifiers to elevated CO ₂ in paddy soil	Lei Cheng College of Life Science, Zhejiang University, Hangzhou, China

*Subject to change

Parallel Sessions

17:00-17:15	35663	Discovery of iron-reducing diazotrophs in rice paddy soil and enhancement of nitrogen fixation by iron application	Yoko Masuda Graduate School of Agricultural and Life Sciences, The University of Tokyo
17:15-17:30	36509	Rice root iron plaque as a mediator to enhance biological nitrogen fixation in paddy soil	Rong Jia Key Laboratory of Land Resources Evaluation and Monitoring in Southwest China, Ministry of Education, Sichuan Normal University, Chengdu, Sichuan Province 610066, PR China", "Fujian Provincial Key Laboratory of Soil Environmental Health and Regulation, College of Resources and Environment, Fujian Agriculture and Forestry University, Fuzhou Fujian Province 350002, PR China", "Engineering Research Center for the Development of Farmland Ecosystem Service Functions, Sichuan Province, PR China
17:30-17:45	32569	Domesticated rice alters the rhizosphere microbiome, reducing nitrogen fixation and increasing nitrous oxide emissions	Jingjing Chang Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences", "Netherlands Institute of Ecology
17:45-18:00	35755	Nitrous oxide acts as an alternative electron acceptor for microbial methane oxidation in oxygen-deficient microcosms	Fengqin Liu Henan Agricultural University
18:00-18:15	33957	Irrigation management drives the niche differentiation and metabolic versatility of ammonia-oxidizing archaea in paddy soils	Xue Zhou Hohai University

*Subject to change



Parallel Sessions

Monday, June 8		Room: Expo Center, Hall 6, 6201	
Session 310005		Multiple Paths to Soil Health: From Technology to Policy, From Paddy Fields to the Globe	
		Conveners: Cheng-Hsien Lin, Department of Soil and Environmental Sciences, National Chung Hsing University Lillian Øygarden, Chair of commission 3.2. Soil and Water Conservation Gary Feng, USDA-ARS, Genetics and Sustainable Agricultural Research Unit Brajesh Singh, Chair of FAO Intergovernmental Technical Panel on Soils (ITPS), Hawkesbury Institute for the Environment, Western Sydney University, Australia Co-Conveners: Hung-Yu Lai, Department of Soil and Environmental Sciences, National Chung Hsing University Pei-Tzu Kao, Department of Soil and Environmental Sciences, National Chung Hsing University Dorota Dec. Vice chair of commission 3.2 Soil and water conservation Felipe A. Zuñiga U., Universidad Austral de Chile, Instituto de Bosques y Sociedad Xinhua Peng, Chair of FAO Intergovernmental Technical Panel on Soils (ITPS), Vice-chair of FAO Intergovernmental Technical Panel on Soils (ITPS), Institute of Agricultural Resources and Regional Planning, CAAS, P.C. China	
Schedule	ID	Title	Presenter
13:15-13:18	-	Opening remarks	-
13:18-13:31	33403	Changes in farm business model: Combined effects on soil health, ecosystem services, farm profit, and associated needs for incentives	Youssef Wang-Touri Wageningen University & Research
13:31-13:44	34765	Triangular approach (SQ-GQ-GY) based soil health assessment - A novel mechanism for ranking Resilient Rice Ecologies of eastern India	Debarati Bhaduri ICAR-Central Rice Research Institute, Cuttack, India

*Subject to change

Parallel Sessions

13:44-13:57	34776	Enhancing soil health through organic amendments in an acid soil	Tingting Chang Hohai University
13:57-14:10	32336	Assessing Human Land Use Impacts on Soil Properties and Genesis in the Great Plains Region of the United States	Elizabeth M. Eroshenko University of Nebraska-Lincoln
14:10-14:23	32670	Reducing the Global Warming Potential of Rice Farming: Why Biochar Works Better than Compost	Ronley C. Canatoy Soil Science Department, Central Mindanao University
14:23-14:36	32644	Methane Mitigation and Arsenic Immobilization in Paddy Soils by Sulfur-Containing Amendments Applied to Stimulate Sulfate-Reducing Bacteria	Han Na Kim Department of Environmental and Biological Chemistry, Chungbuk National University", "Global Centre for Environmental Remediation (GCER), The University of Newcastle
14:36-14:49	33948	Managing water and litter inputs to safeguard wetland soil health: coupled C-N-P responses to drying-rewetting in River Murray floodplain soils	Rui Yan University of Adelaide
14:49-15:02	35959	Microbial innovation for nitrogen management in paddy soil: A success story of Endophytic Azotobacter chroococcum MCC 3432 (NRRI-EndoN)	Upendra Kumar Senior Scientist, ICAR-Central Rice Research Institute, Cuttack, India
15:02-15:15	35884	Agriculture as a strategy to improve food - water - energy nexus in Atlantic Forest, Brazil	Ana Paula Dias Turetta Brazilian Agriculture Research Corporation - Embrapa Soils, Rio de Janeiro, RJ, Brazil
16:30-16:44	34387	Integrated remediation strategies by health risk assessment of brown rice approaching technology for As, Cd, Cr, Ni, Cu and Zn-contaminated paddy soils in Taiwan	Zueng-Sang Chen Department of Agricultural Chemistry, National Taiwan University, Taipei, Republic of China.

*Subject to change

Parallel Sessions

16:44-16:58	35553	Soil ridging combined with soil amendments regulates the arsenic-cadmium related geochemical cycles and mitigate its accumulation in rice	Ting Zhang Institute of Environment and Sustainable Development in Agriculture, Chinese Academy of Agricultural Sciences
16:58-17:12	36016	Effect of organic materials and sulfate addition on cadmium bioavailability and accumulation of rice in cadmium sulfide nanoparticles- and cadmium chloride-treated soil	Yanhua Qiu Institute of Plant Nutrition, Resources and Environment, Beijing Academy of Agriculture and Forestry Sciences, Beijing 100081, China
17:12-17:26	36403	Synergistic modulation of Zinc Bioavailability in Alluvial paddy soil: Integrating Zn-solubilizing microbial consortia, cow dung, and mineral Zinc fertilizers for sustainable Rice production in India	Jaya Prajapati Department of Soil Science & Agricultural Chemistry, College of Agriculture, Central Agricultural University, Imphal, Manipur, India-795004
17:26-17:40	32566	Exploring the environmental feasibility of montmorillonite integration in the electrochemical oxidation of acid mine drainage	Madinai Abulimiti Nanjing University
17:40-17:54	33719	Deep Plowing Mitigates Brackish-Water Irrigation Stress in Greenhouse Tomato Through Root Redistribution, Ionic Regulation, and Improved Physiological Function	Xueyan Zhang Ningxia University
17:54-18:08	35775	Water quality and sediment analysis at selected locations of Imo River, Imo State, In Southeastern Nigeria.	Ubah, Venatius Chiamaka Steve Department Of Biology, Federal University Of Technology Owerri, Imo State, Nigeria.
18:08-18:22	35603	Impacts of Land Uses on Soil Quality in Western Patagonia	Felipe Zúñiga Ugalde Instituto de Bosques y Sociedad, Universidad Austral de Chile, Valdivia, Chile
18:22-18:30	-	General discussion	-

*Subject to change

Parallel Sessions

Friday, June 12		Room: Expo Center, Hall 8, 8201	
Session 401001		Peatlands in a Changing World	
		Convener: Claudio Zaccone, University of Verona, Italy	
		Co-Conveners: Kunshan Bao, School of Geography, South China Normal University, China Angela Gallego-Sala, University of Exeter, UK	
Schedule	ID	Title	Presenter
09:00-09:15	32398	Carbon Storage Capacity of Peat Soils from High Bogs and Low Bogs	Wolfgang Burghardt Soil Technology, Faculty of Biology, University Duisburg-Essen
09:15-09:30	33807	Drainage and land-use change collapse the carbon sink function of tropical peatlands	Erin Swails Center for International Forestry Research (CIFOR)
09:30-09:45	34253	Depth controls on CO ₂ emissions from drained agricultural peat soils and implications for national greenhouse gas inventories	Lars Elsgaard Department of Agroecology, Aarhus University, Tjele, Denmark
09:45-10:00	36552	Warming Amplifies Iron-Mediated Carbon Loss from Peatlands: A Positive Feedback Modulated By Soil Properties	Chunmei Chen Tianjin University

*Subject to change

Parallel Sessions

10:00-10:15	33148	Nutrient cycling in tropical peatland coconut agroecosystems integrating natural weeds as cover crops for sustainable management	Nurul Ihsan Fawzi Department of Soil Science and Land Resources, Faculty of Agriculture, IPB University
10:15-10:30	33797	Phosphorus availability in Dutch fens along a natural Fe-richness gradient: a rewetting simulation experiment of peat columns	Kevin Z. Mganga Copernicus Institute of Sustainable Development, Utrecht University
10:30-10:45	35900	Soil nitrogen loss and altered plant nitrogen uptake following alpine peatland degradation: insights from nitrogen isotopes	Xiaodong Zhang Institute of Ecological Conservation and Restoration, Chinese Academy of Forestry
10:45-11:00	34703	Breaking metabolomics limits for a molecular to pathway multidimensional analysis of metabolism alpine peatlands soil dissolved organic carbon	Shuangchao Wang Sichuan University
11:15-11:30	32934	Biogeochemistry of peatlands in the Australian Alps and Borneo; insights on the feedbacks between peatland function, disturbance and climate change	Samantha Grover RMIT University
11:30-11:45	32857	Human activities overrode natural climate controls on mercury deposition in Southern China during the late Holocene	Shuming Li South China Normal University
11:45-12:00	33136	The secret and fascinating world of the free-floating peat island of Posta Fibreno	Claudio Zaccone Department of Biotechnology, University of Verona

*Subject to change



Parallel Sessions

Tuesday, June 9		Room: Expo Center, Hall 5, 5202	
Session 401002		Soil Food Web Structure and Function under Global Change	
		Convener: Manqiang Liu, Lanzhou University	
		Co-Conveners: Joann Whalen, McGill University	
		Shenglei Fu, Henan University	
Schedule	ID	Title	Presenter
13:30-13:50	35638	Four decades of Soil Ecology: the good, the bad and the missing	Shuijin Hu Nanjing Agricultural University
13:50-14:05	35942	Aggregate-Scale Microbial Communities: Spatial Heterogeneity, Potential food-webs & The Effect of Tillage	Arthur Taylor University of Edinburgh
14:05-14:20	33391	Proteobacteria as keystone bridges in the micro-food web: a new strategy for biocontrol design	Ting Liu Nanjing Agricultural University
14:20-14:35	33772	Greater trophic diversity of soil animal communities under agricultural land use and tropical climate	Zheng Zhou University of Hohenheim
14:35-14:50	34219	Size-structured Energy Channeling in Soil Food Webs across Ecto- and Arbuscular Mycorrhiza-dominated Deciduous Forests	Ajuan Zhang Senckenberg Museum of Natural History Görlitz, Department of Soil Zoology, Am Museum 1, 02826 Görlitz, Germany
14:50-15:05	32451	Coordinated plant-nematode ecological strategies shape soil carbon cycling	Chongzhe Zhang Lanzhou University

*Subject to change

Parallel Sessions

15:05-15:20	34665	Pesticide contamination in agricultural soils in Shanghai: residual characteristics and ecological risks to soil biota	Muyuan Wang Shanghai Jiao Tong University
16:30-16:50	32205	Harnessing the soil food web for sustainable ecosystems: Current evidence and future perspectives	Uffe N Nielsen Hawkesbury Institute for the Environment, Western Sydney University
16:50-17:05	33785	Leaving deadwood in canopy gap mitigates the decline of soil multifunctioning	Yan Zhang University of Göttingen
17:05-17:20	34066	Legume Intercropping Reshapes Aggregate-Scale Soil Micro-Food Webs and Nutrient Regulation in Tropical Rubber Plantations	Shujie Chen Xishuangbanna Tropical Botanical Garden
17:20-17:35	33556	Impacts of chemical free turfgrass renovation on soil arthropod and nematode communities	Zhiqiang Cheng University of Hawaii at Manoa
17:35-17:50	32964	Mechanism of soil fauna on soil microbial necromass carbon accumulation in a subtropical forest under nitrogen addition	Shixing Zhou Sichuan Agricultural University
17:50-18:05	32735	Effects of livestock grazing intensity on ground-dwelling arthropod communities in a desert steppe in Inner Mongolia	Haishan De Inner Mongolia Agricultural University
18:05-18:20	34571	Drivers and Mechanisms of Biological Homogenization of Soil Protists in Human Land-Use Systems	Zhi-Peng Li Institute of Urban Environment, Chinese Academy of Sciences", "CAS Haixi Industrial Technology Innovation Center in Beilun", "University of Chinese Academy of Sciences
18:20-18:35	34601	Trophic interactions regulate the effects of long-term nitrogen enrichment on soil organic carbon	Wen Xing Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences

*Subject to change

Parallel Sessions

Friday, June 12		Room: Convention Center Nanjing 403B	
Session 401003		Unveiling the Hidden World: Biodiversity and Ecological Function of Soil Fauna	
		Convener: Yuji Jiang, Fujian Agriculture and Forestry University	
		Co-Convener: Francisco Dini-Andreote, The Pennsylvania State University	
Schedule	ID	Title	Presenter
11:15-11:30	35684	Stage-specific microbial dynamics underpin ecosystem restoration on tropical coral islands	Wenjia Wu Guangdong Provincial Key Laboratory of Applied Botany, South China Botanical Garden, "Key Laboratory of National Forestry and Grassland Administration on Plant Conservation and Utilization in Southern China, South China Botanical Garden, Chinese Academy of Sciences", "Guangdong Heshan National Observation and Research Station for Forest Ecosystem, South China Botanical Garden, Chinese Academy of Sciences
11:30-11:45	33159	AI-derived-Intrinsically Disordered Proteins from Antarctic Nematode Stabilize Human Cells Under freezing Stress	Xia Xue Zhengzhou University
11:45-12:00	32354	Investigating identification techniques and sample sizes effects on soil nematode community assessment	Lu Wang Helmholtz Centre for Environmental Research - UFZ, "Leipzig University", "German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig
12:00-12:15	34617	Grassland management and time jointly shape the gut microbiome of soil collembolan Folsomia candida: A laboratory study	Meijun Sheng Inner Mongolia Agricultural University
12:15-12:30	36535	Ecotoxicity of Combined Thallium and Polylactic Acid Microplastics Pollution on the Functional Traits of Folsomia candida	Yuying Chen Guangzhou University, "Rural Non-Point Source Pollution Comprehensive Management Technology Center of Guangdong Province

*Subject to change



Parallel Sessions

Thursday, June 11 Friday, June 12		Room: Convention Center Nanjing 201	
Session 402001		Conservation and Restoration of Black Soils in Agro-Ecosystems	
		Convener: Xinhua Peng, Institute of Agricultural Resources and Regional Planning, CAAS, China	
		Co-Conveners: Ole Wendroth, Department of Plant & Soil Science, University of Kentucky, UAS Zhongbin Zhang, Institute of Agricultural Resources and Regional Planning, CAAS, China Yanru Wen, Institute of Agricultural Resources and Regional Planning, CAAS, China	
Schedule	ID	Title	Presenter
Thursday, June 11			
13:30-13:45	34308	Bio-tillage: A new perspective for sustainable agriculture	Zhongbin Zhang Institute of Agricultural Resources and Regional Planning of the Chinese Academy of Agricultural Sciences
13:45-13:57	35820	Long-term no-tillage farming mitigates waterlogging during extreme rainfall events in black soil region of NE China	Weida Gao China Agricultural University
13:57-14:09	35205	Alleviating Soil Compaction under No-Till Management: Impacts of Cropping System	Wenjuan Zheng Nanjing Agricultural University

*Subject to change

Parallel Sessions

14:09-14:21	35814	Short-term effects of overwintering on porosity of the compacted topsoil due to harvest traffic in Northeast China	Shijie Qin Hunan Institute of Agricultural Soil and Eco-Environment Institute
14:21-14:33	31632	Strip tillage combines the characteristics of conventional tillage and no-tillage in terms of soil macropore structure and hydrothermal conditions	Yongqi Qian Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences
14:33-14:45	34461	Carbon-rich African dark earths have lower carbon footprint than adjacent land use types	Emmanuel Baidoo Kwame Nkrumah University of Science and Technology, Ghana
14:45-14:57	32804	Long-Term No-tillage Retains Intact Biopores in the Topsoil Compared to Conventional Tillage Based on the Soil Profile Study	Jiao Yan China Agricultural University
14:57-15:09	36360	Divergent Pathways of Soil Pore Structural Recovery under No-Till across a Semi-Arid to Semi-Humid Climatic Gradient	Wei Han, Jing Tan, Yanli Yi Shenyang Agricultural University
15:09-15:21	32215	Effects of Furrow Straw Mulch on Soil Erosion and Organic Carbon Redistribution in Soil Aggregates at Sloping Farmland	Libo Ye Jilin Agricultural University
16:30-16:45	32786	Straw return combined with fertility enhances soil organic carbon and soil aggregate formation in Mollisol soils	Fenli Zheng Northwest A & F University
16:45-16:57	31760	Spatial Patterns of Ephemeral Gullies and Their Impacts on Farmland and Crop production in the Black Soil Region of Northeast China	Chunmei Wang Northwest University

*Subject to change

Parallel Sessions

16:57-17:09	31622	Gully Growth Rates in Northeast China	Yanru Wen The Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences
17:09-17:21	32727	Integrated Assessment of Slope Erosion in the Mollisol Region of Northeast China Using ¹³⁷ Cs Tracing and Improved RUSLE2 model	Yingli Shen the Research Center of Soil and Water Conservation and Ecological Environment, Chinese Academy of Sciences and Ministry of Education
17:21-17:33	36525	Coupling effects of freeze-thaw action and thawed soil depth on snowmelt erosion under near-surface hydrologic conditions in the Mollisol region of Northeast China	Bin WANG Beijing Forestry University
17:33-17:45	31951	Black Soil Degradation in Northeast China and its Driving Factors	Yili Meng Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences
17:45-17:57	32713	Effects of incorporated straw length on runoff and soil loss from black soil under simulated heavy rainfall	Yang Yang Beijing Normal University
17:57-18:09	32372	Benchmark and Near-Benchmark Chernozems: Assessing Human-Induced Transformation and Pedodiversity for Black Soils Conservation	Smirnova Maria Faculty of Geography, Lomonosov Moscow State University
18:09-18:21	35451	Evaluating and Advancing Large Language Models for Soil and Water Conservation Tasks: Case Study of the Black Soil Region	Han Luo Northwest A&F University
18:21-18:33	33243	Soil Erosion Processes and Dynamic Mechanisms under Soil Compaction and Freeze-Thaw Cycles in the Black Soil Region of Northeast China	Renming Ma Shenyang Agricultural University

*Subject to change



Parallel Sessions

Friday, June 12

09:00-09:15	32439	Organic carbon loss process of black soil during cultivation	Weixin DING Institute of Soil Science, Chinese Academy of Sciences
09:15-09:30	31785	Health regulation of black soil under the dual carbon strategy	Ying Zhang Northeast Agricultural University
09:30-09:42	34082	Mechanistic Insights into Cover Crops and Straw Incorporation: Root Traits, Soil Properties and Carbon Controls on Erosion Resistance across Degradation Gradients in Mollisols	Miaomiao Wang Northeast Forestry University
09:42-9:54	31968	Spatial heterogeneity of soil C-N-P stoichiometry and its controlling factors in agricultural soils across the Songnen Plain, Northeast China	Shihan Qin Shenyang Agricultural University
09:54-10:06	35290	Thermal Stability of Soil Organic Matter in Farmland Chernozems	Antonina Grigorova Laboratory of Carbon Monitoring of Terrestrial Ecosystems, Institute of Physicochemical and Biological Problems in Soil Science, the Russian Academy of Sciences, Pushchino, Russia
10:06-10:18	31947	Microbial-Mediated Mechanisms Underlying Soil Fertility Stability in the Northeast Black Soil Region of China	Mengmeng Wang Shenyang Agricultural University

*Subject to change



Parallel Sessions

10:18-10:30	33482	Intercropping, soil microbiomes, and mycotoxin risk: mechanistic pathways for safer maize production	Yu-Rui Tang China Agricultural University
10:30-10:42	33139	The overlooked plant litter in the long-term biodiversity experiments	Wei-Ping Zhang China Agricultural University
10:42-10:54	32787	Assessing Black Soil Health and Ecosystem Functioning Change in Response to Agricultural Practices in Fombot, Western Cameroon	Napoléon Amani Kagadju Department of Soil Sciences, Faculty of Agronomy and Agricultural Sciences, University of Dschang
11:15-11:30	34077	Multi-platform monitoring method for the quality of Black soils cropland and site specific application	Huanjun Liu Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
11:30-11:45	33388	Remote Estimates of Soil-Properties in China's Black soil-Region	Kaishan Song Northeast Institute of Geography and Agroecology Chinese Academy of Sciences
11:45-12:00	32084	Multi-temporal monitoring of crop residue cover for large-scale classification of tillage practices: linking deep learning of UAV images with satellite-based spectral modelling	Pu Shi Jilin University", "UC Louavin
12:00-12:15	32947	A Comprehensive Framework for Assessing Land Degradation Neutrality in Northeast China's Black Soil Region: Multi-Source Fusion, Driver Analysis, and Scenario Prediction	Yuanfang Huang and Wentao Zhou China Agricultural University, College of Land Science and Technology

*Subject to change



Parallel Sessions

Friday, June 12		Room: Expo Center, Hall 5, 5203	
Session 402004		Sustainable Management and Restoration of Black Soils: Global Experiences and Actions	
		Convener: Yuxin Tong, Global Soil Partnership, FAO	
		Co-Convener: Zhongjun Jia, Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences	
Schedule	ID	Title	Presenter
09:00-09:15	34546	Sustainable management of Ukrainian Chernozems and regenerative practices for their restoration	L. Vorotyntseva National Scientific Center «Institute for Soil Science and Agrochemistry Research named after O.N. Sokolovsky»
09:15-09:30	319B88	Intensification tradeoff for crop yield under different tillage scenarios towards agricultural sustainability of Black Soils	Jingying Fu [Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences"]
09:30-09:45	32777	Assessment of the health of tropical black soils in the context of intensive agriculture: the case of the Vertisols of Tcheboa , Northern Cameroon	Ndzana Georges Martial Department of Soil Sciences, Faculty of Agronomy and Agricultural Sciences, University of Dschang
09:45-10:00	31572	Sambaquis as Records of Soil Management by Original Populations in the Holocene	Anjos, L.H.C. dos Department of Soils, Institute of Agronomy, Federal Rural University of Rio de Janeiro, UFRRJ
10:00-10:15	35828	Assessment of water resources carrying capacity and identification of obstacle factors in the Songnen Plain based on a combined weighting-matter-element extension model	Lei Wang Beijing Academy of Agriculture and Forestry Sciences

*Subject to change

Parallel Sessions

10:15-10:30	31776	Degradation severity shifts environmental controls and vegetation effects on soil respiration in restored Mollisols	Jia Yang School of Forestry, Northeast Forestry University
10:30-10:45	32800	Unraveling soil conservation practices' effects on soil health and crop performance to inform agricultural management in the pampas region	Valentina Rubio National Institute of Agricultural Research
10:45-11:00	32009	Comparative Study on Conservation and Utilization of Black Soils in China and Argentina	Wenyou Hu Institute of Soil Science, Chinese Academy of Sciences
11:15-11:30	32041	DSS for Sustainable Management and Conservation of Black Soils in Russia	Ivan I. Vasenev Ecology Department, Russian State Agrarian University-Moscow Timiryazev Agricultural Academy
11:30-11:45	32175	Status of Black Soils in Rio de Janeiro: a legacy of mismanagement and recommended practices to reclaim their potential	João Pedro Coumendouros Scott Federal Rural University of Rio de Janeiro - UFRRJ
11:45-12:00	36185	Uncovering the Biophysical Mitigation Potential of Off-Season Croplands across Global Black Soil Regions	Yifeng Cui Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences", "Department of Civil and Environmental Engineering, Massachusetts Institute of Technology", "University of Chinese Academy of Sciences
12:00-12:15	34266	Soil-landscape Modeling on Experimental Plots: RECSOIL on Black Soils in Central Russia	A. Sorokin Department of Soil Science, Lomonosov Moscow State University, Moscow, 119991 Russia
12:15-12:30	33782	Depth-dependent responses of soil microbial communities to subsoil tillage with straw enhance soil quality and crop yield	Xin Xu Shenyang Institute of Applied Ecology, Chinese Academy of Sciences

*Subject to change



Parallel Sessions

Monday, June 8		Room: Expo Center, Hall 5, 5201	
Session 402005		Soil Security and Policy: Foundations for a Sustainable Future	
		Convener: Alex McBratney, University of Sydney, Australia	
		Co-Conveners: Cristine Morgan, Soil Health Institute, USA Jae Yang, Kangwon University, South Korea Yong-Guan Zhu, Research Center for Eco-environmental Sciences, Chinese Academy of Sciences, China	
Schedule	ID	Title	Presenter
13:15-13:30	34920	Advocating for Soil Security: or “First Catch Your Hare”	Penelope Wensley Global Soil Security Think Tank
13:30-13:45	32209	The Global Pedogenon Map: combining and Spatialising the Factors of Soil Formation	Nicolas Francos Sydney Institute of Agriculture & School of Life & Environmental Sciences, The University of Sydney
13:45-14:00	33091	European Union advances in soil protection with the Soil Monitoring Law, the Mission Soil and the Carbon farming	Panos Panagos European Commission - Joint Research Centre
14:00-14:15	31838	A Pedogenon Approach to Declining Soil Districts across Europe	Quentin Styc The University of Sydney
14:15-14:30	35299	Development of Canadian Soil Strategy	Alan Kruszel Soil Conservation Council of Canada

*Subject to change

Parallel Sessions

14:30-14:45	33070	Components of a national soil security strategy for sustainable soil use and management	Amin Sharififar the University of Sydney
14:45-15:00	31830	Implementing the Soil Security Framework to Assess National Soil Governance: The Case of France	Julie Celia Itey IUCN WCEL SoilsAL SG
15:00-15:15	31892	Quantifying Soil Security under Climate Change: Integrating Digital Soil Mapping and the Soil Security Assessment Framework	Thilini Jayasekara School of Life and Environmental Sciences, The University of Sydney
16:30-16:45	34864	Soil Genotype and Cultural Diversity in Jeju Island, Korea: Linking Soil Security with Societal Heritage	Jae Yang Department of Biological Environment, Kangwon National University
16:45-17:00	34540	Connecting Soils and Consumers - The Regulation of Undefined Food Label Agricultural Sustainability Claims in Australia	Christopher Wilmot PhD Candidate, (Faculty of Business, Justice and Behavioural Science, Charles Sturt University, Bathurst, Australia, the Soil CRC Newcastle Australia and the University of Newcastle Australia)
17:00-17:15	32155	Legislation in Australia working for soil security (LAWSS)	Julio C. Pachon Maldonado School of Life and Environmental Sciences, The University of Sydney
17:15-17:30	32208	Towards a Global Convention to Secure Soil	Wartini Ng School of Life and Environmental Sciences, The University of Sydney, NSW 2015, Australia, Aroua, Soil Security Think Tank, Secretariat
17:30-18:30	-	Panel Discussion	Alex McBratney, Jae Yang, Cristine Morgan (facilitators)

*Subject to change

Parallel Sessions

Tuesday, June 9		Room: Expo Center, Hall 7, 7203	
Session 402006		Soil, Agriculture, and Human Futures: From Cold Frontiers to Global Challenges	
		Conveners: Chunwu Zhu, Institute of Soil Science, Chinese Academy of Sciences, China Giuseppe Corti, CREA - Council for Agricultural Research and Economics, Centre of Agriculture and Environment, Firenze, Italy Alma Guadalupe Barajas-Alcalá, National Autonomous University of Mexico campus Morelia Co-Conveners: Yongguan Zhu, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing, China Junguo Liu, North China University of Water Resources and Electric Power, Henan, China Ziska, Lewis H., Environmental Health Sciences, Mailman School of Public Health, Columbia University Peng Wang, Nanjing Agriculture University Yu Wang, Institute of Soil Science, Chinese Academy of Sciences Silvia Imhoff, ICiAgro Litoral - CONICET-UNL, Esperanza, Argentina Karen Vancampenhout, KU Leuven Association, Leuven, Belgium	
Schedule	ID	Title	Presenter
09:00-09:15	33003	Towards Sustainable Rice Cropping Systems in a Changing Climate	Kees Jan van Groenigen University of Exeter
09:15-09:30	319B82	Research Progress and Prospects of Paddy FACE	Chunwu Zhu ["Institute of Soil Science, Chinese Academy of Sciences"]
09:30-09:45	32823	Bio-Composts and Soil Microbiomes under a One Health Approach: Assessing Microbial Shifts and Antimicrobial Resistance in an Ex-Situ Pilot Study	Adriano Sofo University of Basilicata

*Subject to change



Parallel Sessions

09:45-10:00	33750	Characteristics of paddy soil: specifics in dynamics in organic carbon cycling	Tida Ge Ningbo University
10:00-10:15	32809	Occurrence, Properties and Sustainable Management of Degraded Upland Soils Under a Changing Climate in the Philippines	Victor B. Asio Visayas State University
10:15-10:30	32665	Omics analysis reveals the antagonistic mechanism of foliar zinc-selenium application and its impact on wheat grain quality	Xiaohong Tian College of Natural Resources and Environment, Northwest A&F University
10:30-10:45	33202	Preservation of Patterned Ground in Permafrost Non-Affected Soils: Evidence from the Central Apennines (Italy)	Andrea Salvucci Department of Agriculture, Food and Environmental Sciences, Polytechnic University of Marche, Ancona (Italy)
10:45-11:00	33749	Optimizing Mineral Nutrition to Improve Soybean Yield and Quality under Elevated CO ₂	Zhichang Chen Institute of Soil Science, Chinese Academy of Sciences
11:15-11:30	31556	From Soil to Grain: Organic Farming Improves Micronutrient Bioavailability	Xiaopeng Gao University of Manitoba
11:30-11:45	32461	Managing domestic trade for food security with environmental and economic equity in China	Chen Wang Zhejiang University
11:45-12:00	33906	Revisiting Food Security in the Context of Climate Change: How Co-Occurring Heatwaves and Atmospheric Lead Deposition Jeopardize Crop Production	Kai Xu Sun Yat-sen University
13:00-13:15	33558	The link between soil security and one health	Damien J Field The University of Sydney
13:15-13:30	319B81	Climate change intensifies phosphorus limitation in rice systems	Yu Wang ["Institute of Soil Science, Chinese Academy of Sciences"]

*Subject to change



Parallel Sessions

13:30-13:45	35673	Soil Health- Driven Improvements in Tropical Fruit Production: Insights from a Vietnam “Living Lab”	Chon Nguyen Quang Eurofins Agro Testing Competence Centre, Wageningen, The Netherlands
13:45-14:00	34433	Remediation of Degradaged Coastal Soil Using Biochar and Pyroligneous Acid	Hongyu Zhang Ocean University of China
14:00-14:15	36036	Soil pH controls cropland N ₂ O responses to rising CO ₂	Yu Jiang Nanjing Agricultural University
14:15-14:30	34715	Maize residue management for enhancing wheat productivity and soil health under conservation agriculture	Naveen Gupta Department of Soil Science, Punjab Agricultural University, Ludhiana (141004), Punjab, India
14:30-14:45	35446	Leveraging Sulfate to Modulate Arsenic Accumulation in Rice	Shuqiong Kong Yangtze University
14:45-15:00	33745	Global wheat soil metagenomes reveal dryland cropping systems as microbial genomic hotspots	Yi Zhou Adelaide University
15:00-15:15	35796	Reduced Protein Content under Elevated CO ₂ Enhances Perfluorooctanoic Acid Bioaccumulation in Wheat	Fan Jiang Nanjing University
16:30-16:45	34470	Beyond constant CO ₂ : Asymmetric day-night elevation, arbuscular mycorrhizal fungi, and intercropping dynamics shape plant physiology and productivity	Xinhua He Shanxi Agr UVSichuan Agr UVUWAVUC Davis
16:45-17:00	34564	Integrated Physiological and Microbial Mechanisms Underlying Cold Tolerance in Japonica Rice: From Root Function to Rhizosphere Ecology	Jia Yan Northeast Agriculture University
17:00-17:15	36041	Active soil microbiomes link urbanization and climate to zoonotic pathogen risk in Chinese cities	Yi-Yue Zhang Institute of Urban Environment, Chinese Academy of Sciences

*Subject to change



Parallel Sessions

Monday, June 8 Tuesday, June 9		Room: Convention Center Nanjing 203	
Session 403002		Land Use and Management Effects on Soil Health and Environmental Quality	
		Convener: Gary Feng, USDA-ARS, United States	
		Co-Conveners: Tingting Chang, Hohai University, China	
		Yujie Zhang, Nanjing Hydraulic Research Institute, China	
Schedule	ID	Title	Presenter
Monday, June 8			
13:15-13:30	31613	Signatures of soil structural degradation: exploring stable water isotopes in soil pores	Jessica Brook School of Biological Sciences, University of Aberdeen
13:30-13:45	31684	Ecological impacts of farming practices on soil quality in a Mediterranean agroecosystem	Rosangela Adesso Department of Agricultural, Forestry, Food and Environmental Sciences (DAFE), University of Basilicata
13:45-14:00	32230	Impact of organic mulch dose and type: A comprehensive Belgian case study	Rémy Willemet Plant Sciences Unit, Flanders Research Institute for Agriculture, Fisheries and Food (ILVO),"Department of Environment - SENSE Unit, Ghent University
14:00-14:15	32357	Soil health in the vineyards of North-Western Italy: a story of terroirs	Sara Negri Department of Agricultural, Forest and Food Sciences, University of Turin

*Subject to change



Parallel Sessions

14:15-14:30	32437	Effects of Land-Use Change on Soil Infiltrability and Preferential Flow in Typical Low Hilly Area	Linlin Chu Hohai University
14:30-14:45	32567	Soil health and carbon sequestration dynamics in sandy soil within the Low Carbon Brazilian Beef protocol	Flávia Cristina dos Santos Embrapa Maize and Sorghum
14:45-15:00	32576	Improving Soil Health in An Irrigated Arid Agroecosystem	Omololu J. Idowu Department of Extension Plant Sciences, New Mexico State University
15:00-15:15	32659	Dynamic of soil organic carbon and phosphorus for different technological options in the Peruvian Amazon	Julio Alegre UNIVERSIDAD NACIONAL AGRARIA LA MOLINA
16:30-16:45	32756	Effects of regenerative organic agriculture on soil quality and plant biochemistry	Pavel Chechenkov Department of Humanities, University of Ferrara
16:45-17:00	32775	Post-Agrogenic Ecosystem Recovery in the Smolensk Lakeland: a Comprehensive Study in Western Russia	Ivan Semenov Isaev Centre for Problems of Forest Ecology and Productivity of the Russian Academy of Sciences
17:00-17:15	32808	Impact of Intensive Vegetable Production on the Properties of Andisol	Victor B. Asio Visayas State University

*Subject to change

Parallel Sessions

17:15-17:30	32875	Soil quality variation and its driving factors in rubber plantations of tropical China	Rui Sun Rubber Research Institute, Chinese Academy of Tropical Agricultural Sciences
17:30-17:45	32910	Distribution of Available Phosphorus in the Soils of Belgrade Across Urban Development Zones	Mirjana Tešić Department of Landscape architecture and horticulture, University of Belgrade Faculty of Forestry
17:45-18:00	33155	Tillage Intensity as a Driver of Soil Bacterial Composition and Functional Potential	Adriano Sofo Department of Agricultural, Forestry, Food and Environmental Sciences (DAFE), University of Basilicata, Potenza, Italy
18:00-18:10	31576	Soil health as a driver of yield patterns and management	Ricardo Canal Filho Laboratory of Precision Agriculture - Luiz de Queiroz College of Agriculture, University of São Paulo
18:10-18:20	32242	A Mixed-Methods Approach to Study Land Management and Soil Health in Urban Soils	Chengcheng Feng Wageningen University & Research
18:20-18:30	33541	The nonlinear response effect of arable land quality on arable land fragmentation in mountain areas	Ranran Pang Northeastern University

*Subject to change

Parallel Sessions

Tuesday, June 9

09:00-09:15	33206	Soil health and ecosystem services across land uses and biogeographical regions in Europe	Virginia Sánchez-Navarro Department of Agricultural Engineering, ETSIA, Universidad Politécnica de Cartagena, Cartagena, Spain
09:15-09:30	33342	Decades of Data: Evaluating soil dynamics under contrasting tillage systems in Fuchsenbigl, Austria, since 1988	Sophia Götzinger Austrian Agency for Health and Food Safety (AGES), Department for Soil Health and Plant Nutrition, Vienna, Austria
09:30-09:45	33350	Soil Health in U.S. Northern Great Plains Agriculture: A Comprehensive Review and Meta-Analysis	Carlos B. Pires School of Natural Resource Sciences, North Dakota State University
09:45-10:00	33401	A Process-Based Approach to Assess the Spatial Variability of Ecosystem Services and the Potential Soil Health Status	Marialaura Bancheri Institute for Mediterranean Agricultural and Forestry Systems (ISAFOM), National Research Council, Piazzale E. Fermi, 1, Portici, NA, 80055, Italy
10:00-10:15	33618	Initial soil carbon status governs soil C stock changes, while pore characteristics improve after conversion of arable land to semi-natural grassland	Lars J. Munkholm Aarhus University
10:15-10:30	33801	Nitrogen dynamics, Soil Health, and Yield Responses under Long-Term Fertilizer and Manure Management in SAT of Central India	S. D. Jadhao Department of Soil Science, Dr. Panjabrao Deshmukh Krishi Vidyapeeth
10:30-10:45	33967	Soil health restoring in Kenya's Maasai Mara savannas degraded by overgrazing	Mauro De Feudis Department of Agricultural and Food Sciences Alma Mater Studiorum-University of Bologna
10:45-11:00	34085	Effects of protection time and stationary state on the fractal dimensions characteristics of the sandy soil in Hunshandake Sandy Land	Shuli Wang Northeast Forestry University

*Subject to change

Parallel Sessions

11:15-11:30	34225	Long-Term No-Tillage Effects on Plant Residue Decomposition and Soil Organic Carbon Formation and Accumulation Patterns in a Japanese Andosol	Daniel Asiamah Aboagye United Graduate School of Agricultural Science, Tokyo University of Agriculture and Technology, Tokyo, Japan
11:30-11:45	34346	Vegetation-Driven Soil Organic Carbon Regulate Mercury Accumulation in Karst Soil Profiles	Jicheng Xia Guizhou University
11:45-12:00	34467	THE LEGISLATIVE BASIS FOR SOIL PROTECTION - THE RED SOIL BOOK	Bezuglova Olga Southern federal university
12:00-12:15	34475	Replacing periodic burning with improved forages reshapes soil carbon and nitrogen dynamics and tree-soil interactions in Colombian savannas.	Melanie Estrella Departamento de Producción Agraria, Escuela Técnica Superior de Ingeniería Agronómica, Alimentaria y de Biosistemas, Universidad Politécnica de Madrid, Madrid, Spain
12:15-12:30	34613	Impact of Strategic Tillage After 26 Years in No-tillage System on Soil Health	Denizart Bolonhezi Sugarcane Research Center - IAC
13:30-13:45	34518	The effect of winter-sown oat catch crops on nitrogen leaching after livestock grazing	Brendon Malcolm New Zealand Institute for Bioeconomy Science Limited
13:45-14:00	34711	High standard farmland construction in typical agricultural areas of the Yellow River Basin based on cultivated land health quality evaluation	Peijia Liu Zhengzhou University
14:00-14:15	34912	Soil Properties of Oil Palm Based Agroforestry System	Yeong Wei Yan Universiti Putra Malaysia
14:15-14:30	35017	Soil carbon and nitrogen dynamics in mechanized maize-based intercropping	Pedro R. Soares Soil Physics and Land Management Group (SLM), Wageningen University & Research, Wageningen, The Netherlands", "Research Centre for Natural Resources Environment and Society (CERNAS), Polytechnic Institute of Coimbra, Coimbra, Portugal

*Subject to change

Parallel Sessions

14:30-14:45	35224	Oil Palm Height, Frond Development and Chlorophyll Responses under Monoculture and Nauclea subdita Agroforestry	Nur Azleen Jamal Jaganathan Department of Land Management, Universiti Putra Malaysia, Selangor, Malaysia
14:45-15:00	35422	Silvopastoral systems enhance multiple soil ecosystem services and provide sensitive indicators for monitoring land restoration in the Colombian Amazon	Adriana M. Silva-Olaya 1. University of the Amazon, Amazonian Research Center CIMAZ-MACAGUAL
15:00-15:15	35473	Prospective Assessment of Land Use/Land Cover Shifts using a Coupled Cellular Automata coupled Artificial Neural Network (CA-ANN) Model in the Central India	Tarun Kumar Thakur Indira Gandhi National Tribal University, Amarkantak, MP, India
16:30-16:45	35547	Decision support tool for improved nutrient and carbon management at farm level	Mengru Wang Earth Systems and Global Change, Wageningen University & Research, Wageningen, The Netherlands
16:45-17:00	35548	Rice growth dynamics under soil conditions mediated by river water	Eva de Melo Ferreira Vietnamese-German University
17:00-17:15	35768	Optimized fertilization strengthens the soil health-yield relationship by enhancing biological activities	Junling Zhang China Agricultural University
17:15-17:30	36609	Alterations in Soil Physiology Enable Cirsium arvense to Invade Mountain Ecosystems	Harminder Pal Singh Department of Environment Studies, Panjab University, India
17:30-17:45	319B41	Harnessing machine learning to improve nitrogen loss predictions in agroecosystems	Shu Kee Lam ["The University of Melbourne"]
17:45-18:00	34260	Land Use and Management Effects on Soil Health of Three Soil Types in the Republic of Serbia	Maja Manojlović University of Novi Sad, Faculty of Agriculture, Novi Sad, Republic of Serbia

*Subject to change



Parallel Sessions

Thursday, June 11 Friday, June 12		Room: Expo Center, Hall 5, 5201	
Session 404002		Share Our Standpoints of Soil Teaching and Learning at School, University and Civil Society for the Future Development of Better Soil Education System	
		Convener: Takashi Kosaki, Aichi University, Japan	
		Co-Conveners: Keiko Mori, Saitama Museum of Rivers, Japan Claudio Zaccane, University of Verona, Italy Taru Sanden, Austrian Agency for Health and Food Safety, Austria	
Schedule	ID	Title	Presenter
Thursday, June 11			
11:15-11:20	-	Introduction	Takashi Kosaki
11:20-11:35	31980	From Soil Pits to Global Goals: Reimagining Soil Education for a Sustainable Future	Said Al-Ismaily Department of Soils, Water and Agricultural Engineering, Sultan Qaboos University
11:35-11:50	32179	EXPLORING THE SOIL: Learning and service guide to assess soil quality	Rosa M Poch Universitat de Lleida
11:50-12:05	33705	Asking once more; What is the essential knowledge of soil in early education, particularly in Monsoon Asian countries?	Keiko Mori Saitama Museum of Rivers
12:05-12:20	319B42	Soil Science Education in Kazakhstan Universities: Strengthening Soil and Geological Literacy for Sustainable Land Management	Aigul Zhapparova ["Kazakh National Agrarian Research University"]

*Subject to change

Parallel Sessions

13:30-13:45	32691	Building Soil Science Literacy: Assessing Impact in K-12 Teacher Training	Jim Cudahy Soil Science Society of America
13:45-14:00	33462	Cultivating Soil Literacy in China: Assessing the Soil Collage as a Transformative Educational Tool	Yan Zhu Abovefarm
14:00-14:15	33085	Building Soil Literacy Through LADA: Teaching Soil Assessment, SOC Understanding, and Reliable Sampling	Maira Kussainova Kazakh National Agrarian Research University", "Kazakh-German University (DKU)", "Kyoto University, Graduate School of Agriculture", "Alfred University", "Rakurs Tech
14:15-14:30	32755	Enhancing Soil Science Laboratory Learning through a Computer-Based Mineral Identification Program (MIP)	P. Trakoonyingcharoen Soil Science Department, Faculty of Agriculture at Kamphaeng Saen, Kasetsart University
14:30-14:45	32936	Virtual Simulator For Teaching Soil Bulk Density: A Bridge Between Soil Science And The Digital Classroom	Vasquez-Rendon, Roman Roberto Chapingo Autonomous University
14:45-15:00	35609	Pedagogical Fossilization in the Era of AI: The Risks of Algorithmic Bias in Soil Science Education	Alessandro Samuel-Rosa Federal Technological University of Paraná (Department of Agronomy, Santa Helena, Paraná, Brazil)
15:00-15:15	35321	Reviving Pedological Insight in Modern Soil Research	K. Karthikeyan ICAR-NBSS&LUP

*Subject to change



Parallel Sessions

16:30-16:45	36368	It's the pits! Cementing theory through practice in soil science teaching	Paul Hallett University of Aberdeen
16:45-17:00	32337	Digging Deeper into the State of Collegiate Soil Judging in the United States	Elizabeth M. Eroshenko University of Nebraska-Lincoln
17:00-17:15	32153	Experiential learning in the field: assessing the impact of the 2024 Moana Oceania Soil Judging Competition (New Zealand) on participants knowledge, skills and attitudes.	Carol Smith Lincoln University
17:15-17:30	32841	Fostering Soil Science: Insights from the 1st European Soil Judging Contest	Luis D. Olivares-Martinez Soil Science and Environmental Technologies Group (GETECMA), Department of Agrochemistry and Environment, Miguel Hernández University (UMH)
17:30-17:45	33141	An International Master school in Applied Soil Science. The EU project "Medsoils-challenge"	Simone Priori University of Tuscia, Department of Agriculture and Forest Sciences
17:45-18:00	33033	Co-developing soil science teaching and learning across North-South - a unique educational collaboration between The University of Melbourne and National University of Laos	Alexis Pang School of Agriculture, Food and Ecosystem Sciences, Faculty of Science, University of Melbourne
18:00-18:15	32132	Sustainable Land Management Study in Tertiary Institutions for Land Reclamation: Key to Sustainable Agriculture	Sifau Adejumo Department of Crop Protection and Environmental Biology, Faculty of Agriculture, University of Ibadan

*Subject to change

Parallel Sessions

Friday, June 12

09:00-09:15	319B80	Current Status and Future Trends of Soil Education in Mongolia	Khadbaatar Sandag ["Geography Department, Mongolian National University of Education"]
09:15-09:30	35444	Soil Science Education - An Introspection	Jagdish Prasad ICAR-NBSS&LUP
09:30-09:45	319B43	The World Soil of the Year: a way to promote and popularize soils	J.J. Lelis Leal de Souza ["Universidade Federal de Vicosá"]
09:45-10:00	33234	Sculpting the Campus, Cultivating Soil: An Eco-Art Pedagogy of Care and Action	Lipeng Jin Sichuan Fine Art Institute
10:00-10:15	34845	From Soil to Art: Soil-Pigmented Wax Crayons as an Educational Resource	Vanda Moreira Martins State University of Western Paraná - UNIOESTE
10:15-10:30	33551	Soil: Eternal Heritage and Khayyam's Perspective	Seyed Kazem Alavipanah, Jafar Jafarzadeh Prof. of University of Tehran
10:30-10:45	-	Discussion	Takashi Kosaki

*Subject to change



Parallel Sessions

Thursday, June 11 Friday, June 12	Room: Expo Center, Hall 6, 6202
Session 406003	Soil and People: Culture, Education, and Intergenerational Connections
	Conveners: Axel Cerón González, FWO Individual doctoral fellow - Vrije Universiteit Brussel and KU Leuven, Belgium Laura Bertha Reyes-Sánchez. National Autonomous University of Mexico Alexandra Toland, Bauhaus-Universität Weimar Isabelle Verbeke, FAO, Land and Water Officer, Global Soil Partnership secretariat Sandén Taru, Austrian Agency for Health and Food Safety, Austria Nkosinomusa Buthelezi-Dube, University of KwaZulu-Natal, South Africa Rita Brara Mukhopadhyay, Visiting Professor, Ashoka University, Sonipat, India and Senior Fellow, Institute of Economic Growth, University Enclave, Delhi-110007 Co-Conveners: Arabela Vega Aguilar, Doctoral candidate - Autonomous University of Barcelona, Spain Dawid Kupka, University of Agriculture in Kraków, Poland Javier Leonardo Toxqui Roldán, Soil Genesis, Morphology and Classification Research Group, Colegio de Postgraduados Campus Montecillo, Mexico Yannick Devos, AMGC - Archaeology, Environmental Change and Geochemistry Research Group, Vrije Universiteit Brussel, Belgium Ma. del Carmen Gutiérrez Castorena, Genesis, Morphology and Soil Classification Research Group, Colegio de Postgraduados Campus Montecillo, Mexico Xin Song, Institute of Soil Science, CAS Anna Krzywoszynska, University of Oulu Takuro Shinano, Hokkaido University Katsutoshi Mizuta, University of Kentucky



Parallel Sessions

Schedule	ID	Title	Presenter
Thursday, June 11			
11:15-11:20	-	Opening: Soils & Heritage	Axel Cerón González
11:20-11:40	31834	Two-Eyed Soil Seeing: Bridging Indigenous Knowledge and Science for Soil Security	Alex McBratney The University of Sydney", "Sydney Institute of Agriculture", "Aroua Global Soil Think Tank
11:40-11:55	31573	Indigenous Agricultural Terraces in Mexico	Javier L. Toxqui-Roldán Colegio de Postgraduados
11:55-12:10	33283	Soil Memory and Heritage: Foundations for Soil Literacy and the Codification of Soil Rights	Edoardo A.C. Costantini Academy of Georgofili, Florence; National Academy of Agriculture, Bologna CNR-IBE - Department of Biology, Agriculture and Food Sciences, Sesto Fiorentino 50019 (Italy)
12:10-12:25	31874	Soil Memory in Karstic Terraced Landscapes: A Geoarchaeology Study of Montefalco Castle, Central Italy	Axel Cerón González Vrije Universiteit Brussel
12:25-12:35	-	Closing & Discussion	Javier Toxqui-Roldan + Edoardo A.C. Costantini + Alex MacBratney + Axel Ceron
13:30-13:35	-	2nd Part: Equity, Diversity & Inclusion	Laura Bertha Reyes + Nkosinomusa Buthelezi-Dube

*Subject to change

Parallel Sessions

13:35-13:50	32180	Profile of professor diversities (male and women) in Brazilian soil science	Risely Ferraz Almeida Universidade do Estado da Bahia
13:50-14:05	31732	Salary survey of soil science faculty in the United States of America: A gender comparison	Eric C. Brevik School of Agricultural Sciences, Southern Illinois University", "School of Earth Systems and Sustainability, Southern Illinois University
14:05-14:20	32177	Gendered Dimensions of Soil and Agricultural Practices in Rajasthan's Arid Landscapes	Kanchan Mathur Professor and Officiating Director (Former) Institute of Development Studies Institute of Development Studies
14:20-14:35	33554	Pathways to Inclusivity in Agricultural and Environmental Sciences	Jim Cudahy Soil Science Society of America
14:35-14:50	33780	Building the Future of Soil Science: Priorities in Workforce Development and Global Engagement	Michael Thompson Iowa State University
14:50-15:00	-	Closing & Discussion	Laura Bertha Reyes + Nkosinomusa Buthelezi-Dube
16:30-16:35	-	3rd Part: Education & Communication	Isabelle Verbecke
16:35-16:50	33406	Raising Soil Awareness through "Soil of the Year" Campaigns in Central Europe	Przemysław Charzyński Department of Soil Science and Landscape Ecology, Nicolaus Copernicus University in Toruń, Poland

*Subject to change

Parallel Sessions

16:50-17:05	33860	From Mentor to the Young: The Soil Education Centre - Soil Museum in Krakow as a Living Story of Intergenerational Soil Advocacy	Dawid Kupka Department of Ecology and Silviculture, Faculty of Forestry, University of Agriculture in Krakow
17:05-17:20	34508	The Fun Soil Profiles according to the World Reference Base for Soil Resources	Adriana Ribon University of Goiás
17:20-17:35	32382	Digital resources and automated questionnaires for soil science education across secondary and higher education in Mexico	Axel Cerón-González Archaeology, Environmental Changes & Geochemistry Research Group, Vrije Universiteit Brussel", "Department of Earth and Environmental Sciences, KU Leuven
17:35-17:50	36479	From Policy to Practice: Young in Soil and Earth Science Society as a Model for Soil Education in Australia	Emily Leyden Adelaide University
17:50-18:05	32810	Operationalizing the Soil Information System Framework: a methodological approach to strengthening collaboration and strategic development applied through country roadmap workshops	David Rossiter ISRIC - World Soil Information
18:05-18:20	319B40	Publishing as an Early-Career Researcher in Soil and Water Conservation: Insights from International Soil and Water Conservation Research	Liqin Qu State Key Laboratory of Simulation and Regulation of Water Cycle in River Basin, China Institute of Water Resources and Hydropower Research
18:20-18:30	-	Closing & Discussion	Isabelle Verbecke

*Subject to change



Parallel Sessions

Friday, June 12

09:00-09:05	-	4th Part: Early Career Researchers	Takuro Shinano
09:05-09:20	31807	Crop identity modulates the homogenization of soil microbial functions induced by long-term fertilization	Guangren Zheng Northeast Institute of Geography and Agroecology Chinese Academy of Sciences Center for Agricultural Technology
09:20-09:35	31846	Digging Deeper: How Soil Re-engineering and Nitrogen Strategies Improve Root Growth and Yield in Barley and Triticale	Kanchana Wickramarachchi Department of Primary Industries and Regional Development
09:35-09:50	34720	Regional Assessment of Soil Compaction and Susceptibility in Salt-affected Arable Land in the Yellow River Delta	Dong Yuhao Modern Agricultural Engineering Laboratory, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences
09:50-10:05	35748	Source to risk receptor transport and spatial hotspots of heavy metals pollution in peri-urban agricultural soils of the largest megacity in China	Shiyan Yang Shanghai Academy of Agricultural Sciences
10:05-10:20	35761	Soil Dashboards creation and soil information systems: The case for Ghana	Edward Yeboah CSIR-Soil Research Institute, Academy Post Office, Kwadaso, Kumasi, Ghana
10:20-10:25	-	5th Part: Soil Humanities	Alexandra Toland

*Subject to change

Parallel Sessions

10:25-10:40	32572	Soil Justice: A Radical Black Marxist Framework for Addressing Soil Contamination	Salvatore Engel-Di Mauro SUNY New Paltz
10:40-10:55	34473	Soil as Metaphor in Sufi Poetry in India: matti, dharti and zameen	Ronie Parciack Dept. of East-Asian Studies, Tel Aviv University
11:15-11:30	35612	The evolution of soil science research in Portugal since the 19th century	João Horta Marques MED—Mediterranean Institute for Agriculture, Environment and Development and CHANGE—Global Change and Sustainability Institute, Universidade de Évora, Pólo da Mitra, Ap. 94, 7006-554 Évora, Portugal", "CEF-Centro de Estudos Florestais and TERRA - Associate Laboratory, Instituto Superior de Agronomia, Universidade de Lisboa, Tapada da Ajuda, Lisbon 1349-017, Portugal
11:30-11:45	35044	Soil vocabularies: towards joint human and machine readable terminology	Maria Fantappie ISRIC - World Soil Information
11:45-12:00	35604	From Soil Science to Soil-ology: A Philosophical Framework for Rethinking Human-Soil Relations	Kambiz Bazargan Agricultural Research Education and Extension organization (AREEO), Soil and Water Research Institute (SWRI), Karaj, Iran
12:00-12:15	-	Closing & Discussion	A. Toland + T. Shinano + I. Verbecke + N. Buthelizi-Dube + L.B. Reyes-Sanchez + A. Ceron-Gonzalez

*Subject to change

Parallel Sessions

Monday, June 8 Tuesday, June 9		Room: Convention Center Nanjing 201	
Session 407001		Soil Nitrogen Processes, Consequences, and Regulations	
		Convener: Feng Zhou, College of Urban and Environmental Sciences, Peking University	
		Co-Conveners: Baojing Gu, College of Environmental & Resource Sciences, Zhejiang University Jinbo Zhang, School of Breeding and Multiplication, Hainan University Xu Zhao, Institute of Soil Science, Chinese Academy of Sciences Jun Shan, Institute of Soil Science, Chinese Academy of Sciences	
Schedule	ID	Title	Presenter
Monday, June 8			
13:15-13:30	36210	The potential of optimized agricultural management to reduce global cropland nitrogen losses within safe boundaries	Wim de Vries Wageningen University and Research
13:30-13:45	35601	Reducing N-related environmental risk while achieving food security in China	Liu Xuejun China Agricultural University
13:45-14:00	31603	Global Soil Nitrogen Budget and Pollution hotspots (1980-2022)	Xiuming Zhang IIASA", "Zhejiang University
14:00-14:15	33879	Estimating fractions of N ₂ O emissions from nitrification and denitrification using data assimilation	Baobao Pan University of Melbourne
14:15-14:30	34896	Optimizing the C: N Ratio of N-Enriched Biochar Enhances Soil Nitrogen Dynamics, Enzyme Activity, and Crop Productivity under Reduced Nitrogen Inputs	Muhammad Tauseef Jaffar Key Laboratory of Plant Nutrition and the Agri-environment in Northwest China, Ministry of Agriculture and Rural Affairs, Northwest A&F University, Yangling 712100, China", "Key Laboratory of Low-carbon Green Agriculture in Northwestern China, Ministry of Agriculture and Rural Affairs, P. R. China, Yangling 712100, China", "College of Natural Resources and Environment, Northwest A & F University, Yangling 712100, Yangling, China

*Subject to change

Parallel Sessions

14:30-14:45	32023	SmartField Solutions: Advancing N ₂ O Mitigation in Danish Agriculture	Meng Kong Department of Agroecology, Aarhus University, AU Viborg
14:45-15:00	32289	Modeling soil HONO emissions	Dianming Wu East China Normal University
15:00-15:15	32965	Balancing Productivity, Profitability, and Sustainability: Quantifying Nitrogen Fate and Optimizing Site-Specific Management in High-Rainfall Agroecosystems	Vaibhav Balasaheb Shelar Auburn University
16:30-16:45	35678	Cultivating Resilient Crops: Nitrogen Management for Climate and SDG Benefits	Jagdish Kumar Ladha University of California, Davis
16:45-17:00	32516	Evaluating the Fate of Nitrate in Deep Soils Using Dual Isotopes	Xia Zhu-Barker University of Wisconsin-Madison
17:00-17:15	32239	The disparity between canopy and understory N deposition in regulating soil N ₂ O emissions in a Moso bamboo forest	Yanjiang Cai Zhejiang A&F University
17:15-17:30	36033	Free-living nitrogen fixation in paddy soils: integrating continental-scale drivers with phenologic dependent dissolved organic matter coupling	Jun Shan Institute of Soil Science, Chinese Academy of Sciences
17:30-17:45	34485	Long-term atmospheric nitrogen deposition and environmental impacts in a subtropical watershed in Central China	Jianlin Shen Institute of Subtropical Agriculture, Chinese Academy of Sciences
17:45-18:00	34724	Soil rather than fertilizer dominates N ₂ emissions in flooded paddy fields	Longlong Xia Institute of Soil Science, Chinese Academy of Sciences
18:00-18:15	35936	Contrasting effects of drought periods on grassland nitrous oxide emissions are attenuated by nitrogen deposition	Yujie SHI Northeast Normal University

*Subject to change

Parallel Sessions

Tuesday, June 9

09:00-09:15	319B49	How do nitrogen transformation processes affect nitrogen use efficiency in rice paddy	Xiaoyuan Yan ["Institute of Soil Science, Chinese Academy of Sciences"]
09:15-09:30	35116	Quantify gaseous nitrogen production from agricultural soils using a microbial-explicit model	Zhifeng Yan Tianjin University
09:30-09:45	33701	Nitrogen Budgets and Runoff Losses: Addressing Environmental Challenges through Site-Specific Management	Rishi Prasad Auburn University
09:45-10:00	33909	Effects of manure substitution on nitrous oxide emissions in a subtropical Ultisol	Yongxin Lin Fujian Normal University
10:00-10:15	33972	Effect of Soil Moisture on Nitrous Oxide Emission from Two Intensively Cultivated Agricultural Soils in Sri Lanka - A Microcosm Study	K.M.T.S. Kulathunga Department of Soil Science, Faculty of Agriculture, University of Peradeniya
10:15-10:30	34141	Global nosZ diversity informs microbial community profiling related to N ₂ O reduction in maize cropland soils	Gengbo Jiang Sun Yat-sen University
10:30-10:45	35255	Dynamic Hydrological Connectivity Regulates the Transport and Transformation of Soil Derived N ₂ O in a Subtropical Karst Critical Zone	Nan Zou Tsinghua University
10:45-11:00	35486	Evaluation of the Effect of Urease and Nitrification Inhibitors on Mitigating Ammonia and Nitrous Oxide in North Carolina Corn Systems	Doyeong Hur North Carolina State University
11:15-11:30	36548	Tracing nitrogen and carbon controls on urine-induced N ₂ O emissions in regenerative and continuous grazing systems	Yuxue Cai 1 Global Agriculture and Food Systems, The Royal (Dick) School of Veterinary Studies, University of Edinburgh, Edinburgh, UK

*Subject to change



Parallel Sessions

11:30-11:45	36600	Role of particulate organic matter accrual in affecting 15N fate to grain corn comparing long-term vs. first-time vs. no cover cropping	Yajun Peng University of Guelph
11:45-12:00	34358	Nitrous oxide emissions and soil organic carbon in a 60-year long-term crop-pasture rotation experiment	Mariana Rosas-Alenicov Instituto Nacional de Investigación Agropecuaria (INIA)
12:00-12:15	34446	Mechanistic insights into microbial pathways for nitrate loss in forest ecosystems	Jinsen Zheng Japan International Research Center for Agricultural Sciences
13:30-13:45	319B48	Viruses of nitrifying prokaryotes and their impact on soil nitrogen cycling	Graeme W. Nicol ["Department of Microbial Ecology, University of Lyon"]
13:45-14:00	32274	Dissolved Organic Nitrogen Losses in Organic Systems: Challenging the Texture Paradigm	Eleanor Sangree University of California Santa Cruz
14:00-14:15	32457	Depth-Dependent Soil Compaction as a Modulator of Nitrous Oxide Fluxes in Cropping Systems	Elysia Lewis Department of Agronomy, Food, Natural Resources, Animals, and Environment, University of Padova
14:15-14:30	32751	Feasibility of gypsum by-products as soil amendment to mitigate nitrous oxide emission from arable soil	Chang Oh Hong Pusan National University
14:30-14:45	33393	Sources of Nitrogen Fertilizers and Crop Yield Responses in Acidic Soils of North West Ethiopia	Yohannes Misskire Debre Markos University, Department of Natural Resources Management, P.O. Box 269, Debre Markos, Ethiopia
14:45-15:00	32766	Summer fallow drives leaching of legacy nitrogen in cereal land converted from old orchard	Mengzhen Zhao Northwest A&F University

*Subject to change

Parallel Sessions

15:00-15:15	32668	Flooding duration and temperature jointly drive soil nitrogen transformation rates in the floodplain wetlands of Poyang Lake during the dry season	Xinyi Jiang College of Life Sciences, Nanchang University", "Jiangxi Provincial Key Laboratory of Carbon Neutrality and Ecosystem Carbon Sinks
16:30-16:45	32315	Coupled Carbon-Nitrogen Cycles with Global Change	Baojing Gu Zhejiang University
16:45-17:00	34227	A mechanistic framework to explain variability in nitrification inhibitor performance across soils	Ben A. Rigby The University of Melbourne
17:00-17:15	31662	Mineral-Microbial Interactions Drive Variation in Nitrogen Transformation Characteristics During Entisol (Purple Soil) Development	Ting Lan Sichuan Agricultural University
17:15-17:30	33629	Exogenous input stoichiometry regulates the spatiotemporal synchronization of soil nitrogen supply and maize demand: A microbiome-driven mechanism	Zhe Zhao Shenyang agricultural university
17:30-17:45	35462	Regulating Soil Nitrogen Losses in Wheat Systems: Impacts of Fertilizer Source and Application Rate on NH ₃ Volatilization and Nitrate Accumulation	Abdul Wakeel Institute of Soil and Environmental Sciences, University of Agriculture Faisalabad-38000, Pakistan
17:45-18:00	35753	Identifying active nitrate-assimilating bacteria that alleviate secondary salinization in facility soils	Cheng Han Nanjing Normal University
18:00-18:10	35504	Microbial and Biogeochemical Mechanisms Driving N ₂ O Mitigation Under Combined Legume Green Manure and Bacillus velezensis Application	Tahir Shah College of Natural Resources and Environment, Northwest A&F University, Yangling, Shaanxi 712100, China
18:10-18:20	36430	Water content and pH thresholds jointly control the distribution pattern of soil nitrogen in arid zone ecosystems	jiaguo Xinjiang University
18:20-18:30	32710	Patterns and mitigation mechanisms of dinitrogen emissions and ammonia volatilization from paddy under elevated CO ₂ and warming	Yu Liu Institute of Soil Science, Chinese Academy of Sciences

*Subject to change



Parallel Sessions

Monday, June 8		Room: Expo Center, Hall 5, 5202	
Session 408001		Harmonization of Soil Health Monitoring: Scientific, Institutional, and Societal Perspectives	
		Convener: Claudio Zucca, University of Sassari & Sustainable Management of Soil and Landscape (SMSL) Centre	
		Co-Convener: Sergio Saia, University of Pisa	
Schedule	ID	Title	Presenter
13:15-13:30	32985	The Soil Indicator Dichotomy - finding the common ground	Nathan Robinson Federation University
13:30-13:45	31815	Unpacking Cause and Effect in Soil Health Science	Yang Lin University of Florida
13:45-14:00	35764	Building a Grower Facing Portal for Soil Health Assessment and Decision Making	Elizabeth Rieke Soil Health Institute
14:00-14:15	36615	The role of SOILS4MED project in promoting soil information in the Mediterranean and a unique case study from Apulia Region in Italy	Pandi Zdruli CIHEAM Mediterranean Agronomic Institute of Bari
14:15-14:30	33799	Monitoring Systems of Agricultural Soils Across Europe Regarding the Upcoming European Soil Monitoring Law	Antonio Bispo INRAE
14:30-14:45	35506	Assessment and Long-Term Monitoring of Soil Quality in France and its Overseas Territories	Lilou VANOVERBEKE INRAE France

*Subject to change



Parallel Sessions

16:30-16:45	33443	From Soil Enzymes to Policy: The Soil Health BR Platform as a National Tool for Climate-Smart Agriculture in Brazil	Ieda Carvalho Mendes Embrapa Cerrados
16:45-17:00	33543	Study on the Trade-offs between Cultivated Land Soil Health and Cultivated Land Soil Quality	Huan Xu Northeastern University
17:00-17:15	32197	Microbial Biodiversity and its role in Soil Health in Mediterranean Agricultural Landscapes of Sicily	Lino Sciurba Department of Agricultural, Food and Forest Sciences, University of Palermo
17:15-17:30	35003	Unveiling Soil Vitality in Morocco: A Comprehensive Evaluation of Soil Health Indicators in a semi-arid area	Zineb El Mouridi National Institute of Agricultural Research (INRA), BP 6356, CRRRA Rabat, Av. Al Irfane, 10100 Rabat, Morocco.", "Ibn Tofail University, Faculty of Sciences, Plant and Animal Productions and Agro-Industry Laboratory, Department of Biology, PO Box 133, Kénitra, Morocco.
17:30-17:45	32907	From fragmented legacy data to predictive hydraulics: PTF4MED for Mediterranean soils	Giacomo Belvisi Dipartimento di Scienze Agrarie, Alimentari e Forestali, Università degli studi di Palermo
17:45-18:00	35363	The Soil Health Indicator: A Scalable, Rapid Assessment Tool Linking Soil Science to Agricultural Sustainability	J.A. Reijneveld Eurofins Agro Testing Competence Centre
18:00-18:15	35885	A Comparison of Two Soil Health Assessment Frameworks	Cristine L.S. Morgan Soil Health Institute

*Subject to change



Parallel Sessions

Thursday, June 11 Friday, June 12		Room: Convention Center Nanjing 403B	
Session 408002		Nature-Based Solutions for Soil Health and Sustainable Crop Production	
		Convener: Junling Zhang, Chair of Soil Health Working Group of the Soil Science Society of China, Director of Endophytic and Mycorrhizal Fungi Subcommittee, Mycological Society of China, College of Resources and Environmental Science, China Agricultural University, Beijing 100193, China	
		Co-Conveners: Guangzhou Wang, College of Resources and Environmental Science, China Agricultural University, Beijing 100193, China Didier Lesueur, Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD), Alliance of Bioversity International and CIAT / Common Microbial Biotechnology Platform, Deakin University, Hanoi, Vietnam	
Schedule	ID	Title	Presenter
Thursday, June 11			
13:30-13:50	36195	Intercropping increases soil multifunctionality potentially by increasing the abundance of functional genes: evidence from a long-term field experiment	Long Li China Agricultural University, Beijing, China
13:50-14:05	34480	Agronomic constraints limit the climate change mitigation potential of winter cover crops in Europe	Renske Hijbeek Plant Production Systems group, Wageningen University, Wageningen, the Netherlands
14:05-14:20	32333	Biochar and Compost as Nature-Positive Solutions to Semi-Arid Agriculture: Multi-Level Assessments of Soil Health, Nutrient Cycling, and Greenhouse Gas Emissions	Rajan Ghimire 1. New Mexico State University

*Subject to change



Parallel Sessions

14:20-14:35	33513	Restoring Soil Health and Managing Soilborne Pathogens in Vietnam's Intensified Coffee and Black Pepper Systems	Didier Lesueur CIRAD - UMR Eco&Sols and Asian Hub of the Alliance in Vietnam
14:35-14:50	32037	Changes in Soil Bacterial and Fungal Community Characteristics in Response to Biochar Treatments	Nicholas Clarke NIBIO
14:50-15:05	33337	Ecological Regulation Function of Soil Microorganisms: Synergistic Effects of Arbuscular Mycorrhizal Fungi and Trichoderma in Biotic and Abiotic Stress Tolerance	Zhipeng Hao State Key Laboratory of Regional and Urban Ecology, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
15:05-15:20	33784	Faba bean-wheat intercropping sustains soil water and nutrient cycling, and the carbon availability for microbes in the short term	Shamina Imran Pathan Department of Agriculture, Food, Environment and Forestry (DAGRI), University of Florence
16:30-16:50	35851	Microbial solutions for reducing soil nitrous oxide emissions	Guang He East China Normal University
16:50-17:05	34459	Natural farming practices for enhancing soil health and nutritional quality of crops in different agroecology of eastern Ind	Shiveshwar Pratap Singh Dr. Rajendra Prasad Central Agricultural University, Pusa, Bihar, India
17:05-17:20	34374	Identification of soil health-related problems in apple orchards: preliminary results from the Grójec Living Lab	Jerzy Jonczak Department of Soil Science, Warsaw University of Life Sciences-SGGW, Warsaw, Poland

*Subject to change

Parallel Sessions

17:20-17:30	34999	Soil-crop-fertilization interactions drive the effects of Fusarium oxysporum FO12 on soil properties and plant nutrition	Jesús Sevillano-Caño Departamento de Agronomía, Universidad de Córdoba, Córdoba, España
17:30-17:40	35743	Maize/peanut intercropping advantages: evidence for soil biota-mediated nitrogen transfer	Xiao Wang Institute of Applied Ecology, Chinese Academy of Sciences
17:40-17:50	35002	Crop yield and soil health responses to integrated nitrogen and rice residue management in rice-wheat cropping system	Kirti Bhatt Department of Soil Science, College of Agriculture, Punjab Agriculture University, Ludhiana, India
17:50-18:00	33208	Enhancing Drought and Salinity Resilience in Tomato Plants Using Plant Growth-Promoting Bacillus Species from Semi-Arid Soils of Australia	Erandi Madukumari Herath The University of Melbourne (School of Agriculture, Food and Ecosystem Sciences, Faculty of Science, Melbourne, Australia)
18:00-18:10	36607	What matters to detect early soil health change in integrated cover crop systems?	Yajun Peng University of Guelph
18:10-18:20	36582	Phytoremediation Potential of Native Plant Species for Improving Soil Health in Vineyards with High Levels of Arsenic and Copper	Cristiana Paiva GreenUPorto\Inov4Agro - Sustainable Agrifood Production Research Centre, University of Porto, Vairão, Portugal", "Department of Geosciences, Environment and Spatial Plannings, University of Porto, Porto, Portugal
18:20-18:30	35355	Cover Copping for Soil Health Improvement in North-western Canada	Bharat Shrestha Agriculture and Agri-Food Canada, Beaverlodge Research Farm, Beaverlodge, AB

*Subject to change

Parallel Sessions

Friday, June 12

09:00-09:15	32077	Productive Grassland: Influence of Mixture Composition on Yield and Nitrogen Response Efficiency in a Temperate Region	Danielle Varley Agri-Food and Biosciences Institute (AFBI)
09:15-09:30	36429	Standardization Leads the Way: Building Soil Health Together to Support Sustainable Agriculture	Qingqing Jiang Shenzhen Institute of Standards and Technology
09:30-09:40	36599	Copper-Amendment Interactions Drive Molecular and Physiological Stress Responses in <i>Vitis vinifera</i>	Beatriz Fernandes GreenUPorto\INOV4Agro, Campus de Vairão, Vairão, Portugal
09:40-09:50	33239	Optimizing Soil Health in Tropical Peatlands through Coconut-based Agroforestry	Safira Eka Aprianti Tay Juhana Foundation, North Jakarta, 14440 Indonesia
09:50-10:00	33975	Evaluation of the soil quality improvement potential through basalt rock dust amendment	Angelique Daniell Unit for Environmental Sciences and Management, North-West University

*Subject to change



Parallel Sessions

10:00-10:10	34669	The issue of soil pollution solved using organic farming#04 Case studies for solved the soil damaged by flood disaster problem	Pathawit Chongsermsirisakul SiPa Research Organization
10:10-10:20	34942	Soil Natural Productivity: A Path to Self-Regeneration and Sustainability — Empirical Insights from Hechuren's "Natural Mulching and No-Tillage"	Yi Zhu Chongqing Hechuren Farming Culture Heritage and Development Center
10:20-10:30	32780	Nature-based solutions for soil protection, preservation and improvement: a comprehensive review of technical, social and funding aspects	Daniel Ruiz Beamonte Polytechnic University of Catalonia (UPC). CIRCE - Group of Bioeconomy and Climate Change, CIRCE Technological Center", "Group of Bioeconomy and Climate Change, CIRCE Technological Center", "Polytechnic University of Catalonia (UPC)
10:30-10:40	31339	Cover Crop-Driven Anaerobic Soil Disinfestation Enhances Weed Suppression and Collard Greens Productivity	Mahmoud Rady Department of Plant and Environmental Sciences, Clemson University
10:40-10:50	319B47	Application of Dredged Soil Resource Utilization in Mangrove Habitat Improvement	Li Yaohua ["Technology R&D Center, CCCC Guangzhou Water Transport Engineering Design and Research Institute Co., Ltd."]

*Subject to change



Parallel Sessions

Thursday, June 11		Room: Convention Center Nanjing 303A	
Session 408003		Soil Management Practices on Soil Health in Plastic Greenhouses	
		Convener: Ju Min, Institute of Soil Science, CAS	
		Co-Conveners: Gary Feng, USDA-ARS, United States Yufeng Liu, Shenyang Agriculture University Tingting Chang, Hohai University, China Yujie Zhang, Nanjing Hydraulic Research Institute, China	
Schedule	ID	Title	Presenter
16:30-16:45	32631	Soil of Plastic Greenhouse Vegetable in China: Problems and Countermeasures	Ju Min Institute of Soil Science, Chinese Academy of Sciences
16:45-17:00	31824	Balancing Crop Yield and Environmental Risk in Chinese Greenhouse Vegetable Production Systems: Insights from Phosphorus Management	Yusef Kianpoor Kalkhajeh Department of Environmental Science, College of Science, Mathematics and Technology, Wenzhou-Kean University", "Center for Integrative Plant Sciences, Wenzhou-Kean University", "Department of Biology, College of Science, Mathematics and Technology

*Subject to change

Parallel Sessions

17:00-17:15	31789	Farming system diversification enhances land use efficiency of China's protected horticulture	Jinlong Dong Institute of Soil Science, Chinese Academy of Sciences
17:15-17:30	35882	Organic substitution as a soil health management practice alleviates salinization and steers nematode assembly in plastic greenhouse soils	Xuefeng Hu Tianjin Normal University
17:30-17:45	32782	Effects and Mechanisms of Plastic Film Residue on N ₂ O Emissions in Greenhouse Vegetable Soils	Yaqiong Hao Institute of Soil Science, Chinese Academy of Sciences
17:45-18:00	34149	Enhanced soil ecosystem multifunctionality and microbial community shifts following spent mushroom substrate application in protected vineyards	Xiaochi Ma Jiangsu Academy of Agricultural Sciences
18:00-18:15	35041	Enhancing silicon uptake and use efficiency in <i>Piper nigrum</i> L. against <i>Fusarium</i> disease on acidic soils using Calcioprill and sodium silicate	Ng Ji Feng PS Global Sdn. Bhd., No. 12-5, Block 2, Jln Setia Prima S U13/S, Setia Alam, 40170 Shah Alam, Selangor, Malaysia

*Subject to change



Parallel Sessions

Thursday, June 11 Friday, June 12		Room: Convention Center Nanjing 202	
Session 408004		Soil & Environmental Health: Advancing Science for Human & Ecosystem Resilience	
		Conveners: Lizhong Zhu, Zhejiang University Yongguan Zhu, Research Center for Eco-Environmental Sciences	
		Co-Convenor: Lena Qiying Ma, Zhejiang University	
Schedule	ID	Title	Presenter
Thursday, June 11			
11:15-11:18	Starting-Session chairs: Fang-Jie Zhao and Montserrat Filella		
11:18-11:43	33427	Arsenic biogeochemistry in paddy rice systems	Fang-Jie Zhao Nanjing Agricultural University
11:43-12:03	33539	A seminal paper: 25 years on enrichment factors cited rather than understood	Montserrat Filella Department F.-A. Forel, University of Geneva, Geneva, Switzerland
12:03-12:18	33429	Ecological and Human Health Risks of Heavy Metals in Coastal Sediments of Grand Bahama Island	Williamson Gustave School of Chemistry, Environmental & Life Sciences, University of the Bahamas
12:18-12:30	35065	Seeing is believing: Exploring metal interactions in rice paddies using chemical imaging tools	Dong-Xing Guan Zhejiang University
13:30-13:33	-	starting	Session chairs: Rongliang Qiu and Xiaoming Zou
13:33-13:58	33716	Green Remediation Theory and Technological Application for Heavy Metal-Polluted Farmland Soils — Chinese Practices and Experience	Rongliang Qiu South China Agricultural University

*Subject to change

Parallel Sessions

13:58-14:18	34684	Calcium in Soil Health: Beyond pH Management to Mitigating Phosphorus Overuse and Enhancing Carbon Stabilization	Xiaoming Zou Jiangsu Academy of Agricultural Sciences
14:18-14:38	34686	Biochar laced with elemental sulfur restores microbial function in aridland soils	Daniel Blackburn Department of Soils, Water and Agricultural Engineering, Sultan Qaboos University
14:38-14:56	33679	Particle and mass characteristics influence in vitro and in vivo lead bioavailability from multiple sources	Xiaoping Li Shaanxi Normal University
14:56-15:11	33961	Harnessing Non-Conventional Salt-Accumulating Plants for Integrated Phytodesalination and Sustainable Salinity Management	Kashif Hayat Zhejiang Shuren University
15:30-15:33	Starting-Session chairs: Xinbin Feng and Daniel Blackburn		
15:33-15:58	33823	Mercury sources in soil of forest ecosystems and health risks to birds	Xinbin Feng Institute Of Geochemistry, Chinese Academy Of Sciences
15:58-16:13	33846	Dietary strategies to reduce bioavailability and toxicity of lead, cadmium, and arsenic following oral exposure: Mechanisms and health implications	Hongbo Li Nanjing University
16:13-16:28	35159	Heavy metals migration from soil to animal/human in heavy metal contaminated areas: Fate and risk of legacy Pb and Cd	Liping Li Henan University of Technology
16:28-16:40	34616	Health risk assessment of dietary cadmium exposure based on cadmium bioavailability in food: Opportunities and challenges	Di Zhao Nanjing Agricultural University
16:40-16:52	35376	From Predict to Control Cr(VI) Risk in Agricultural Soil: Aging Model and S-nZVI Stabilization for Crop Safety	Shi-Wei Li University of Jinan
16:52-17:02	34237	Luxury at a Cost: Linking Portable XRF-Based Bioaccessible Chromium to ICP-MS-Determined Chromate and Dermal Permeation Risk in Bright-colored Leather Products	Can Liu Zhejiang University
17:05-18:00	-	SEH-EBM Editorial meeting	Session chair: Lena Q Ma

*Subject to change



Parallel Sessions

Friday, June 12

09:00-09:05	Starting-Session chairs: Jay Gan and Benny Chefetz		
09:05-09:30	35425	PFAS in Agro-Food Systems: Risk Management Strategies	Jay Gan Zhejiang University
09:30-09:50	33847	Agricultural Water Reuse: Effects on Soil and Ecosystem Health	Benny Chefetz Agricultural Research Organization - Volcani Institute", "Hebrew University of Jerusalem
09:50-10:10	36071	Reinventing Soil Health in the Plastic Age: Fungal-Nano Synergies for Microplastic Remediation	Nasir Mehmood Academy of Biology and Medicine, Southern Federal University, Rostov on Don, Russia
10:10-10:25	34786	Variation in Arsenic Accumulation and Remediation Potential among Different Genotypes of <i>Pteris vittata</i>	Yue Cao Sun Yat-sen University
10:25-10:37	34137	Hyphospheric Phosphorus Enhances Arsenic Hyperaccumulation in <i>Pteris vittata</i> via Coordinated Mycorrhizal and Root Uptake Pathways	Chenjing Liu Zhejiang University
10:37-10:48	35652	Phytate-Mediated Arsenic Hyperaccumulation in <i>Pteris vittata</i> : Synthesis, Sequestration, and Exudation	Chunyan Hu Zhejiang University

*Subject to change

Parallel Sessions

10:48-11:00	34606	Multi-dimensional Drivers for Urban Soil Microbial Diversity: Insights from the Species-area Relationship	Xinyue Yang School of Geographical Sciences, Faculty of Science and Engineering, University of Nottingham Ningbo China", "State Key Laboratory of Regional and Urban Ecology, Ningbo Observation and Research Station, Institute of Urban Environment, Chinese Academy of Sciences
-	Session chairs: Ganga M Hettiarachchi and Lena Q Ma		
11:15-11:35	35469	Phosphorus and cover crop management practices alter phosphorus speciation in soils and eroded sediments	Ganga M Hettiarachchi Kansas State University
11:35-11:50	35721	Re-thinking Climate Resilience in Smallholder Agriculture: Insights from Technology, Economics, and Policy Interactions in Eastern India	Shubham Anil Durgude International Maize and Wheat Improvement Centre CIMMYT, New Delhi, India
11:50-12:02	34622	How Does Vegetation Cover Alter Mercury Accumulation and Mobility in Soils of Guizhou?	Namu Moduzuo GuizhouUniversity
12:02-12:14	35780	Adapting to Climate Change: Sustaining Soil Health through Carbon- Nitrogen Cycle Management	Jinglan Cui Zhejiang University
12:14-12:25	36387	Digital Characterization of the Spatial Distribution of the Albic Horizon in the Northeast Black Soil Region	Shou-Xi Lv Shenyang Agricultural University

*Subject to change



Parallel Sessions

Thursday, June 11 Friday, June 12		Room: Convention Center Nanjing 403A	
Session 409001		Advances in Best Management Practices for Achieving Climate-Smart Agriculture	
		Convener: Yuchuan Fan, Professor, College of Jiyang, Zhejiang A&F University, Zhejiang, China	
		Co-Conveners: Xi Zhang, Assistant Professor, Biosystems Engineering and Soil Science Department, The University of Tennessee, Knoxville, TN, USA Xun Wu, Associate Professor, College of Land Science and Technology, China Agricultural University, Beijing, China LiuJun Xiao, Associate Professor, College of Agriculture, Nanjing Agricultural University, Nanjing, China	
Schedule	ID	Title	Presenter
Thursday, June 11			
11:15-11:30	33082	A Framework for Agricultural Best Management Practices (BMPs): Guidelines, Database, and Future Directions	Yuchuan Fan Zhejiang A&F University
11:30-11:45	31631	Optimizing sampling protocols for agriculture and soil science: introduction of a spatial machine learning decision support tool	Alon Ben-Gal Soil, Water, and Environmental Sciences, Agricultural Research Organization - Volcani Institute
11:45-12:00	36370	Regional variation in the potential to reach net zero emissions in global agriculture	G.H. Ros Wageningen University, the Netherlands

*Subject to change

Parallel Sessions

12:00-12:15	33240	Enhancing Soil Resilience and Climate Adaptation through Site-Specific Agroecological Strategies - AGROSUS Project	Alicia Morugán-Coronado Universidad Politécnica de Cartagena
12:15-12:30	34633	Soil Organic Carbon Buffers Wheat Yield Against Warming by Regulating Phenological Sensitivity	Yang Yan xianghu lab; zhejiang univerfsity", "Xianghu lab; Zhejiang univerfsity
13:30-13:45	36493	Optimizing soil improvement and nitrogen management for sustainable crop production	LiuJun Xiao Nanjing Agricultural University
13:45-14:00	31584	Effect of cover crops on carbon and nitrogen stocks in perennial crops under Mediterranean conditions	Raul Zornoza Universidad Politecnica de Cartagena
14:00-14:15	33152	Mechanism of soil carbon sequestration in cover cropping systems	Jun Wang Northwest University, PR China
14:15-14:30	33670	Functional legume rotations optimize global synergies between soil organic carbon accrual and crop yield	Huadong Zang China Agricultural University
14:30-14:45	34549	Effects of manure and agronomic practices on particulate, dissolved, and mineral-associated organic matter in a long-term integrated crop-livestock system	Inoka Amarakoon The University of Manitoba
14:45-15:00	34155	Effects of Plant Density, Nitrogen Rate and Supplemental Irrigation on Maize Source-Sink Relationship and Water-Nitrogen Use Efficiency Under Straw Mulch in Northeast China	Yuning Li China Agricultural University

*Subject to change

Parallel Sessions

15:00-15:15	33275	Nitrogen use for improved profitability and sustainability of rice production in central Myanmar	Xia Liang School of Agriculture, Food and Ecosystem Sciences, Faculty of Science, The University of Melbourne
16:30-16:45	35629	Including water-salinity stress hysteresis and compensation to empirical root water uptake models	Xun Wu China Agricultural University
16:45-17:00	34823	Root-zone Water and Salt Transport Dynamics and Irrigation Optimization in Mulched Drip-Irrigated Cotton Fields in Arid Regions	Chong Fu China Agricultural University
17:00-17:15	32069	Neglecting Non-Rainfall Water Contributions Results in an Overestimation of Crop Water Use Efficiency	Anqi Wang College of Jiyang, Zhejiang A&F University
17:15-17:30	31637	Pathways to resilience in dryland agricultural systems	Zhihao Tan The University of Queensland
17:30-17:45	32598	Interactive effects of straw and biochar amendments on soil organic carbon stabilization and bacterial community dynamics	Ninghui Xie College of Agriculture, Inner Mongolia Minzu University
17:45-18:00	34818	Decadal biochar legacy alters soil physicochemical properties but not microbial C turnover	Mingming Zong Aarhus University
18:00-18:15	36230	Evaluation of ultra-fine lime to manage soil acidity using reactivity and eluviation assays	Erinne Stirling Adelaide University", "CSIRO

*Subject to change

Parallel Sessions

Friday, June 12

09:00-09:15	31849	Innovative Pasture Diversification Trials to Enhance Soil Health, Carbon Dynamics, and Climate Resilience	James O'Connor The UWA Institute of Agriculture, The University of Western Australia", "UWA School of Agriculture and Environment, The University of Western Australia
09:15-09:30	35509	Silvopastoral Systems as a Strategy to Increase Carbon Stocks and Improve Soil Health in Brazilian Drylands	Leidivan Almeida Frazão Federal University of Minas Gerais", "Center for Carbon Research in Tropical Agriculture
09:30-09:45	31806	Impacts of Corn Hybrid and Fertilization Strategies on Plant Carbon Allocation and Soil Carbon Dynamics Under Variable Moisture Conditions	Yichao Rui Purdue University
09:45-10:00	32052	Does a long-term no-till corn-soybean rotation decrease nitrous oxide emissions in Alfisols?	Amir Sadeghpour Crop, Soil, and Environment Program, School of Agricultural Sciences, Southern Illinois University
10:00-10:15	35208	Evaluating BMPs that reduce GHGs (N ₂ O) and improve water quality: A case study in southern Ontario, Canada	Prasad Daggupati Department of Civil, Environmental and Water Resource Engineering, University of Guelph, Canada
10:15-10:30	31582	EcoPond - A nature-based mitigation technology for methane emissions from animal effluents	Hong J Di Lincoln University
10:30-10:45	32945	Greenhouse gas emissions as influenced by integrated conservation management practices under organic production in a sandy soil	Frank Oliver Clemson University
10:45-11:00	33447	Sustainable Pathways for Southeast Asia's Rice Systems	Yunrui Li School of Agriculture, Food and Ecosystem Science (SAFES), Faculty of Science, The University of Melbourne, Melbourne, Australia
11:15-11:30	36619	Controlled-Release Fertilizers in BMPs for Sustainable Agriculture	Bin Gao Rensselaer Polytechnic Institute

*Subject to change



Parallel Sessions

Tuesday, June 9		Room: Expo Center, Hall 5, 5201	
Session 409002		Advancing Soil Organic Carbon Science for Sustainable Land Management	
		Convener: Zhongkui Luo, Zhejiang University Co-Conveners: Budiman Minansy, University of Sydney Zhou Shi, Zhejiang University Qiangyi Yu, Chinese Academy of Agricultural Sciences Songchao Chen, Zhejiang University	
Schedule	ID	Title	Presenter
09:00-09:15	34020	Global estimation of soil microbial-derived carbon stocks and its implications for the carbon cycle	Han Hu Institute of Soil Science, Chinese Academy of Sciences
09:15-09:30	32672	Divergent drivers of soil organic carbon fractions across global pedoclimatic zones	Songchao Chen Zhejiang University
09:30-09:45	33992	Advancing soil organic carbon assessment by integrating fractionated pools, biology, and land-use history across managed landscapes	Louis-Pierre Comeau Agriculture and Agri-Food Canada, Government of Canada
09:45-10:00	34742	Response of soil organic carbon to the changes in plant productivity under warming	Mingming Wang Zhejiang University
10:00-10:15	34641	Unraveling the Interconnections of Soil Organic Carbon Dynamics in Sustainable Land Management	Qiangyi Yu CAAS", "CAAS

*Subject to change

Parallel Sessions

10:15-10:30	32378	Whole-profile soil organic carbon simulation in China using SOILcarb model	Yuanyuan Du Zhejiang University
10:30-10:45	33327	Soil organic carbon buffers crop yields against climate extremes	Haoyu Zhang Zhejiang University
10:45-11:00	32475	Modelling climate change impacts on soil organic carbon dynamics in dryland croplands	Jorge Álvaro-Fuentes CSIC
11:15-11:30	32387	Coupled geomorphic and climate-driven biogeochemical processes regulate soil organic carbon stocks in agricultural terraces	Pengzhi Zhao Earth & Life Institute, Université catholique de Louvain
11:30-11:45	31692	Decadal Soil Organic Carbon Changes in European Forests from 2009 to 2018	Zhongxing Chen Zhejiang University
11:45-12:00	34368	Quantifying non-linear relationships and causal effects of soil organic carbon on crop productivity stability	Yuyang Huang Zhejiang University
12:00-12:15	34524	National Scale Mapping of Soil Organic Carbon Vulnerability Indicators in New Zealand	Pierre Roudier Bioeconomy Science Institute
13:30-13:45	33187	Crushed basalt application shows soil improvement and potential carbon capture in wheat field	Binoy Sarkar Future Industries Institute, Adelaide University, Mawson Lakes, SA 5095, Australia
13:45-14:00	35452	Influence of combined application of biochar and arbuscular mycorrhizal fungi on nutrient availability and ionic modification in canola under salinity stress	Hafiz Muhamamd Rashad Javeed Department of Environmental Sciences, COMSATS University Islamabad

*Subject to change

Parallel Sessions

14:00-14:15	34460	Integrating Remote Sensing and Process-Based Modeling to Assess Grassland Soil Organic Carbon Change	Marmar Sabetizadeh Earth and Life Institute, Université catholique de Louvain, Louvain-La-Neuve, Belgium
14:15-14:30	31956	Optimal Selection of Soil Organic Carbon Prediction Models and Their Implications for Potential Soil Erosion Estimation (RUSLE)	Qian Zou Jiangxi University of Finance and Economics
14:30-14:45	31383	Comprehensive Review: Insights into the Dynamics of Soil Organic Carbon Stocks in Vineyards	Mukkaram EJAZ Silesian University of Technology, Institute of Physics - Centre for Science and Education, Division of Geochronology and Environmental Isotopes, Konarskiego 22B, Gliwice 44-100, Poland
14:45-15:00	33089	Cover crop species and mixtures drive contrasting vertical distribution of root- and residue-derived C and N in conservation-tilled sandy Ultisols	Rongzhong Ye Clemson University
15:00-15:15	34967	Urban soils carbon across the scales and regions: who and what drive the spatio-temporal variability of soil carbon in urban areas	Viacheslav Vasenev Wageningen University
16:30-16:45	33798	Soil Organic Carbon Assessment Across Land-Use and Management Scenarios in a Metropolitan Urban-Rural Territory	C. Walter SAS, Institut Agro, INRAE
16:45-17:00	33981	Projecting future changes in soil organic carbon across New South Wales using machine learning and climate projections	Yuxin Ma 1 New South Wales Department of Climate Change, Energy, the Environment and Water
17:00-17:15	35295	Depth Variations and Drivers of Soil Organic Carbon in Croplands of the Black Soil Region, Northeast China	LI Liang College of Land Science and Technology, China Agricultural University

*Subject to change



Parallel Sessions

Thursday, June 11 Friday, June 12		Room: Convention Center Nanjing 203	
Session 409003		Climate Change and Soil Microbial Control Carbon Sequestration	
		Convener: Yang Yang, State Key Laboratory of Loess Science, Institute of Earth Environment, Chinese Academy of Sciences	
		Co-Conveners: Shaoshan An, State Key Laboratory of Soil Erosion and Dryland Farming on the Loess Plateau, Northwest A&F University Anna Gunina, Peoples' Friendship University of Russia/Institute of Applied Ecology, Chinese Academy of Sciences Baorong Wang, State Key Laboratory of Soil Erosion and Dryland Farming on the Loess Plateau, Northwest A&F University Yanxing Dou, State Key Laboratory of Soil Erosion and Dryland Farming on the Loess Plateau, Northwest A&F University	
Schedule	ID	Title	Presenter
Thursday, June 11			
11:15-11:30	32981	Activation energy of soil organic matter decomposition and Consequences of Global Warming	Yakov Kuzyakov University of Goettingen
11:30-11:45	32114	Mechanism of increased drought intensity stimulating the extracellular polymeric substance (EPS) accumulation and their contribution to soil organic carbon	Shaoshan An Northwest A&F University
11:45-12:00	34463	Symbiosis in an asymmetrical day-night high-CO ₂ world: Interactive effects of arbuscular mycorrhizal fungi and elevated CO ₂ on legume nutrition and soil fertility	Xinhua He Shanxi Agr UVSichuan Agr UVUWAUC Davis
12:00-12:15	33508	Exploring drivers of microbial drought sensitivity through combined laboratory and field approaches	Alberto Canarini Department of Biological, Geological and Environmental Sciences, University of Bologna, Bologna, Italy

*Subject to change

Parallel Sessions

12:15-12:30	35864	Effects of warming on SOC	Yuan Sun Nanjing Forestry University
13:30-13:40	32307	Fungal Necromass Carbon: Insights into Global Soil Carbon Sequestration and Its Practical Implementation in Circular Agricultural Systems	Dong Liu Kunming Institute of Botany, Chinese Academy of Sciences
13:40-13:50	32701	Linking the diversity of soil CO ₂ -fixing microorganisms with soil organic carbon accumulation along biological soil crust chronosequence	Baorong Wang Northwest A&F University
13:50-14:00	33132	Grassland degradation-induced soil organic carbon loss associated with micro-food web simplification	Yang Hu Xinjiang Agricultural University
14:00-14:10	33469	Role of microbial-derived carbon to soil organic carbon formation during natural and artificial vegetation restoration	Yanxing Dou Northwest A&F University
14:10-14:20	32883	Quantifying microbial controls on particulate and mineral-associated organic matter in cropland soils	Meixia Gao Institute of Applied Ecology, Chinese Academy of Sciences
14:20-14:30	31356	Aridity-driven soil carbon vulnerability to drought shapes future carbon-climate feedbacks	Baoku Shi Northeast Normal University
14:30-14:40	32080	Soil carbon mineralization decreased in desert steppe by light grazing but not fencing management	Tianqi Zhao Institute of Water Resources for Pastoral Area, Ministry of Water Resources
14:40-14:50	32081	Grazing disturbance reduces soil organic carbon sequestration and stability in desert steppe	Naijing Lu Institute of Water Resources for Pastoral Area, Ministry of Water Resources
14:50-15:00	35294	Thermal acclimation of soil microbial respiration across permafrost ecosystems: contrasting roles of autotrophic and heterotrophic microorganisms	Ning Tian Institute of Applied Ecology, Chinese Academy of Sciences
15:00-15:10	36406	Recognizing the role of soil microorganisms in organic carbon accumulation in drylands	Xiaoguo Zhou Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences

*Subject to change

Parallel Sessions

16:30-16:45	34594	Global warming decreased soil organic carbon stock via increasing organic matter lability and heterotrophic respiration	YoungHo Seo Division of Applied Life Science (BK21+ Program), Gyeongsang National University, 501 Jinju-daero, Jinju, 52828, Republic of Korea
16:45-17:00	35941	Global warming speeds up cover crop decomposition and nutrient release through UV radiation by altering microbial community diversity and function in semiarid Mediterranean woody agroecosystems	María Almagro 1 IFAPA Camino de Purchil, Granada (Spain)
17:00-17:15	32340	Community, metabolic pathways and fixation potential of soil CO ₂ -fixing microorganisms on the Loess Plateau	Yimei Huang Northwest A&F University
17:15-17:30	33025	Microbial Intracellular Carbon Storage: A Missing Link in Global Soil Carbon Sequestration Framework	Guanglong Tian Biosolids Utilization and Soil Science Section, Monitoring and Research Department, Metropolitan Water Reclamation District of Greater Chicago
17:30-17:40	33653	Global Change Reshapes Microbial Residues and Plant Lignin Components in Soils	Jiwei Li Northwest Agriculture & Forestry University
17:40-17:50	32266	Microplastics from conventional and biodegradable mulch films alter microbial necromass accumulation and organic carbon sequestration	Zhang Haixin HENAN INSTITUTE OF SCIENCE AND TECHNOLOGY
17:50-18:00	32267	Shifts in C-degradation genes and microbial metabolic activity with vegetation types affected the surface soil organic carbon pool	Huang Qian Northwest A&F University
18:00-18:10	32339	Orchard soils exhibit the highest microbial CO ₂ fixation potential and contribution to soil organic carbon across land-use types in Qaidam Basin	Fadan Lei Northwest A&F University
18:10-18:20	33733	Turnover of microbial biomass residues to soil organic matter and its contribution mechanism	Tiantian Zheng Shenyang Normal University
18:20-18:30	33824	Mechanisms underlying rhizosphere regulation of soil organic carbon components and stability by leguminous plants in subtropical karst and non-karst forests	Shuting Chen Guangxi Normal University

*Subject to change

Parallel Sessions

Friday, June 12

09:00-09:10	33886	Soil organic carbon formation from plant and microbial residual carbon: Effects of home-field advantage and root litter quality	Huijun Li Qinghai University
09:10-09:20	34193	From incubations to landscapes: compensatory thermal adaptation and substrate effects constrain microbial carbon processing in forest soils across China	Tengyue Du Institute of Applied Ecology, Chinese Academy of Sciences
09:20-09:30	34247	Coupled temperature sensitivity of microbial carbon and nitrogen use efficiencies in forest soils on a continental scale	Yang Zhang Institute of Applied Ecology, Chinese Academy of Sciences
09:30-09:40	34336	Divergent responses of plant lignin phenols and microbial residues to global change: a global meta-analysis	Linjie Fan Zhejiang University
09:40-09:50	32309	The influence and mechanism of the interaction between Mineral-associated Organic Carbon and soil aggregates on soil carbon sequestration	Zijia Zuo Shaanxi Normal University
09:50-10:00	34630	Decades of no-till coupled with warming improves topsoil soil organic matter accrual via stimulate microbial carbon use efficiency	Xiaoying Jin China Agricultural University
10:00-10:10	35269	Context-dependent dominance of plant detritus or microbial necromass in soil organic carbon accrual	Tao Wang Institute of Mountain Hazards and Environment, Chinese Academy of Sciences, Chengdu 610041, China

*Subject to change



Parallel Sessions

Thursday, June 11		Room: Expo Center, Hall 5, 5202	
Session 409004		Evolution of Soil Organic Matter: Impacts of Climate Change and Land Use Change	
		Convener: Nan Sun, Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences, China	
		Co-Conveners: Xiujun Wang, Shanxi Agricultural University, China	
		Lili Zhang, Institute of Applied Ecology, Chinese Academy of Sciences, China	
Schedule	ID	Title	Presenter
11:15-11:35	31933	Differences of Soil Carbon Sequestration Efficiency of Typical Cropland in China, UK and USA	Minggang Xu State Key Laboratory of Efficient Utilization of Arid and Semi-arid Arable Land in Northern China, Key Laboratory of Arable Land Quality Monitoring and Evaluation, Ministry of Agriculture and Rural Affairs/Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences", "Institute of Eco-Environment and Industrial Technology, Shanxi Agricultural University
11:35-11:55	32406	Soil Carbon Change under Land Use and Climate Change	Pete Smith Institute of Biological & Environmental Sciences, University of Aberdeen
11:55-12:10	32305	Does elevated atmosphere CO ₂ facilitate soil carbon sequestration?	Caixian Tang La Trobe University

*Subject to change

Parallel Sessions

12:10-12:25	320B40	Reconstruction of Rhizosphere Soil Microenvironments: Synergistic Plant-Microbe Purification Mechanisms and Practices	Lijuan Cui State Key Laboratory of Wetland Conservation and Restoration, Chinese Academy of Forestry Sciences, Beijing 100091, China
13:30-13:45	31934	To reduce CH ₄ and N ₂ O emissions whilst maintaining crop yield in rice-wheat system in China with climate change using SPACSYS model	Nan Sun State Key Laboratory of Efficient Utilization of Arable Land in China, Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences
13:45-14:00	33728	Nitrogen addition effects on soil organic carbon accrual in cropland land	Tian Jing State Key Laboratory of Nutrient Use and Management, College of Resources and Environmental Sciences, China Agricultural University
14:00-14:15	33068	Decadal extreme drought reduces alpine subsoil carbon stocks	Jinsong Wang, Ronglei Zhou, Shuli Niu Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences
14:15-14:30	33205	Crop diversification as a climate-smart strategy: A model-based assessment in Mediterranean orchards for soil carbon sequestration and greenhouse gas emissions mitigation	Virginia Sánchez-Navarro Department of Agricultural Engineering, ETSIA, Universidad Politécnica de Cartagena, Cartagena, Spain
14:30-14:45	36461	Long-term Grassland Conversion Reshapes Deep Soil C and N Cycling: Thermodynamic Destabilization and Microbial Drivers	Xiang Wang China Agricultural University
14:45-15:00	31501	Soil Microbial Diversity and Carbon Stability for Climate Resilient Land Management in the Western Ghats	Jagadesh Muthumani Department of Soil Science and Agricultural Chemistry, Tamil Nadu Agricultural University

*Subject to change

Parallel Sessions

15:00-15:15	34199	Mechanisms of soil organic carbon sequestration within aggregates of black soil under long-term land use change	Na Li Northeast Institute of Geography and Agroecology, CAS
16:30-16:45	34091	Fertilizer-N recovery links to SOC stabilization and fractionation in straw-mulched soil: Insights from ¹⁵ N-tracing and ¹³ C natural abundance	Cong Xu Institute of Agricultural Resources and Environment, Jiangsu Academy of Agricultural Sciences
16:45-17:00	33770	Quantifying soil organic matter effects on nitrogen use efficiency and fate in wheat-maize cropping systems: a ¹⁵ N tracer approach	Lin Liu Changzhi University
17:00-17:15	34382	Contrasting effects of long-term fertilization on pore structure and POM in upland and paddy soils revealed by X-ray CT	Zichun Guo Institute of Soil Science, Chinese Academy of Sciences, Nanjing
17:15-17:30	34588	Evolutionary Characteristics of Stable Organic Matter in Lateritic Red Soils under Long-Term Rotation and Fertilization Systems	Yingting Gong Institute of Agricultural Resources and Environment, Guangdong Academy of Agricultural Sciences
17:30-17:45	33392	Photocatalytic generation of reactive oxygen species from dissolved black carbon: Identification of photoproduction sites	Lin Wang Institute of Agricultural Resources and Environment, Sichuan Academy of Agricultural Sciences, Chengdu, 610066, China
17:45-18:00	33931	Organic fertilization under conservation tillage enhances biopore formation and particulate organic matter accumulation via fraction-specific pore relationships in a Vertisol	Tianyu Ding Institute of Soil Science, Chinese Academy of Sciences
18:00-18:15	34976	Distribution Characteristics and Influencing Factors of Carbon and Nitrogen Content in Mineral-Associated Organic Matter in Mollisols (Phaeozems) of Northeast China	Jiayi Duan Northeast Normal University", "Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
18:15-18:30	35026	Long-term organic farming alters soil organic matter molecular composition through divergent microbial processing pathways	Zhanlonggang Yu China Agricultural University

*Subject to change



Parallel Sessions

Monday, June 8		Room: Convention Center Nanjing 205	
Session 409006		One Carbon Metabolism in Terrestrial Ecosystems	
		Convener: Jingjing Peng, China Agricultural University	
		Co-Conveners: Werner liesack, Max Planck Institute for Terrestrial Microbiology Lei Cheng, Biogas Institute of Ministry of Agriculture and Rural Affairs Diana Z. Sousa, Wageningen University and Research	
Schedule	ID	Title	Presenter
13:15-13:30	34487	Functional Diversity and Interactions of CO-utilizing Microbial Communities	Diana Z. Sousa Wageningen University & Research
13:30-13:45	34490	Culturing the Uncultured Anaerobes from the Perspective of Microbial Growth Curves	Lei Cheng Biogas Institute of Ministry of Agriculture and Rural Affairs
13:45-14:00	33914	Exploring Aerobic Methanotroph Diversity in Terrestrial Habitats: Recent Advances and Challenges for Further Studies	Svetlana N. Dedysh Winogradsky Institute of Microbiology, Research Center of Biotechnology of the Russian Academy of Sciences
14:00-14:15	34130	Life under Limiting Methane Metabolic Flexibility, Hydrogen Use, and Starvation/Revival of Methylocystis spp.	Werner Liesack Max Planck Institute for terrestrial Microbiology, 35043 Marburg, Germany; College of Resources and Environmental Sciences, China Agricultural University, Beijing 100083, China

*Subject to change



Parallel Sessions

14:15-14:25	33044	Optimizing and Simulating the Soil Carbon Fractions within the Beps-mend Framework	Mousong Wu Nanjing University
14:25-14:35	34061	Ozone-driven Spatial Divergence of Methane Production in Rice Paddies	Yang Ji Nanjing University of Information Science and Technology
14:35-14:45	34363	Vertical Profiles of Community and Activity of Methanotrophs in Large Lake and Reservoir of Southwest China	Quan Yuan Institute of Geochemistry, Chinese Academy of Science
14:45-14:55	34370	Elevational Patterns and Temperature Sensitivity of Soil Methane Oxidation in Southeastern Tibetan Forests	Yongcui Deng Nanjing Normal University
14:55-15:05	34136	Temperature-Driven Virus-Host Interactions Regulating Methane Production in Paddy Fields	Ruiliang Xu College of Resources and Environmental Sciences, State Key Laboratory of Nutrient Use and Management; Key Laboratory of Plant-Soil Interactions; National Academy of Agricultural Green Development, China Agricultural University, Beijing, China
15:05-15:15	34900	Cascading Regulation of Soil Micro-food Web on Carbon Stability in Camellia oleifera Intercropping Systems	Xiaohong Wu Central South University of Forestry and Technology

*Subject to change



Parallel Sessions

Thursday, June 11 Friday, June 12		Room: Convention Center Nanjing 205	
Session 409007		Physical, Chemical, and Biological Drivers for Soil Greenhouse Gas Fluxes	
		Convener: Zhifeng Yan, School of Earth System Science, Tianjin University	
		Co-Conveners: Dani Or, Dept. of Civil and Environmental Engineering, University of Nevada, Reno, USA Yonghong Wu, Institute of Soil Science, Chinese Academy of Sciences, China Shuli Niu, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, China Pete Smith, Institute of Biological and Environmental Sciences, School of Biological Sciences, University of Aberdeen, UK	
Schedule	ID	Title	Presenter
Thursday, June 11			
13:30-13:45	32538	Greenhouse Gas Emissions from Soils and Ways to Reduce Them	Pete Smith University of Aberdeen
13:45-13:55	32474	Soil greenhouse gas emissions under different land uses across Europe	Jorge Álvaro-Fuentes CSIC
13:55-14:05	32703	Recent stabilization of agricultural non-CO ₂ greenhouse gas emissions in China	Songbai Hong Peking University
14:05-14:15	35183	Static Chamber Protocol Optimization for Soil Greenhouse Gas Flux Measurements under Pulse Events	Lifang Wu Tsinghua university

*Subject to change

Parallel Sessions

14:15-14:25	32960	Effect of no-tillage based cover crop management on greenhouse gas emissions, and greenhouse gas balance in organic soybean field in Hokkaido, Japan	Bishal Subedi Graduate School of Agriculture, Hokkaido University
14:25-14:35	32293	Agricultural Management and Soil Leakiness: Drivers of Methane Oxidation and Nitrification	Ruchen Tian Netherlands Institute of Ecology (NIOO-KNAW)
14:35-14:45	35278	Microbial regulation of soil CO ₂ and CH ₄ emissions during rewetting of degraded peatlands	Jiye Cai Northeast Normal University
14:45-14:55	35720	Belowground Cross-trophic Networks Impact CH ₄ and CO ₂ Emissions in Degraded Alpine Peatlands	Dengbo Chen Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
14:55-15:05	36385	Iron-carbon coupling mechanisms during soil organic carbon dynamics under climate-change conditions in long-term biochar-amended soils	Haohua He Fudan University; EPFL
15:05-15:15	34530	Coupling of nocturnal water vapor and CO ₂ uptake in arid soils: Comparative analysis from three arid soils	Thuc T. Nguyen The Jacob Blaustein Institutes for Desert Research, Ben-Gurion University of the Negev, 84990, Israel
16:30-16:45	35084	Slowing down the strong ammonia oxidation is the key to reduce N ₂ O emission in alkaline agricultural soils	Xiaotang Ju Hainan University
16:45-16:55	33167	Coupling expression of nitrifying and denitrifying genes induce high N ₂ O emissions in strong ammonia oxidizing soils	Xiaotong Song Chinese Academy of Sciences, Research Center for Eco-Environmental Sciences
16:55-17:05	33647	Use of urease inhibitors can reduce gaseous N loss in Australian dryland wheat from applied fertilizers	Mei Bai School of Agriculture, Food and Ecosystem Sciences, Faculty of Science, The University of Melbourne

*Subject to change



Parallel Sessions

17:05-17:15	34717	Organic amendments regulated the pattern and product stoichiometry of nitrate reduction processes in arable soils	Zhijun Wei Institute of Soil Science, Chinese Academy of Sciences
17:15-17:25	33820	N ₂ O fluxes after application of organic and mineral fertilizers to acidic tea soils in Kenya	Thomas Smith Cranfield University
17:25-17:35	34466	Innovative measures to reduce nitrous oxide emissions from manure and fertilizer use under realistic agricultural conditions.	Rens Accou Department of Environment, Ghent University, Ghent, Belgium
17:35-17:45	319B89	A “naturally dominant” chemo-denitrification pathway drives N ₂ O emissions in Tibetan glacier retreat zones	Lei Zhong School of Earth System Science, Tianjin University
17:45-17:55	36193	Mechanistic controls of nitrous oxide emissions revealed by flux-gradient measurements and site-specific incubations	Sarah Demers University of Saskatchewan
17:55-18:05	33305	Effects of Elevated CO ₂ Concentrations and Temperature on Soil Inorganic Nitrogen and Greenhouse Gas Emissions in Winter Wheat	Danni Lv Inner Mongolia Agricultural University
18:05-18:15	34456	Effect of soil structure on N ₂ O production and emission	Baoxuan Chang Tianjin University

*Subject to change



Parallel Sessions

Friday, June 12

09:00-09:15	35280	Effect of soil structure on CO ₂ production and emission	Zhifeng Yan Tianjin University
09:15-09:25	31891	Carbon Dioxide Emissions from Soil Can Serve as a Sustainable Characteristic of the Forest-Steppe Biome	Olga Sukhoveeva Institute of Geography, Russian Academy of Sciences
09:25-09:35	36153	Effects of Three-Dimensional Surface Area Correction on Soil CO ₂ Flux and Biomass Accounting in a Gully Landscape	Peiyu Sun Northwest A&F University
09:35-09:45	34188	Microbial phosphorus cycling: A key driver of CO ₂ emission in phosphorus-supplied subtropical forest soils	Muhammed Mustapha Ibrahim South China Botanical Garden, Chinese Academy of Sciences, Guangzhou, China
09:45-09:55	32862	Global Response and Mechanism of Methane Cycling in Wetlands Under Elevated Atmospheric CO ₂ and Warming	Siyu Chen Research Center for Eco-Environmental Sciences", "University of Chinese Academy of Sciences
09:55-10:05	34312	The Carbon-Iron Coupling Mechanism of Organic Carbon Turnover in the Rice Root Zone Under Redox Gradients	Yan Li Institute of Subtropical Agriculture, Chinese Academy of Science

*Subject to change

Parallel Sessions

10:05-10:15	31717	Understanding methane emission dynamics in temperate rice fields through systematic review and statistical modeling	Lucia Crosetto Department of Agricultural, Forest and Food Sciences, University of Torino
10:15-10:25	34629	Carbon Flux Responses of Rice Paddy to Coupled Heatwaves and Droughts in the Jiangnan Plain	Xiaorui Liu Key Laboratory for Geographical Process Analysis and Simulation of Hubei Province, College of Urban and Environmental Sciences, Central China Normal University", "Hubei Jiangnan Plain Scientific Observation and Research Station of Farmland Ecosystem, Central China Normal University
10:25-10:35	35029	Contrasting warming responses of anaerobic microbial communities explain variation in methane Q10 across paddy soils	Ye Liu State Key Laboratory of Bioactive Substance and Function of Natural Medicines, Institute of Medicinal Plant Development, Chinese Academy of Medical Sciences & Peking Union Medical College, Beijing 100193, China
10:35-10:45	32639	Periphytic biofilms modulate priming effect of soil organic matter mineralization in paddy soil	Lei Zhou Institute of Soil Science, Chinese Academy of Sciences
10:45-10:55	35129	Inhibition and the mechanisms of ethene on methanogen	Jingjing Wang Institute of Applied Ecology, Chinese Academy of Sciences

*Subject to change



Parallel Sessions

Monday, June 8 Tuesday, June 9		Room: Convention Center Nanjing 205	
Session 409008		Soil Carbon Dynamics and Impacts of Land Use and Management	
		Convener: Xiujun Wang, Shanxi Agricultural University, China	
		Co-Conveners: Jianbin Zhou, Northwest A&F University, China Kazem Zamanian, Leibniz University, Germany	
Schedule	ID	Title	Presenter
Monday, June 8			
16:30-16:45	31915	Cover crop quantity and quality jointly drive priming effects and new soil organic carbon formation across soil fertilization histories	Zhi Liang Department of Agroecology, Aarhus University
16:45-17:00	32562	The conversion of paddy to upland soils triggers the loss of soil organic carbon stocks by promoting Fe oxide crystallization	Dong Wu Hebei Academy of Agriculture and Forestry Sciences
17:00-17:15	34183	Impact of burning cessation on soil carbon stocks and organic matter fractions in semi-natural grasslands	Hajime Sakurada Graduate school of agriculture, Hokkaido University

*Subject to change



Parallel Sessions

17:15-17:30	33258	Soil carbon stocks and sequestration rates in Northern Irish grasslands	Selva Dhandapani Agri Food and Biosciences Institute
17:30-17:45	33938	Long-Term Variability of Peat Soil Properties and CO ₂ Flux in a Planted Forest Ecosystem	Putri Oktariani IPB University", "Indonesian Peat Community Association
17:45-18:00	34059	Effects of Eucalyptus robusta afforestation on soil carbon fractions and the underlying mechanisms	Xin Zhou Guangxi Normal University
18:00-18:15	36088	Tree proximity effects on soil organic carbon, bulk density and soil moisture in a dryland landscape	Ana Paula Ferreira de Brito School of Agriculture, Food and Wine, Faculty of Sciences, Engineering and Technology, The University of Adelaide, Waite Campus, Glen Osmond, SA 5064, Australia", "CSIRO, Adelaide, SA, Australia
18:15-18:30	34657	Long-term impact of integrated crop-livestock-forest systems on soil organic carbon sequestration and edaphic health in the Brazil	Alberto C. de Campos Bernardi Embrapa

*Subject to change

Parallel Sessions

Tuesday, June 9

09:00-09:20	32980	Soil Acidification in the Anthropocene	Yakov Kuzyakov University of Goettingen
09:20-09:40	34731	Vulnerable Zone of Soil Inorganic Carbon Loss in Intensive Agricultural Regions	Zhou Jianbin College of Natural Resources and Environment, Northwest A&F University
09:40-09:55	32410	Dynamics of soil organic and inorganic carbon in aggregates under straw and biochar amendments	Amar Ali Adam Hamad Shanxi Agricultural University
09:55-10:15	32408	Synergistic Relationships Between Soil Organic and Inorganic Carbon in North China's Croplands: A Mini-review and Prospective	Xiujun Wang Shanxi Agricultural University
10:15-10:30	32412	Coupling mechanism of soil organic carbon and inorganic carbon	Tongping Lu Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences
10:30-10:45	31805	Biologically driven short-term inorganic carbon changes in calcareous soils	Rosa M Poch Universitat de Lleida", "Universidad Pública de Navarra
10:45-11:00	33565	Distribution Characteristics and Coupling Relationships Between Soil Organic Carbon and Inorganic Carbon in Major Dryland Wheat-Producing Areas of the Loess Plateau: A Case Study from Southern Shanxi Province, China	Junyu Xie Shanxi Agricultural University
11:15-11:30	31639	Divergent carbon stabilisation pathways in Australian soils	Yijia Tang Sydney Institute of Agriculture & School of Life and Environmental Sciences, the University of Sydney
11:30-11:45	35878	Vertical Distribution of Soil Organic Carbon Stocks and Fractions under Conventional and No-Tillage Systems in Morocco	Fatima ezzahra JABBOUR Mohammed VI Polytechnic University

*Subject to change

Parallel Sessions

11:45-12:00	35188	Soil organic carbon stocks under no-tillage on farms in European Russia	Kristina Ivashchenko Institute of Physicochemical and Biological Problems in Soil Science, Russian Academy of Sciences
12:00-12:15	32545	Global response of soil organic carbon pools to land management and climate change	Shui-Qing Chen Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences", "University of Science and Technology of China
13:30-13:45	31842	Carbon-Nitrogen Dynamics and Soil Aggregation in Terrace Soil of Rice-Wheat Cropping System	Md. Mizanur Rahman Department of Soil Science, Gazipur Agricultural University
13:45-14:00	31878	Soil C and N storages response to land-use and management changes: A comparison of various plant-soil ecosystems in Eastern Japan	CHENG Weiguo Yamagata University Japan
14:00-14:15	32034	Land-use pattern influenced quality and climate-resilience of soil in the Brahmaputra valley at Himalayan foothill in India	Prabhat Pramanik NRM Division, ICAR - Indian Agricultural Research Institute
14:15-14:30	32822	Soil Carbon-Nitrogen Pools in Different Land Use Types and Varying Time Scales: Implications for Soil Health and Sustainable Agriculture	Samuel Ayodele Mesele International Institute of Tropical Agriculture
14:30-14:45	33185	Linking the Chemical Composition of Soil Organic Carbon with the Formation, Stability, and Carbon Accumulation of Soil Aggregates under Divergent Land Uses	Kiattisak Sonsri Department of Soil Science, Faculty of Agriculture at Kamphaeng Saen, Kasetsart University, Kamphaeng Saen Campus, Nakhon Pathom 73140, Thailand
14:45-15:00	34539	Digging Deeper: Increasing Precision in quantifying Soil Organic Carbon Losses After Forest-to-Cultivated Land Conversion	Nastaran Chalabianlou Postdoctoral Fellow

*Subject to change

Parallel Sessions

15:00-15:15	34997	Evaluating Carbon Stock Shifts Following Land-Use Change: Secondary Land to Plantation in Azamgarh, India	Jitendra Ahirwal Centre of Environmental Studies, University of Allahabad, Prayagraj- 211002, Uttar Pradesh, India
16:30-16:45	33452	Biochar-loaded NH ⁺ 4-N effectively reduces carbon emissions by changing the composition of soil organic carbon and microbial community	Xuebo Zheng Tobacco Research Institute of Chinese Agricultural Sciences
16:45-17:00	33460	Contrasting microbial C dynamics under different long-term P fertilization regimes in non-allophanic Andosols.	Koizumi Wako Graduate School of Agricultural Science, Tohoku University Miyagi Japan
17:00-17:15	34764	Using Natural $\delta^{13}\text{C}$ Signature from Both Soil Profiles and Topsoils to Understand Organic Carbon Transformation in Mollisols (Phaeozems) of Northeast China	Kangning Geng Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
17:15-17:30	34789	Soil carbon dynamics and microbial associations across the soil profile under regenerative management in Northern California vineyards	Connie T. F. Wong Department of Land, Air and Water Resources, University of California, Davis, CA, USA
17:30-17:45	35071	Initial organic carbon content controls the depth-dependent soil organic carbon responses to liming	Yang Li Sichuan Agricultural University
17:45-18:00	35078	Long-term pig manure application increases SOC through aggregate protection and Fe-C associations in a subtropical red soil (Udic Ferralsols)	Hui Rong China Agricultural University
18:00-18:15	35135	Trade-offs between soil organic carbon input and mineralization driven by high-level phosphorus fertilization: 30-year field evidence	Jianguo Li College of Resources and Environment, Interdisciplinary Research Center for Agriculture Green Development in Yangtze River Basin, Southwest University

*Subject to change

Parallel Sessions

Friday, June 12		Room: Expo Center, Hall 5, 5202	
Session 409009		Soil Carbon Fluxes for Climate and Soil Health	
		Convener: Yafei Li, Agroecology and Environment, Agroscope, Switzerland	
		Co-Conveners: Yuqiao Wang, Henan Agricultural University, China Ruikun Gou, Northwest Agricultural and Forestry University, China	
Schedule	ID	Title	Presenter
09:00-09:05	-	Session Introduction	Conveners
09:05-09:20	32314	Management practices to mitigate long-term soil organic carbon losses in temperate arable soils	Martin Wiesmeier Bavarian State Research Center for Agriculture
09:20-09:35	31767	A model-based tool for supporting sustainable management of soil organic carbon in Swiss croplands	Yafei Li Agroecology and Environment, Agroscope, Zürich
09:35-09:50	34904	Soil Carbon Fluxes in Agroecosystems with Annual and Perennial Grasses in the Moscow region of Russia	Svatlana Kulachkova Lomonosov Moscow State University
09:50-10:05	33659	Contrasting effects of inorganic vs. organic nitrogen deposition on soil respiration: Evidence from a 10-year field experiment	Lili Dong Shenyang Agricultural University", "Chinese Academy of Sciences
10:05-10:20	32574	Blue Carbon Stocks in Brazilian Mangroves	João Pedro Coumendouros Scott Federal Rural University of Rio de Janeiro
10:20-10:35	32690	Mangrove Biomass and Soil Carbon Stocks: Spatial Approach in the Cananéia Region	Anjos, L.H.C dos Department of Soils, Institute of Agronomy, Federal Rural University of Rio de Janeiro

*Subject to change

Parallel Sessions

10:35-10:50	33484	How temperature controls methane fluxes and methanogenic pathways at polygonal tundra of Samoylov Island in the Lena River Delta (Northern Siberia)	Nikita B. Ustinov Laboratory of Greenhouse Gases, A.M. Obukhov Institute of Atmospheric Physics, RAS, Moscow, Russia
11:15-11:30	33808	Partitioning soil carbon fluxes reveals climate-sensitive losses from tropical peat soils under land-use change	Erin Swails Center for International Forestry Research (CIFOR)
11:30-11:45	34294	Greenhouse Gas Fluxes and Their Environmental Drivers in a Coastal Peatland of the Kamchatka Peninsula	Liudmila A. Krivenok A.M. Obukhov Institute of Atmospheric Physics, RAS, Moscow, Russia
11:45-12:00	36265	Linking Seasonal Controls and Biological Degradation in the Chihuahuan Desert, Mexico	Dulce Flores-Renteria SECIHTI-Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional, Unidad Saltillo, Ramos Arizpe, Mexico", "Laboratorio Nacional MexFlux, Monitoring of Greenhouse Gases in Ecosystems. Sede regional Saltillo, México.
12:00-12:15	34492	Evaluating global soil carbon sequestration and loss: an expert assessment of their role in climate mitigation and adaptation	Budiman Minasny College of Science and Engineering, James Cook University, Cairns, Queensland, Australia
12:15-12:30	33060	Soil carbon fluxes as indicator of Healthy urban soils in a Mediterranean city	Teresa Alía Soil Science Unit, Chemistry in Pharmaceutical Science Department. Universidad Complutense de Madrid.

*Subject to change



Parallel Sessions

Thursday, June 11 Friday, June 12		Room: Convention Center Nanjing 402A	
Session 409010		Soil microbial life and death: impacts on soil organic carbon dynamics under global change	
		Convener: Qing-Fang Bi, Max-Planck Institute for Biogeochemistry, Jena, Germany	
		Co-Conveners: Alberto Canarini, Department of Biological, Geological and Environmental Science, University of Bologna, Bologna, Italy	
		Xiuli Hao, Huazhong Agricultural University, Wuhan, China	
		Ke-Qing Xiao, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences	
		Yuting Liang, Institute of Soil Science, Chinese Academy of Sciences, Nanjing, China	
Schedule	ID	Title	Presenter
Thursday, June 11			
11:15-11:20	-	5-minute convener introduction	-
11:20-11:35	32195	Global viral auxiliary metabolic genes drive carbon sequestration under climate change	Mao Ye Institute of Soil Science, Chinese Academy of Sciences (Nanjing)
11:35-11:50	34154	Viral mediation of microbial turnover governs soil organic matter allocation	Weigen Huang State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences, Nanjing, China

*Subject to change



Parallel Sessions

13:30-13:35	-	5-minute convener introduction	-
13:35-14:05	34639	Microbes as engineers in modulating and preserving soil organic carbon	Qiaoyun Huang Huazhong Agricultural University
14:05-14:20	34562	Pathway-aware microbial phosphorus traits predict carbon-use efficiency and soil organic carbon turnover across urban gradients	Bangxiao Zheng Xiamen University of Technology
14:20-14:35	34170	Protist predation shifts bacterial life strategies and increases carbon use efficiency across contrasting soils	Silin Ma National Key Laboratory of Agricultural Microbiology, Huazhong Agricultural University, Wuhan, China.
14:35-14:50	35052	Microbial respiration, growth, and CUE - The roles of Land use, management, and environmental factors	Jarin Jose 1. Max Planck Institute for Biogeochemistry (MPI-BGC), Jena, Germany
14:50-15:05	34072	Microbial Carbon Use Efficiency and Its Linkage to Soil Carbon Storage	Jinquan Li Fudan University
15:05-15:20	35876	Microbial growth rate is a stronger predictor of soil organic carbon than carbon use efficiency	Xianjin He South China Botanical Garden, Chinese Academy of Sciences

*Subject to change

Parallel Sessions

16:30-16:45	34421	Response of Microbial Necromass and Extracellular Polymeric Substances under Multifaceted Global Change	Ke Shi German Centre for Integrative Biodiversity Research (iDiv) Halle-Leipzig-Jena, Puschstr. 4, 04103 Leipzig, Germany", "Department of Biology, Leipzig University, Puschstr. 4, 04103 Leipzig, Germany", " Department of Ecology, Co-Innovation Center for Sustainable Forestry in Southern China, Nanjing Forestry University, Nanjing, 210037, China
16:45-17:00	34600	From expansion to endurance: persistent warming reshapes soil active microbial communities in forest ecosystems	Jieying Wang NorthwestUniversity
17:00-17:15	34364	Thermal adaptation reshapes soil microbial carbon use efficiency under prolong warming	Lingrui Qu Institute of Applied Ecology, Chinese Academy of Sciences
17:15-17:30	33259	Soil microbial community structure and soil carbon dynamics in fields and hedgerows of Northern Irish Grasslands	Selva Dhandapani Agri Food and Biosciences Institute
17:30-17:45	33934	Soil microbial life-history strategies covary with ecosystem multifunctionality across aridity gradients	Tao Zhou NORTHEAST FORESTRY UNIVERSITY

*Subject to change

Parallel Sessions

Friday, June 12

09:00-09:05	-	5-minute convener introduction	-
09:05-09:30	32278	Multi-Scale Evidence for Declining Microbial Carbon Fixation Along Forest Succession Gradients	Shu-Yi-Dan Zhou South China Botanical Garden, Chinese Academy of Sciences
09:30-09:45	34405	Influence of nitrogen fertilization and cover crops on soil microbial dormant fraction	Simeng Wang Northwest University
09:45-10:00	34347	Microbial Enhancement of Soil Inorganic Carbon and Its Synergy with Organic Carbon Stabilization	Yishu Hu Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences", "Sino-Danish College, University of Chinese Academy of Sciences", "Department of Plant and Environmental Sciences, University of Copenhagen, Thorvaldsensvej 40, Frederiksberg 1871, Denmark
10:00-10:15	34834	Vertical distribution and controlling factors of soil microbial necromass carbon (MNC) under erosion-deposition processes	Qilin Yang Huazhong Agricultural University
10:15-10:30	34041	Microbial sequestration pathways of soil organic carbon in meadow steppes under long-term nitrogen and phosphorus application: Analysis based on aggregate scale residual carbon	Zhendan Wu Inner Mongolia Agricultural University

*Subject to change

Parallel Sessions

10:30-10:45	32141	Unlocking Carbon Management Sustainability by Quantifying Microbial Necromass and SOC Asynchrony	Xuefeng Zhu Institute of Applied Ecology, Chinese Academy of Sciences (Shenyang)
10:45-11:00	33849	Fenton reaction facilitates chitin degradation and nitrogen acquisition in the ectomycorrhizal fungus <i>Suillus luteus</i>	Bowen Zhang Centre for Environmental and Climate Science, Lund University", "Research Center for Mountain Environment and Ecological Security, Institute of Mountain Hazards and Environment, Chinese Academy of Sciences
11:15-11:30	32444	Patterns and drivers of soil microbial residue carbon responses to precipitation changes in grassland ecosystems	Yingchao Yu Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences", "University of Chinese Academy of Sciences
11:30-11:45	34013	Resolving the microbial processes underpinning necromass pools across landuses	Yao LI Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
11:45-12:00	34206	Clay-organic matter interactions drive microbial necromass preservation in soils	Xu Wang Institute of Applied Ecology, Chinese Academy of Sciences
12:00-12:15	34269	Soil organic matter persistence emerges from recursive microbial necromass and mineral feedbacks	Bin Zhang Nanjing Agricultural University

*Subject to change



Parallel Sessions

Monday, June 8 Tuesday, June 9		Room: Convention Center Nanjing 202	
Session 409011		Soil Organic Matter Transformation, Stabilization and Storage	
		Convener: Claudio Zaccone, Dept. of Biotechnology, University of Verona, ITALY	
		Co-Conveners: Boris Jansen, University of Amsterdam, Institute for Biodiversity and Ecosystem Dynamics, Amsterdam, THE NETHERLANDS Cesar Plaza, Consejo Superior de Investigaciones Científicas, Instituto de Ciencias Agrarias, Madrid, SPAIN	
Schedule	ID	Title	Presenter
Monday, June 8			
13:15-13:30	32582	Soil Carbon Dynamics and the Observer Effect	Ronald Amundson University of California, Berkeley
13:30-13:45	32655	Toward a standardized and ecologically relevant framework for soil organic matter physical fractionation	Xinnan Li Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
13:45-14:00	31863	Multi-element evidence that soil organic matter persistence is not attributed to selective preservation or loss but an ecosystem property	Wenxiang Zhou The University of Queensland, School of Agriculture and Food Sustainability
14:00-14:15	34515	Ancient radiocarbon-free organic carbon as a pervasive bias in soil ¹⁴ C-based turnover estimates	Yoann COPARD Univ Rouen Normandie, Université Caen Normandie, CNRS, Normandie Univ, M2C UMR 6143, F-76000 Rouen, France

*Subject to change

Parallel Sessions

14:15-14:30	35265	A mechanistic investigation into the influence of mineral surface carbon loading on the formation of soil organic carbon	YaLu Wang Institute of Mountain Hazards and Environment, Chinese Academy of Sciences", "University of Chinese Academy of Sciences
14:30-14:45	36149	The Interaction between Mineral Transformation and Mineral-Associated Organic Matter (MAOM) Degradation	Jiahui Wu University of Vienna, Division of Environmental Geosciences, Vienna, Austria
14:45-15:00	34745	Particulate pathway dominates mineral-associated organic matter formation and transformation	X. Chen Anhui Agricultural University
15:00-15:15	32719	Controls on the mineralization and stabilization of exogenous organic matter in volcanic soils	Dalin Wang Kyoto University
16:30-16:45	33711	¹³ C tracing reveals organo-mineral regulation of carbon stabilization under ambient and elevated CO ₂ levels	Lukas Van Zwieten NSW Department of Primary Industries and Regional Development
16:45-17:00	34337	Dual and divergent formation pathways govern the composition and origins of mineral-associated organic carbon	Mengqiang Zhu University of Maryland College Park", "University of Wyoming
17:00-17:15	36470	Soil Erosion and Organic Matter Stabilization Mechanisms	Xiang Wang China Agricultural University
17:15-17:30	33634	Manganese oxides direct polyphenol carbon toward abiotic polymerization or oxidative decomposition: Effect of pH and molecular structure	Hui Li Department of Crop and Soil Sciences, North Carolina State University
17:30-17:45	32377	Ferrihydrite-mediated carbon stabilization and plant responses in an alkaline soil	Zeinab Ghasemzadeh The University of Adelaide
17:45-18:00	35062	Iron oxides promote stable soil organic carbon sequestration in rice paddies	So Yeong Park Division of Applied Life Science (BK21), Gyeongsang National University, Jinju, Republic of Korea
18:00-18:15	36538	Iron-Mediated Carbon Dynamics in Coastal Wetlands under Seawater Intrusion	Chunmei Chen Tianjin University
18:15-18:30	33518	Hydrothermal-driven iron reduction-mineralization and organic carbon sequestration	Liulong Cheng South China Agricultural University

*Subject to change

Parallel Sessions

Tuesday, June 9

09:00-09:15	31817	Roots enhance the accrual of mineral-associated organic carbon via new carbon formation and microbial conversion of native soil carbon	Juan Jia State Key Laboratory of Forage Breeding- by- Design and Utilization, Key Laboratory of Vegetation and Environmental Change, Institute of Botany, Chinese Academy of Sciences
09:15-09:30	31819	Organic acid-mediated destabilization overrides warming effect on soil carbon mineralization	Xiaojuan Feng State Key Laboratory of Forage Breeding-By-Design and Utilization, and Key Laboratory of Vegetation and Environmental Change, Institute of Botany, Chinese Academy of Sciences
09:30-09:45	32001	Insights from soil-aggregate microbiome and in-field soil respiration for improved carbon sequestration assessment of land use practices	Anil Somenahally Texas A&M AgriLife Research
09:45-10:00	32666	Organic materials combined with microbial inoculants suppress priming effect and enhance SOC sequestration in sandy soil	Xiaohong Tian College of Natural Resources and Environment, Northwest A&F University
10:00-10:15	32979	Sources contributing to soil organic matter fractions in temperate forests are modified by mycorrhizal types	Johanna Pausch Agroecology, Bayreuth Center of Ecology and Environmental Research (BayCEER), University of Bayreuth
10:15-10:30	35962	Microbial mediation of deep soil inorganic carbon accumulation under long-term straw return in alkaline agricultural soils	Jianning Shang China Agricultural University
10:30-10:45	35198	Fresh Plant Residues Drive Fungal Necromass Carbon Turnover to Stabilize Organic Carbon throughout the Soil Profile	Dabin Zhang College of Natural Resources and Environment, Northwest A&F University

*Subject to change

Parallel Sessions

10:45-11:00	33285	Discovering the molecular basis for carbon storage in soil for food security and climate change mitigation	Wanyue Zhao University of Bristol
11:15-11:30	32758	Amplifying the soil mineral pump for carbon sequestration	Ke-Qing Xiao Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
11:30-11:45	35162	Tree species traits interact with site properties to shape soil organic matter composition	Delphine Derrien INRAE, BEF, F-54000 Nancy, France", "(11)tINRAE, Institut Agro, SAS, 35000 Rennes, France
11:45-12:00	32593	Rapid soil formation and carbon accumulation along a Little Ice Age soil chronosequence in southeast Alaska	Diogo Spinola University of Northern British Columbia
12:00-12:15	33528	Controls on Temperature Sensitivity of Soil Organic Carbon Decomposition Along a Volcanic Elevation Gradient in California	Ze Jingwen Graduate School of Agriculture, Kyoto University, JAPAN", "Institute of Agriculture, Tokyo University of Agriculture and Technology, JAPAN", "Faculty of Agriculture, Tokyo University of Agriculture and Technology, JAPAN", "Department of Land, Air and Water Resources, University of California, USA
12:15-12:30	33752	Conversion of coastal marshes to croplands shifts the pool, composition and functional groups of soil organic matter	Yidong Wang, Wei Xu, Qiang Li Tianjin Normal University
13:30-13:45	33145	Global warming and soil management impact on organic carbon stocks and dynamics in vineyard soils	Giorgio Galluzzi Department of Biotechnology, University of Verona

*Subject to change



Parallel Sessions

13:45-14:00	34367	Soil carbon dynamics and persistence in conservation agriculture tropical and subtropical soils	Daniel Ruiz Potma Gonçalves Empresa Brasileira de Pesquisa Agropecuária - Embrapa
14:00-14:15	35145	Assessment of carbon stock, stabilization, and soil aggregate structure in different Mediterranean agro-ecosystems	Martina Grattacaso Research Institute on Terrestrial Ecosystems (IRET), National Research Council (CNR), Via Madonna del Piano 10, 50019 Sesto Fiorentino, Italy", "Department of agricultural, food, environmental and forestry science and technology (DAGRI), University of Florence, Piazzale delle Cascine 18, 50144 Firenze, Italy
14:15-14:30	32669	Reframing Manure Amendments and Nitrogen Inputs as Co-Determinants of Persistent Soil Organic Carbon in Semi-Arid Agroecosystems	Xiangtian Meng College of Natural Resources and Environment, Northwest A&F University
14:30-14:45	32514	Long-term organic amendment in a maize cropping system enhanced CO ₂ emissions via stimulation of oligotrophic microbial decomposition of chemically recalcitrant dissolved organic matter compounds	Hongqin Zou Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences, Beijing
14:45-15:00	32579	A repeat-pulse field labeling study to trace the fate of ¹³ C and ¹⁵ N labelled canola and durum crop residues in plant and soil organic matter on the Canadian Prairies	Hongjie Zhang Swift Current Research and Development Centre, Agriculture and Agri-Food Canada
15:00-15:15	32681	Molecular signatures of soil organic matter diverge under long-term manure versus straw amendments in agricultural Mollisols	Meng Zhou, Yang Xiao, Yansheng Li, Xiaobing Liu Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences

*Subject to change



Parallel Sessions

16:30-16:45	32802	Straw incorporation stimulated the intercropping effect to enhance soil carbon sequestration	Yi-Wen Zhao China Agricultural University
16:45-17:00	36109	Application of Clay and Iron Oxide-Amended Compost: Linking Emission Reductions to Enhanced Soil Aggregation, Necromass, and Plant Performance	Benedikt Boppré Utrecht University", "NIOO-KNAW
17:00-17:15	35151	From waste to carbon sink: mineral-organic coupling in technosols	Yujia Tang Sichuan University
17:15-17:30	32889	The Long-Term Impact of Excess Phosphorus Saturation on Soil Organic Carbon Sequestration in Agricultural Soils	Marie Tuerlinckx Ghent University
17:30-17:45	34264	Soil organic matter formation from high P organic amendments	Mario Alvarez Salas University of Copenhagen
17:45-18:00	36174	Rapid versus delayed stabilization of residue-derived carbon by amorphous aluminum hydroxide and rice-husk biochar in alkaline soils	Tetsuhiro Watanabe Kyoto University
18:00-18:15	35659	Effects of silicon modified biochar with different pyrolysis temperatures on carbon stabilization pathways in saline alkali soil	Xin Gao Qingdao Agricultural University
18:15-18:30	36062	Sewage Sludge Biochar Is Less Persistent Than Plant-Based Biochars in Soil	Haichao Li Department of Soil and Environment, Swedish University of Agricultural Sciences, Uppsala, Sweden; Institute of Crop Science and Resource Conservation, University of Bonn, Bonn, Germany

*Subject to change



Parallel Sessions

Thursday, June 11 Friday, June 12		Room: Convention Center Nanjing 402B	
Session 409012		The Challenge and Opportunity for Precise Assessment and Prediction of Soil Carbon Sequestration and Storage Across Spatial and Temporal Scales	
		Convener: Aizhen Liang, Northeast Institute of Geography and Agroecology, CAS	
		Co-Conveners: Michael Thompson, Iowa State University William Horwath, University of California, Davis Zhongjun JIA, Northeast Institute of Geography and Agroecology, CAS	
Schedule	ID	Title	Presenter
Thursday, June 11			
Chair: Aizhen Liang, Northeast Institute of Geography and Agroecology, CAS			
11:15-11:35	34444	How spatial resolution shapes soil carbon estimates	Bradley A. Miller Agronomy Department, Iowa State University, Ames, Iowa 50011, USA
11:35-11:55	35961	Calcium carbonate constrains the capacity and saturation of mineral-associated organic carbon in global soils	Xi Yang Institute of Soil Science, Chinese Academy of Sciences
11:55-12:15	35013	Climate-vegetation interactions regulate decadal dynamics of soil organic carbon fractions across Europe	Yuntao Wu Zhejiang University
12:15-12:30	32801	Microscale soil organic matter patches shaped by carbon- and nitrogen-rich microdomains	Yahan Hu TUM School of Life Sciences, Technical University of Munich

*Subject to change



Parallel Sessions

Chair: Michael Thompson, Past President of SSSA

13:30-14:00	35371	Soil carbon sequestration: Realism versus potential	William R. Horwath University of California Davis
14:00-14:30	33228	Long-term field trials as a tool to evaluate the potential of fertilizers to maintain soil carbon persistence	Evgenia Blagodatskaya Department of Ecology of Agroecosystems, Helmholtz Centre for Environmental Research - UFZ
14:30-14:45	36110	Cultivation management reshapes soil profile configuration and organic carbon sequestration: Evidence from a 45-year field study	Si-Yu Cui Shenyang Agricultural University
14:45-15:00	32987	An approach to carbon credit finance feasibility assessment of SOC sequestration projects	Andrei Rozanov Stellenbosch University
15:00-15:15	34428	Estimating sequestration potentials of soil organic carbon in black soils of Northeast China	Jiubo Pei Shenyang Agricultural University

*Subject to change

Parallel Sessions

Chair: Evgenia Blagodatskaya, Department of Ecology of Agroecosystems
Helmholtz Centre for Environmental Research - UFZ

16:30-17:00	34727	An integrated framework combining spatial soil carbon information and a calibrated Roth C model for improving cropland SOC estimation	Kyeongyeong kim National Institute of Agricultural Sciences, Republic of Korea
17:00-17:15	34162	Impact of long-term tillage on the soil organic carbon storage and its composition in black soil	Pengxiang Sui Jilin Academy of Agricultural Sciences (Northeast Agricultural Research Center of China)
17:15-17:30	31858	How no-tillage and cropping systems shape soil organic carbon formation and stabilization over time: Evidence from a 16-year chronosequence	Yan Zhang Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
17:30-17:45	32207	Equilibrium levels for SOC stocks under different environmental regimes	Jonathan Gray Retired (formerly NSW Dept Planning & Environment)
17:45-18:00	36017	Driving factors and spatiotemporal variations of soil organic carbon in the Northeast China Plain	Honghong Ma Institute of Geophysical and Geochemical Exploration, Chinese Academy of Geological Sciences
18:00-18:15	36504	From diagnosis to management: informing low-carbon policy for tea plantations in Jiangsu, China	Xiao Han School of Tea and Food Science and Technology, Jiangsu Vocational College of Agriculture and Forestry
18:15-18:30	33354	Enhancing soil carbon sequestration and straw utilization through optimized microbial decomposition strategies	Shuaimin Chen Jilin Academy of Agricultural Sciences

*Subject to change

Parallel Sessions

Friday, June 12

Chair: William Horwath, UC Davis

09:00-09:30	35588	Dynamics of soil organic carbon and its mineralization in black soils of Northeast China	Lu-Jun Li Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
09:30-10:00	33320	Coupling of microbial carbon and energy fluxes in soil	Sergey Blagodatsky Karlsruhe Institute of Technology
10:00-10:15	34273	Stover incorporation enhances soil carbon sequestration by improving the hydrophobicity of humic acid and soil water repellency	Boyan Zhang Jilin Agricultural University
10:15-10:30	35012	Using a historical a soil properties database (INFOSOLO) to analyse long-term variations in SOC, SOC fractions, and soil structure: a case study	J. Antunes LEAF —Linking Landscape, Environment, Agriculture and Food Research Center, Associate Laboratory TERRA, School of Agriculture, University of Lisbon, Lisboa, Portugal ", "National Institute for Agricultural and Veterinary Research (INIAV), Soil Lab, Oeiras, Portugal
10:30-10:45	36133	Reconstructing rangeland soil carbon erosion using sediment trapped behind small reservoir dams	LU LI University of Basel
10:45-11:00	33746	Latitude-dependent temperature thresholds reverse soil organic carbon losses in global Mollisol croplands	Xiangtian Meng Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences

*Subject to change



Parallel Sessions

Chair: Xiaobin Guo, Institute of Subtropical Agriculture, CAS

11:15-11:30	33883	Field experiment reveals varied earthworm densities boost soil organic carbon more than they increase carbon dioxide emissions	Ronggui Tang Zhejiang A&F University
11:30-11:45	33087	Straw return depth and tillage intensity drive changes in organic carbon fractions and their stability in black soil	Lei Zhang Northeast Institute of Geography and Agroecology Chinese Academy of Sciences
11:45-12:00	35356	The carbon sequestration potential of arable soils in Russia based on dynamic modeling	Vladimir A. Romanenkov Soil Science Faculty, Lomonosov Moscow State University, Moscow, Russia", "Pryanishnikov Research Institute of Agrochemistry, Moscow, Russia
12:00-12:15	34173	Soil biogeochemical models current applications and future directions	Wenjun Wang Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences

*Subject to change



Parallel Sessions

Thursday, June 11		Room: Expo Center, Hall 5, 5203	
Session 409014		Soil Organic Carbon: Accounting, Mechanisms, and Sustainable Management	
		Conveners: Jianming Xu, Zhejiang University, China Yanfen Wang, University of the Chinese Academy of Sciences (UCAS), China Co-Conveners: Johannes Lehmann, Cornell University, USA Yu Luo, Zhejiang University, China Yash Dang, University of Queensland, Australia Jianqing Du, University of the Chinese Academy of Sciences (UCAS), China Songchao Chen, Zhejiang University, China Anquan Xia, Development and Research Center (National Geological Archives of China), China Geological Survey, Beijing, 100037, China Francesco Fava, Department of Environmental Science and Policy, Università degli Studi di Milano, Via Celoria 2, Milan, Italy Tong Li, University of Queensland, Australia Kai Xue University of the Chinese Academy of Sciences (UCAS), China	
Schedule	ID	Title	Presenter
11:15-11:30	34134	A simple gravimetric proxy for rapid, low-cost estimates across diverse subtropical soils	Jeff Ellis Griffith University, School of Environment and Science, Australian Rivers Institute
11:30-11:45	34351	Biochar at scale needs long-term proof: LTE field trials supporting the green transition of Danish agriculture	Lars Elsgaard Department of Agroecology, Aarhus University, Tjele, Denmark

*Subject to change

Parallel Sessions

11:45-12:00	31698	Enhancing spectral estimation accuracy of soil organic carbon by using geographic region and clay content as covariates	Wenxu Zhang College of Agriculture, Shihezi University
12:00-12:15	32076	Integration of Smartphone Imagery with Topographic Parameters for Soil Organic Carbon Prediction in the Indo-Gangetic Plains: An Interpretable Machine Learning Approach	Pragati Pramanik Maity ICAR-Indian Agricultural Research Institute
13:30-13:45	32425	Differences in the physical protection mechanisms of soil organic carbon with ¹³ C-labeled straw and biochar	Caidi Yang Northwest University
13:45-14:00	33645	Engineered biochar amendments to address multiple soil constraints: Results from 12 field studies	Lukas Van Zwieten NSW Department of Primary Industries and Regional Development
14:00-14:15	32473	The influence of natural and anthropogenic pyrogenic history of the landscape on soil carbon stocks on example of Komi Republic	Alexey Dymov Institute of Biology Komi Scientific Center, Ural Branch of the RAS
14:15-14:30	32581	Underestimating Soil Carbon Dynamics: The Missing Role of Vertical Transport	Ronald Amundson University of California, Berkeley
14:30-14:45	33199	A long-term global Mollisols SOC content prediction framework: integrating prior knowledge, geographical partitioning, and deep learning models with spatio-temporal validation	Xiangtian Meng Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
14:45-15:00	33242	Field NIR Spectroscopy for Soil Carbon Monitoring in Hazelnut Orchards	Leonardo Pace University of Tuscia

*Subject to change

Parallel Sessions

16:30-16:45	32445	Recognizing and Reducing Effects of Moisture-Salt Coexistence on Soil Organic Matter Spectral Prediction: From Laboratory to Satellite	Danyang Wang Nanjing Agricultural University
16:45-17:00	34034	Can we grow food on the Moon? Engineering biological systems in lunar regolith	Katherine Weigh Department of Primary Industries and Regional Development, NSW
17:00-17:15	34723	Life Cycle Assessment of Traditional Japanese Thatched Roofs with Biochar End-of-Life Integration: Implications for Carbon Mitigation	Tawiah Joseph Kotey Graduate School of Science and Technology, University of Tsukuba, Ibaraki, Tsukuba Japan
17:15-17:30	35729	Intercropping to Enhance Agricultural Production and Increase The Level of Carbon in The Soil	Juline Diken Malounghou Bounangnan Laboratory of Biotechnology, Agri-food, Materials and Environment, Faculty of Science and Technology, Hassan II University of Casablanca, Morocco 2 Higher Institute of Agronomy and Biotechnology, University of Science and Technology of Masuku, Gabon
17:30-17:45	35772	Uncertainty of Vis-NIR-based models for predicting soil organic carbon using Monte Carlo simulation	Po-Hui Wu Department of Agricultural Chemistry, National Taiwan University, Taipei 10617, Taiwan
17:45-18:00	31616	Mid-Infrared Spectroscopy for Soil Organic Carbon Estimation: Global Insights and Case Studies	Tong Li The University of Queensland
18:00-18:15	35854	Innovation and Application of Targeted Humification of Agricultural Wastes and Targeted Soil Improvement Technologies	Wei Dan Beijing Academy of Agriculture and Forestry Sciences

*Subject to change

Parallel Sessions

Thursday, June 11		Room: Expo Center, Hall 6, 6201	
Session 502002		From Dirt to Destiny: Communicating Soil Science for Global Sustainability and Cultural Understanding	
		Convener: Neng-Chang Chen, Institute of Eco-environmental and Soil Sciences, Guangdong Academy of Sciences	
		Co-Convener: Yuan-Ming Song, University of Science and Technology Beijing	
Schedule	ID	Title	Presenter
11:15-11:30	319B50	Soil Survey in Modern China from the Perspective of Sino-American Academic Exchange: A Case Study of the University of Nanking and the Geological Survey of China	Yongguan ZHU Research Center for Eco-environmental Sciences, Chinese Academy of Sciences
11:30-11:45	34880	On Shishi Wanwusheng Soil Science Communication Hall	Zaifa Dong Shishi Wanwusheng Soil Science Communication Hall
11:45-12:00	34469	From Soil to Screen: Storytelling and Digital Media to Boost Soil Literacy	Stephan Mantel ISRIC World Soil Information, Wageningen, the Netherlands
12:00-12:15	31997	Soil as Component of Ancient Adobe, Mudbricks, Mortar, and Plaster: Investigation of Engineering Structures of The Past in Oman	Said Al-Ismaily Department of Soils, Water and Agricultural Engineering, Sultan Qaboos University
12:15-12:30	36178	Soil aesthetics in the popularization of soil science	Maria Chepurnova Lomonosov Moscow State University
13:30-13:45	33410	Optimal Organic Amendment Strategies for Safe Utilization of Heavy Metal-Contaminated Soils via Interpretable Machine Learning and Multi-Objective Optimization	Qifeng Min Agro-Environmental Protection Institute, Ministry of Agriculture and Rural Affairs

*Subject to change



Parallel Sessions

13:45-14:00	34849	Past, Present and Perspective of Soil Science Communication in China	Nengchang CHEN Guangdong Institute of Eco-Environmental and Soil Sciences
14:00-14:15	33306	Analysis and Exploration on the Paths of Experiential Soil Science Popularization towards Primary School Students	Chen-yang Xu Northwest A&F University
14:15-14:30	34987	Siliceous restrictive layer: a new soil constraint in Northeast China's Black Soil Region	Zhong-Xiu Sun Shenyang Agricultural University
14:30-14:45	34962	Underfoot: Soil Exhibits in Public Spaces	Raj BUtalia Self
14:45-15:00	34413	"Fertile Land with Childlike Heart"-Science Popularization Action of Little Guardians for Soil Protection	Nan Zhao Institute of Eco-environmental and Soil Sciences, Guangdong Academy of Sciences
15:00-15:15	34990	Biochar-based fertilizers alter the ecological components of organic carbon in the soil aggregates of red soil tea gardens	Junming HU Guangxi Academy of Agricultural Sciences
15:15-15:30	34080	From Soil Healing to System Thinking: Repositioning Sustainability through Nature's Logic	Enheng Wang Northeast Forestry University
15:30-15:45	36546	Performance: Open Hands	Cristina Angueira Soil consultant, Former Soil researcher INTA

*Subject to change



Parallel Sessions

Tuesday, June 9		Room: Expo Center, Hall 6, 6201	
Session 503005		The Digital Transformation of Soil Science	
		Conveners: Richard J Heck, University of Guelph, Canada Fernando Ayala Niño. Laboratorio de edafología aplicada y Servicios Ambientales Unidad de Biotecnología y Prototipos (UBIPRO). Facultad de Estudios Superiores Iztacala-UNAM. Tlalnepantla de Baz Estado de México, México Giuliano Langella, Department of Agriculture, University of Naples Federico II, Piazza Carlo di Borbone 1, 80055 Portici NA, Italy Co-Conveners: Fabio Terribile, Università di Napoli Federico II, Italy Francisco Bautista. Centro de Investigación en Geografía Ambiental, Universidad Nacional Autónoma de México-UNAM, Morelia 58190, Michoacán, Mexico Héctor Estrada-Medina. Campus de Ciencias Biológicas y Agropecuarias. Universidad Autónoma de Yucatán. Mérida 97315, Yucatán, México Piero Manna, Institute for Mediterranean Agricultural and Forestry Systems (ISAFOM), National Research Council (CNR), Piazzale E. Fermi, 1, Portici, NA, 80055, Italy Marialaura Bancheri, Institute for Mediterranean Agricultural and Forestry Systems (ISAFOM), National Research Council (CNR), Piazzale E. Fermi, 1, Portici, NA, 80055, Italy	
Schedule	ID	Title	Presenter
09:00-09:05	-	Welcoming message	-
09:05-09:17	31890	Classifying Soils with Artificial Intelligence	Estrada-Medina Héctor Universidad Autónoma de Yucatán

*Subject to change

Parallel Sessions

09:17-09:29	32002	Artificial Intelligence Assisted Soil Description and Inference	Sandra Evangelista The University of Sydney
09:29-09:41	32200	Mixed reality for soils monoliths: an example from the National Museum of Soils of Mexico	Fernando Ayala-Niño Laboratorio de Edafología Aplicada y Servicios Ambientales, UBIPRO. Facultad de Estudios Superiores Iztacala-UNAM
09:41-09:53	32268	Technology in Soil Science Education in the 21st Century: Web, Software, and Apps for Generation Z	Francisco Bautista and Angeles Gallegos Centro de Investigaciones en Geografía Ambiental, Universidad Nacional Autónoma de México.
09:53-10:05	32613	The Algorithmic Lens: Unraveling Soil Structure with Artificial Intelligence	Yongwei Fu China Agricultural University
10:05-10:17	32836	Machine learning-based prediction of plant-available nutrients in soils using multiple variable selection strategies	Seung Jun Lee Chung-buk National University
10:17-10:29	33599	Automatic segmentation of soil micromorphological images using a Convolutional Neural Network	Komkova Daria Federal Research Centre V.V. Dokuchaev Soil Science Institute, Moscow, Russia
10:29-10:41	33640	AI Enabled Soil Moisture Monitoring for Real Time Drought Detection in the Western United States	John Blackwell Colorado State University

*Subject to change



Parallel Sessions

10:41-10:53	33969	AI-Driven Data Mining of Scientific Literature: A Framework for Soil Research	Yikang Cheng Nanjing TAG-HUB Innovation Technology Co., Ltd.
11:00-11:12	34132	3D Two-stage Multi-modal Soil Pore Segmentation based on Flow Field	Yinkai Fu School of Technology, Beijing Forestry University
11:12-11:24	34165	Multi-Class Segmentation of Soil Structure from CT Images based Deep Learning	Zihan Huang Beijing Forestry University
11:24-11:36	34477	AI-Assisted Applications for Soil Science Education: Tools for Teaching and Learning	Héctor Estrada-Medina Autonomous University of Yucatán
11:36-11:48	34931	SpecSINFERS: Soil Inference Systems in the AI era	José Padarian The University of Sydney
11:48-12:00	35074	Segmentation of soil structural domains in thin-section images a deep learning approach	Carlo Perreca University of Naples Federico II - Department of Agricultural Sciences
12:00-12:12	35833	Precise Source Apportionment and Spatial Distribution Prediction of Soils Heavy Metals Pollution in the Largest Magacity in China Based on Multi-source Data and Machine Learning	Lian Wang Shanghai Academy of Agricultural Sciences
12:12-12:30	-	General comments	-

*Subject to change

Parallel Sessions

Monday, June 8	Room: Convention Center Yangtze Room	
Soil Feeds Life		
Schedule	Title	Presenter
Ecological Protection, Restoration and Sustainable Development of Gobi Chair: Lixing Yuan		
13:15-13:30	The Classification, Regionalization and Mapping of Gobi in China	Yiming Feng Institute of Desertification Studies, Chinese Academy of Forestry,China]
13:30-13:45	Soil Characteristics and Utilization Routes of the Gobi Desert in Xinjiang	Hongfei Zhou Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences, China
13:45-14:00	Soil Survey and Damage Analysis of Gobi Gravel layer in Hami City	Junli Li Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences
14:00-14:15	Research on Collaborative Paths of Gobi Ecological Protection and Regional High-Quality Development in Hami City, Xinjiang Uygur Autonomous Region	Rong Dai, Aiguo Zhang Nanjing Institute of Environmental Sciences, Ministry of Ecology and Environment;Xinjiang Uygur Autonomous Region;Xinjiang Hami Desert-Gobi Station,China
14:15-14:30	Research on Gobi Ecological Quality Assessment and Its Driving Mechanism in Hami City	Chaoran Li, Mengjia Xu, Zhili Chen, Pengpeng Yu Nanjing Normal University,China
14:30-14:45	Exploration of Near-Zero Carbon Restoration Pathways for the "Mining-Photovoltaic-Greening" model in Gobi Mining Areas: A case of Xinjiang Hami Yinggema No.2 Coal Mine	Wenlong Yao Xinjiang Hami Yinggema Coal Power Investment Co., Ltd.China
14:45-15:00	Effects of Photovoltaic Infrastructure Development and Operation on Soil Ecosystem Dynamics in Extremely Arid Regions	Chunbo Chen Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences,China
15:00-15:15	A Research on Spatio-temporal Evolution and Driving Mechanisms of Vegetation in Typical Arid and Semi-Arid Regions — A Case Study of Ningxia	Yangyang Gu Nanjing Institute of Environmental Sciences, Ministry of Ecology and Environment,China

*Subject to change

Parallel Sessions

Curb Land Degradation, Protect Soil Health

Chair: Rong Dai

15:30-15:45	Desert Ecosystems in China: Past, Present and Future	Xunming Wang Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, China
15:45-16:00	Advances in the Application of Bio-based Materials for Sand Fixation	Daihui Zhang Institute of Chemical Industry of Forest Products, Chinese Academy of Forestry, China
16:00-16:15	Synergy Between Abandoned Mine Restoration and Gobi Conservation in Desert Areas: An Environmental Boundary Perspective	Haidong Li College of Forestry and Grassland, College of Soil and Water Conservation, Nanjing Forestry University, China
16:15-16:30	Risk Assessment, Source Apportionment and Driving Mechanism of Soil Heavy Metals in Coal Mining Areas of Xinjiang, China	Fei Zhang Zhejiang Normal University, China
16:30-16:45	Spatio-temporal Mapping and Multi Scenario Prediction of Soil Organic Carbon of Grassland Ecosystems in China	Changming Zhu Jiangsu Normal University, China
16:45-17:00	Stabilization Study on Synergistic Disposal of Arsenic-Contaminated Soil by Ceramsite Kiln	Yifan Yan Nanjing Institute of Environmental Sciences, Ministry of Ecology and Environment, China
17:00-17:15	Effect and Quantitative Simulation of Watershed Buffer Zone on Prevention and Control of Agricultural Non-point Source Pollution	Ruozhu Yang, Delin Xu, Yunsheng Jia, Liangkai Wang Nanjing Institute of Environmental Sciences, Ministry of Ecology and Environment, China

*Subject to change

Parallel Sessions

Tuesday, June 9

09:00-09:05	Conference Address	Yuanxiao Yan Institute of Soil Science, Chinese Academy of Sciences, China
09:05-09:10	Conference Address	Lixing Yuan College of Resources and Environmental Sciences, China Agricultural University, China
09:10-09:15	Conference Address	Hongye Wang Department of Cultivated Land Quality and Farmland Engineering Supervision and Protection, Ministry of Agriculture and Rural Affairs, China
09:15-09:20	Expert Speech	Representative of International Experts
09:20-09:25	Expert Speech	Fusuo Zhang Chinese Academy of Engineering, China Agricultural University, China
09:25-09:50	Keynote Report	Minggang Xu Chinese Academy of Engineering, Shanxi Agricultural University, China
09:50-10:05	Empowering High-Quality Development in Hami City by Developing New Quality Productive Forces in the Gobi Region	Zhixian Zhang The Standing Committee of the CPC Hami Municipal Committee, the Hami Municipal People's Government, China
10:05-10:20	Agricultural green development model based on resource efficiency and environmental emission reduction in North China – case a case study in Quzhou	Weifeng Zhang China Agricultural University

*Subject to change

Parallel Sessions

Session: Nature-Based Solutions for Soil Health and Sustainable Crop Production

Part 1 Crop Diversification for Sustainable Agriculture

Chair: Guangzhou Wang; Didier Lesueur

10:35-10:50	Intercropping increases soil multifunctionality potentially by increasing the abundance of functional genes: evidence from a long-term field experiment	Xiao-Tong Yin, Chuan-Lin Xiao, Zi-Heng Hao, Cheng-Bao Wang, Jun Mao, Rui-Peng Yu, Peter Christie, and Long Li State Key Laboratory of Nutrient Use and Management, Beijing Key Laboratory of Biodiversity and Organic Farming, China Agricultural University, Beijing, China
10:50-11:05	Maize/peanut intercropping advantages: evidence for soil biota-mediated nitrogen transfer	Xiao Wang, Wenju Liang, Xiaoke Zhang Institute of Applied Ecology, Chinese Academy of Sciences, China
11:05-11:20	What matters to detect early soil health change in integrated cover crop systems?	Peng, L. L. Van Eerd, B. Seuradje, L. Van Arkel, E. R. Page, L. A. Phillips M. School of Environmental Sciences, University of Guelph, Canada
11:20-11:35	Agronomic constraints limit the climate change mitigation potential of winter cover crops in Europe	Marti Vidal Morant, Sarah-Maria Scheid, Bas du Mortier, Charlotte van Haren, Allard de Wit Renske Hijbeek Wageningen University, Netherlands
11:35-11:50	Optimizing Soil Health in Tropical Peatlands through Coconut-based Agroforestry	Safira Eka Aprianti, Nurul Ihsan Fawzi Ilham Adi Santoso, Fransisca Simanjuntak, Putri Oktariani, Suwardi Tay Juhana Foundation, Indonesia
11:50-12:05	Restoring Soil Health and Managing Soilborne Pathogens in Vietnam's Intensified Coffee and Black Pepper Systems	Long Nguyen Van, Laetitia Herrmann, Chung Nguyen Van, Aydin Enez, Lambert Brau, Cuong Vo Chi, Do Nguyen, Didier Lesueur Environment - Deakin University, Australia

*Subject to change

Parallel Sessions

13:30-13:45	Faba bean-wheat intercropping sustains soil water and nutrient cycling, and the carbon availability for microbes in the short term.	Riccardo Picone, Norman Gentsch, Gemma Marchetti, George Guggenberger, Giacomo Pietramellara ¹ , Shamina Imran Pathan ¹ . University of Florence, Italy
13:45-14:00	Crop yield and soil health responses to integrated nitrogen and rice residue management in rice-wheat cropping system	Kirti Bhatt and Jagdeep Singh Punjab Agriculture University, India
14:00-14:15	Cover Copping for Soil Health Improvement in North-western Canada	Bharat Shrestha , Bishnu Pandey , Kirsten Hannam , and Shabtai Bittman Agriculture and Agri-Food, Canada
14:15-14:30	Cover Crop-Driven Anaerobic Soil Disinfestation Enhances Weed Suppression and Collard Greens Productivity	Mahmoud Rady, Matthew Cutulle, and Brian Ward Clemson University, USA
14:30-14:45	Productive Grassland: Influence of Mixture Composition on Yield and Nitrogen Response Efficiency in a Temperate Region	Varley, C. Brophy, J. A. Finn, S. Baker, S. Higgins Agri-Food and Biosciences Institute, United Kingdom
14:45-15:00	Soil Natural Productivity: A Path to Self-Regeneration and Sustainability— Empirical Insights from Hechuren's "Natural Mulching and No-Tillage"	Yi Zhu Natural Mulching and No-Tillage Empirical Laboratory Chongqing Hechuren Farming Culture Heritage and Development Center Chongqing, China
15:00-15:15	Natural farming practices for enhancing soil health and nutritional quality of crops in different agroecology of eastern India	Sneha Sen, Shiveshwar Pratap Singh, Shankar Jha, Shiv Shankar Prasad, Sanjay Tiwari, Ratnesh Kumar Jha Soil Science, Dr. Rajendra Prasad Central Agricultural University, India

*Subject to change

Parallel Sessions

Session: Nature-Based Solutions for Soil Health and Sustainable Crop Production

Part 2 Soil Health Solutions for Sustainable Agriculture

Chair: Didier Lesueur; Guangzhou Wang

15:30-15:45	Biochar And Compost As Nature-Positive Solutions To Semi-Arid Agriculture: Multi-Level Assessments Of Soil Health, Nutrient Cycling, And Greenhouse Gas Emissions	Rajan Ghimire, Sundar Sapkota, Juan P. Frene, and Piumi Madhuwanthi New Mexico State University, USA
15:45-16:00	Enhancing Drought and Salinity Resilience in Tomato Plants Using Plant Growth-Promoting Bacillus Species from Semi-Arid Soils of Australia	Erandi Herath, Deli Chen , Jiang Lu,Pangzhen Zhang The University of Melbourne, Australia
16:00-16:15	Assessing rhizosphere and root traits of maize varieties under drought in integrated greenhouse and field experiments	Martin Wiesmeier, Jessica Thiel, Andreas J. Wild, Saniv Gupta, Alica Heid, Tillmann Lueders, Mohsen Zare Johanna Pausch Institute for Agroecology and Organic Farming, Germany
16:15-16:30	Standardization Leads the Way: Building Soil Health Together to Support Sustainable Agriculture	Qingqing Jiang, Na Zhu, Yunlong Zhao, Yilin Dong, Miaoqi Xie, and Ke Wang Shenzhen Institute of Standards and Technology, China
16:30-16:45	Nature-based solutions for soil protection, preservation and improvement: a comprehensive review of technical, social and funding aspects	Daniel Ruiz-Beamonte , Marianna Garfi Universitat Politècnica de Catalunya-BarcelonaTech, Barcelona, Spain
16:45-17:00	Evaluation of the soil quality improvement potential through basalt rock dust amendment	Angelique Daniel Unit for Environmental Sciences and Management, North-West University, South Africa

*Subject to change

Parallel Sessions

17:00-17:15	Changes in Soil Bacterial and Fungal Community Characteristics in Response to Biochar Treatments	Igor A. Yakovlev, Hege Særvold Steen, Inger Heldal, Jihong Liu Clarke, Nicholas Clarke Norwegian Institute of Bioeconomy Research, Ås, Norway
17:15-17:30	Soil-crop-fertilization interactions drive the effects of Fusarium oxysporum FO12 on soil properties and plant nutrition	Jesús Sevillano-Caño, Carlos Agustí-Brisach, María Belén Corral-Burguillos, Alessio Vettori, José María García-Mina, Ángel María, Zamarreño, Vidal Barrón, María José García-del Rosal, Antonio Rafael-Sánchez-Rodríguez Departamento de Agronomía, Universidad de Córdoba, Córdoba, España
17:30-17:45	The issue of soil pollution solved using organic farming#04 Case studies for solved the soil damaged by flood disaster problem	Pathawit Chongsermsirisakul, Siripen Iamurai SiPa Research Organisation, Thailand
17:45-18:00	Microbial solutions for reducing soil nitrous oxide emissions	Guang He and Frank E. Löffler East China Normal University, China
18:00-18:15	Identification of soil health-related problems in apple orchards: preliminary results from the Grójec Living Lab	Jerzy Jonczak, Józef Chojnicki, Sebastian Przybyłko, Aleksandra Chojnacka, Piotr Jankowski, Wojciech Kwasowski, Alicja Dzięgielewska-Sitko, Edyta Pawłowicz, Beata Rustowska, Lidia Oktaba, Artur Pędziwiatr, Łukasz Uzarowicz, Zbigniew Zagórski, Dagmara Stangierska-Mazurkiewicz, Hanna Górska-Warsewicz, and Cristina Carlos University of Life Sciences-SGGW, Poland
18:15-18:30	Ecological Regulation Function of Soil Microorganisms: Synergistic Effects of Arbuscular Mycorrhizal Fungi and Trichoderma in Biotic and Abiotic Stress Tolerance	Zhipeng Hao, Kangxu Zhang, Xin Zhang, and Baodong Chen State Key Laboratory of Regional and Urban Ecology, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, China

*Subject to change

Poster Sessions

Expo Center, Hall 5A			Monday, June 8, 15:30-16:30 Tuesday, June 9, 15:30-16:30	
Poster Session 1			001~785	
Session number	No.	ID	Title	Presenter
101001	001	31967	Integrated 3D Static Modelling of Mars Field Offshore Dahomey Basin Nigeria	Mohammed Abubakar Mohammed Institute Siberian School of Geosciences, Irkutsk National Research technical University", "Department of Geology, Federal University Lafia
101001	002	31970	Pixel-wise spectral correction framework for soil total carbon mapping: integrating hyperspectral image and laboratory Vis - NIR spectra	Jiaxue Wang Wuhan University
101001	003	33048	Identification of Key Factors for Soil Drainage Classification via Color Metric Comparison from Soil Images	Danbi LEE National Institute of Agricultural Sciences
101001	004	33133	Arbuscular mycorrhizal fungi hyphal density rather than diversity stimulates microbial necromass accumulation after long-term Robinia pseudoacacia plantations	Chunhui Liu Northwest A&F University
101001	005	33356	Soil nutrient enrichment and metal detoxification potential of Neltuma juliflora in the urban landscapes and the motorway corridors	R. Mohanraj Department of Environmental Science and Management, Bharathidasan University, Tiruchirappalli - 620024, India
101001	006	33432	Effect of Fresh and Fermented Olive Solid Waste and Cow Manure on Soil Fertility and Wheat Productivity	Abd Al Karim Jaafar Damascus University
101001	007	33439	Predicting the interaction of a coated moldboard plow and soil compared to the conventional one using adaptive neuro-fuzzy inference system (ANFIS)	Mohammad Askari Department of Biosystems Engineering, Faculty of Agricultural Engineering, Sari Agricultural Sciences and Natural Resources University, Sari, Iran

*Subject to change

Poster Sessions

101001	008	33852	Quantitative Characterisation of Microbial Carbon Based on EPS and Aminoglycoside Components	Bin Li Huazhong Agricultural University
101001	009	35124	Soil Morphological Characteristics and Profile Development of Nabkhas in the Coastal Deserts of Oman	Malak Al Ghabshi Sultan Qaboos University
102001	010	32129	Magnetic Susceptibility as a Non-Destructive Proxy for Anthropogenic Roadside Contamination: A First Study in Uruguay	Lucía Isabel Amy Pereyra Grupo de Física, Departamento de Suelos y aguas, Facultad de Agronomía, Universidad de la Republica", "Instituto de Física, Facultad de Ingeniería, Universidad de la República
102001	011	35448	Pedodiversity in the Peruvian Andes-Amazon Transition: Lithological and Topographic Controls in a Tectonically Active Landscape	Mishell Jahayra Munoz Lino Universidade Federal de Viçosa (UFV)
102001	012	36529	Influences of parent materials on magnetic properties of tropical lateritic soils in Hainan Island of South China	Tian-Le Cai Shanghai University
102005	013	32819	Challenges for China-Russia transborder soil research	Denisova Elizaveta Soil Science Department, Lomonosov Moscow State University
102005	014	34008	Soil Type Prediction Based on Soil Formation Factors and Random Forest	Yao Lu China University of Geosciences
102005	015	36126	Hydraulic Properties of Artificial Soil Constructed from Agricultural and Forestry Waste	Yarun Wang Shanxi Agricultural University
104002	016	31685	Investigating the Dry Color Requirement for Mollic and Umbric Horizons	William B. Hernández Virginia Polytechnic Institute and State University
104002	017	31828	Achievements and challenges for international classification of human-transformed and human-constructed soils	Kabala, C. Wroclaw University of Environmental and Life Sciences
104002	018	31876	Reassessment of the anthropogenic soil' s classification of Slovakia - basic principles and criteria	Jaroslava Sobocká National Agricultural and Food Centre, Soil Science and Conservation Research Institute

*Subject to change

Poster Sessions

104002	019	33102	Characterization and Classification of Soils on Sedimentary Parent Rock in Kobape, Southwestern Nigeria	Abayomi S. Fasina Department of Soil Science and Land Resources Management, Federal University Oye-Ekiti
104002	020	33105	The classification Salt-affected Soil in Reclaimed Agricultural Tide	Byounghwan SEO Rural Development Administration
104002	021	33149	Identifying Lithic Discontinuities in Volcanic Soils Using Particle-Size Analysis: A Comparative Study of Andosols and Nitisols Along a Toposequence in Western Java, Indonesia	Stefaan Dondeyne Department of Geography, Ghent University", "Department of Soil Science and Land Resource, Faculty of Agriculture, Universitas Padjadjaran", "Gembloux Agro-Bio Tech, University of Liège
104002	022	33156	Research on the Classification of Human-Altered Soils in China	Kening Wu China University of Geosciences, Beijing
104002	023	33552	South Africa' s classification challenge: pedological tradition or pedometric transition?	Trevan Flynn University of Fort Hare
104002	024	33779	Soil characterization as a tool for sustainable soil management in the Assam-Meghalaya foothill belt: Implications for humanity' s shared future	Surabhi Hota ICAR-Directorate of Weed Research
104002	025	33940	Refining Soil Classification for Complex Pedogenic Environments: A Function-Sensitive Approach from Iran	Mohammadhassan Salehi Soil Sci. Dept., College of Agriculture, Shahrekord University
104002	026	34283	Appraisal of Soil Taxonomy and the World Reference Base for Soil Resources Applied to Classify Purple Soils from the Eastern Sichuan Basin, China	Siyu Liu Southwest University
104002	027	34850	Differences in chemical properties and soil classification of Andosols under varying volcanic ash deposition in the caldera rim of Mt. Aso, Kyusyu Islands, Japan	Haruko Saito Graduate School of Applied Biosciences, Tokyo University of Agriculture
104002	028	35234	Coarse fragments and soil classification: conceptual gaps and taxonomic challenges from a Brazilian perspective	Caroline Delpupo Federal Institute of Minas Gerais

*Subject to change

Poster Sessions

106003	029	31843	Climate Variability: Bridging Time Scales in Soil Formation Analysis	Zhmyro Sofiia Faculty of Geography and Geoinformation Technology, Higher School of Economics
106003	030	32388	Soil Cover of the Central East European Plain in the Middle Pleistocene – Kamenka Interglacial (MIS 7)	Pavel Panin Laboratory of Evolutionary Geography, Institute of Geography RAS
106003	031	32673	Podzols of the north of Western Siberia – the bridge between modern soil formation and paleocryogenesis	M.A. Chepurnova Soil Science Faculty, Lomonosov Moscow State University
106003	032	32683	Investigating the Cretaceous Critical Zone: Relative Primary Productivity and Organic Carbon Dynamics in the Upper Moreno Hill Formation	Ian Alexander Taylor Mewborne College of Earth and Energy, School of Geosciences, University of Oklahoma
106003	033	32785	How Periglacial Past Affected the Evolutionary Pathways of Holocene Temperate Soils: Northern Part of the East European Loess Belt	Vasily A. Lobkov Institute of Geography, Russian Academy of Sciences
106003	034	33019	Geochemical signatures (pXRF) of polygenetic soils in the Cerrado-Caatinga transition, Piauí, Brazil	João Victor Alves Amorim Federal University of Paraíba
106003	035	33613	Bronze Age kurgans as a complex paleoarchive: data from paleosoils and kurgan constructions in the steppe zone of Russia	Alyona Sverchkova Institute of Geography, Russian Academy of Sciences
106003	036	33947	Pedogenic Response to Holocene climatic fluctuations in the Caucasian foothills (Dagestan, Russia)	F. Kurbanova Environmental paleoarchives laboratory, Institute of Geography, Russian Academy of Sciences
106003	037	34228	Paleosol succession in the Purna alluvial basin, Central India: An archive of high-resolution paleoclimate, paleoecology and paleoenvironment data	Ajab Singh Borehole Geophysics Research Laboratory, Ministry of Earth Sciences, Government of India, Karad-415105, Maharashtra, India
106003	038	34270	Indicators of the paleoecological situation in the Volga region soils	R. Reshetnikova Lomonosov Moscow State University, Russia
106003	039	34462	Reading the Quaternary Soil Memory: Quartz Isotope Fingerprints of Aeolian Processes in the Asian Steppe	Geer Teni Graduate School of Science and Technology, University of

*Subject to change

Poster Sessions

				Tsukuba
106003	040	34471	More than a metaphor: soil memory as methodological framework	Francisco Sérgio Bernardes Ladeira Unicamp
106003	041	35341	Carbonate profiles of soils in cold ultracontinental dry steppes: morphology, genesis, and spatial distribution (the Turano – Uyuk Basin, Southern Siberia)	Vsevolod Tiunkin Soil Science Faculty, Lomonosov Moscow State University, Moscow, Russia; Lab. of Soil Informatics, V.V. Dokuchaev Soil Science Institute, Moscow, Russia
106003	042	35468	The final stage of loess accumulation in the glacial region of the last glaciation and its reflection in the properties of modern soils: a case study of northwestern Russia.	Aleksandr Leontev Saint Petersburg State University, St. Petersburg, Russia
107001	043	31818	Spatiotemporal Variations of Soil Hydrothermal Processes and Their Association with Mattic Layer Rupture in Alpine Soils on the Qinghai-Tibetan Plateau	Yunzhi Wang Shenyang Agricultural University
107001	044	32183	Paleoreconstruction of permafrost-affected peatlands' development in the Pur-Taz interfluvium (North-Western Siberia, Russia)	Tikhonravova Ya. Melnikov Permafrost Institute, Siberian Branch, Russian Academy of Sciences", "Northwest Institute of Eco-Environment and Resources, Chinese Academy of Sciences
107001	045	32890	Transformation of Soil Organic Matter in Agricultural Soils in Subarctic Climatic Conditions	Timur Nizamutdinov Department of Applied Ecology, Saint Petersburg State University
107001	046	32909	Contrasting Geochemical Signatures of Groundwater and Peatland Waters in Permafrost Bogs of the European Russian Northeast	Dmitry Kaverin Institute of Biology Komi SC UB RAS", "BIO-GEO-CLIM Laboratory, Tomsk State University
107001	047	33113	Advancing alpine carbon cycle predictions through microbial mechanisms and freeze – thaw – explicit modeling	Gangsheng Wang Wuhan University
107001	048	34242	Needle ice - an antigravity mechanism of cryogenic transformation of soils	Mari Chepurnova Lomonosov Moscow State

*Subject to change

Poster Sessions

				University
107001	049	34310	The “Coolest” processes: Cryogenic Phenomena in the Soils of Northwestern Siberia	Varvara A. Chernova Faculty of Soil Science, Lomonosov MSU, Moscow, Russian Federation
107001	050	34391	Abundance and Diversity of Antibiotic Resistance Genes in soils of retreated area from different types of glaciers on the Qinghai-Tibet Plateau	Feng Zhang Chinese Academy of Sciences, Institute of Mountain Hazards and Environment
107001	051	34447	The Soil Factors of Palsas Resilience in an Industrial Wasteland in the Arctic Region (Monchegorsk, Russia)	Ignashov Pavel Alekseevich Institute of Biology of the Karelian Research Centre of the Russian Academy of Sciences
107001	052	34552	Permafrost degradation and glacier retreat driving sulfide-derived metal enrichment in soils and sediments in an antarctic proglacial lake	Juan Pablo Corella MNCN-CSIC
107001	053	35072	Assessment of soil temperature dynamics in different soil landscapes in western Greenland	Marcio Rocha Francelino Universidade Federal de Viçosa
107001	054	320B10	The silent season: Rapid increases in non- growing season soil respiration on the Tibetan Plateau	Qinlu Li Northwest A&F University
108001	055	31770	Soybean Cropland Suitability Analysis in Subtropical Desert Climate Using GIS and Remote Sensing Techniques	Noman Ahmad Facultad de Agronomía y Sistemas Naturales, Pontificia Universidad Católica de Chile", "Institute of Soil and Environmental Sciences, University of Agriculture Faisalabad
108001	056	31810	Spatiotemporal dynamics and future trajectories of soil organic and inorganic carbon stocks over the past three decades in northern and eastern China	Yanfeng Zhao Zhengzhou University
108001	057	31870	Spatial Variation of Key Indices of “Soil Hardening” and Construction of Transfer Functions in Black Soil of Songnen Plain	Bingjie Wang Shenyang Agricultural University
108001	058	32317	Study on Soil Organic Matter Inversion of Different Textural Soils in the Northeast Black	Ma Minghui Shandong Agricultural

*Subject to change

Poster Sessions

			Soil Region Based on Hyperspectral Remote Sensing	University
108001	059	32764	Identifying the Primary Drivers of the Spatiotemporal Evolution of Soil Salinization in the Songnen Plain	Zeja Zhang China Agricultural University
108001	060	32882	Spatial Prediction and Dynamic Change of Soil Organic Carbon Using Remote Sensing Variables as Auxiliary Information in Wavy Plain, Northeast China	Tianyi Shao Shenyang Agricultural University
108001	061	33237	Localized SCORPAN-based machine learning framework for spatial-temporal tracking (2000 – 2025) of soil carbon dynamics in Chile	Raul Roberto Poppiel Department of Soil Science, Luiz de Queiroz College of Agriculture, University of São Paulo, Piracicaba, SP, Brazil
108001	062	33324	SoilSound: Smartphone-based Soil Moisture Estimation Using Acoustic Sensing	Zhongqi Cheng Brooklyn College of the City University of New York
108001	063	33325	Feasibility of RF-Based Wireless Sensing of Lead Contamination in Soil	Zhongqi Cheng Brooklyn College of the City University of New York
108001	064	33756	Explainable Deep Learning Unveils Critical Scenarios Driving Soil Cadmium Pollution in a Coastal Industrial City: A Geospatial AI Approach	Wenhao Zhao Chinese Research Academy of Environmental Sciences
108001	065	33816	Advancing Corn Yield Prediction through Cross-Scale Integration Approaches	Solmaz Fatholoulumi University of Guelph
108001	066	33817	Enhancing Precision Nitrogen Management through Integration of Soil Properties and Remote Sensing	Solmaz Fatholoulumi School of Environmental Sciences, University of Guelph
108001	067	33867	Geospatial Index of Acid Mine Drainage (IIMSDAM) Impact on Soils	Joseph Tadeo Almazan Valencia Institute of Geology, Department of Environmental and Soil Sciences, UNAM
108001	068	35206	Differentiating parent materials using the soil thermal gradient between 5 and 10 cm at national scale (Uruguay)	Martín Francia Department of Soils and Water, Faculty of Agronomy, Universidad de la República, Montevideo, Uruguay

*Subject to change

Poster Sessions

108001	069	35322	Evaluating Soil Moisture Satellite Products Against TDR In Situ Measurements	Abdolnabi Abdeh Kolahchi (Soil Conservation and Watershed Management Research Institute (SCWMRI))
108001	070	36434	Spatiotemporal Dynamics and Uncertainty Attribution of 1 km Satellite Soil Moisture Products Across China_ A Comparative Assessment via TCH and OPGD	JiayiHE Sichuan Agricultural University
108002	071	32629	A Zonal Optimization Mapping Framework for Soil Taxonomic Classification in Large Flat Regions: A Case Study of the Songnen Plain	Zhidong Zhao China Agricultural University
108002	072	34512	SOCBIO-MAP: Integrating Earth Observation, AI, and In-Situ Sampling to Democratize High-Resolution Soil Organic Carbon and Biodiversity Mapping	Berenice Di Biase Soilytix GmbH
108002	073	36485	Spatial distribution and formation environment of rock fragment layer in black soil region of northeastern China	Jia-yi Shi Shenyang Agricultural University
108003	074	31825	Stacking ensembles with spatial residual correction for improved soil pH mapping in tropical croplands	Zhang Meixuan Hainan University
108003	075	32533	Spatiotemporal divergence of soil acidification in China' s cropland	Xi Wang Zhejiang University
108003	076	32536	Global hotspots of soil microplastics and their drivers	Peiwen Wu Zhejiang University
108003	077	32865	Unmanned Aerial Vehicle-borne Ground Penetrating Radar (UAV-GPR) Technology for Large-Scale Detection of Surface Soil Moisture and Salinity Content	Qinbo Cheng Hohai University
108003	078	34851	A streamlined soil database strengthening near-real-time interoperability for soil monitoring networks and services	Andrea Lachi CREA (Research Centre for Agriculture and Environment)
108003	079	35799	Spatio-temporal patterns and environmental controls of soil organic carbon stocks in global tidal wetlands since 2009	Yang chenconghai Nanjing university
108003	080	35890	Estimation of Salinization in the Yellow River Delta Based on BO-XGBoost and a Four-Dimensional Feature Space, with Spatiotemporal and Trade-off/Synergy Factor	Jicun Yang Shandong University of Technology

*Subject to change



Poster Sessions

			Analysis	
108003	081	35892	Interpretable salinization estimation model for Dongying City based on integrated multi-dimensional spectral indices with XGBoost-driven transformations	Xinyu Che Shandong University of Technology
108003	082	35895	Soil Salinity Inversion in the Yellow River Delta Based on BO XGBoost and 3D Spectral Feature Space	Runze Zhang Shandong University of Technology
110003	083	32793	Determination of Nitrogen in Maize Plant Using Near Infrared Spectroscopy and Partial Least Squares Regression	Yue Ma Shenyang Agricultural University
110003	084	32937	VisNIRS-Based Spectral Library and Predictive Modelling of Soil Attributes for Soil Health Evaluation in Central - Southern Chile	María de los Ángeles Sepúlveda-Parada Doctoral Program in Agronomic Sciences. VIS-IR Spectroscopy and Sustainable Soil Management Laboratory, Department of Soils and Natural Resources, Faculty of Agronomy, University of Concepción
110003	085	32950	Prediction of soil basal respiration using Vis-NIR spectroscopy and machine learning in agricultural areas of south-central Chile	Jean Iván Intriago Ávila Doctoral Program in Agronomy Sciences, Faculty of Agronomy, University of Concepción", "Doctoral Program in Agronomy Sciences, Faculty of Agronomy, University of Concepción
110003	086	33191	Standardized Protocol for Soil Organic Matter Prediction using Vis-NIR Spectroscopy- A Meta-Analysis	Anshu Beri School of Environmental Sciences, University of Guelph, 50 Stone Road East, Guelph, ON N1G 2W1, Canada
110003	087	33207	Physics-informed machine learning for extractable soil nitrate prediction using spectroscopy	Katsutoshi Mizuta University of Kentucky
110003	088	33828	Estimation of Soil Inorganic Carbon Based on Visible Near Infrared Reflectance Spectroscopy Absorption Depth	Jiajing Gu School of Geographic Sciences, Nanjing University of Information Science and

*Subject to change

Poster Sessions

				Technology
110003	089	34510	Alternative Spectroscopic Approaches for Soil Analysis: A Comparative Study	Roberto Barbetti CREA-FL
110003	090	35079	Soil Profile Horizon Classification Integrating Point-Based Hyperspectral Data and Machine Learning Algorithms	Xiang Liu Nanjing University of Information Science and Technology
110003	091	36486	Effect of spectral range, spectral pre-processing, calibration method, and sample classification on soil property predictions using a country-scale soil spectral library for Hungary	Ádám Csorba Department of Soil Science, Institute of Environmental Sciences, Hungarian University of Agriculture and Life Sciences, Gödöllő, Hungary
201001	092	31563	Physically informed Bayesian mixing models reveal more realistic root water uptake profiles	Han Fu Northeast Institute of Geography and Agroecology
201001	093	34831	The Application of Enriched Biochar as Soil Amendment and Its Effect on Soil Physical Properties of Psamment	Adriana Department of Soil Science and Land Resources, Universitas Andalas, Padang, Indonesia
201001	094	35083	Changes in soil moisture content by soil characteristics in apple orchard by region	Songrae Cho Rural Development of Agriculture of south Korea", "soil-water management division
201001	095	36258	Study on the Impact of River-Sea Position on Water Sources of Tamarix chinensis Vegetation in the Yellow River Delta	Xiangyu Hu Ludong University
201001	096	36380	The Effect and Mechanism of Root Enhancement and Drought Resistance in Apple Orchards in Hilly Areas through Weathered Layer Drilling	Yufei Yang Ludong University", "LudongUniversity
201001	097	36393	HYDRUS-2D-based Study on the Impact of Drip Irrigation and Soil Compaction on Soil Water and Salt Movement	Xiaodong Zhan Ludong University
201001	098	36432	Territorial Analysis and Methodology for the Development of Irrigated Agriculture in Brazil	Durval Dourado Neto University of São Paulo

*Subject to change

Poster Sessions

202001	099	31848	Impacts of myo-inositol hexaphosphate and phosphate on Fe(II)-catalyzed transformation of ferrihydrite	Yupeng Yan Jiangxi Agricultural University
202001	100	32259	Soil development on coal-waste dump in southern Poland	Czajka A., Rahmonov O. Faculty of Natural Sciences, University of Silesia in Katowice
202001	101	32560	Dissipation of ¹³ C-Sulfamethoxazole in Tropical Soils under Contrasting Management Systems and Microplastic Contamination	Jussara Borges Regitano Department of Soil Science, ESALQ/USP
202001	102	32610	Understanding nutrient diffusion and availability from polyhalite fertiliser in contrasting soils	Joy Eloiza M. Rosales University of South Australia
202001	103	32983	Quantifying drivers of soil acidification under pakchoi cultivation with varying nitrogen inputs in Hainan, tropical China	Zhineng Hong University of Chinese Academy of Sciences", "State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences
202001	104	33074	Digestate and cover crops: effects on the quality and environmental impact of soil management and organic fertilization	Letizia Franchi Department of Chemical, Pharmaceutical and Agricultural Sciences (University of Ferrara)
202001	105	33171	The effect of pH buffering capacity of acidic paddy soil in southern China on soil Cd availability	Hailong Lu Institute of Botany, Jiangsu Province and Chinese Academy of Sciences
202001	106	33494	Soil – Plant Isotopic Coupling in Support of PDO Agri-Food Traceability	Paola Adamo Department of Agricultural Sciences, University of Naples Federico II, Portici (Naples), Italy
202001	107	33511	SORPTION-DESORPTION DYNAMICS OF ZINC (Zn) IN CONTRASTING SOIL TYPES AND PROPERTIES IN SOUTHWESTERN NIGERIA	ODUNJO Taiwo Elijah Institute of Agricultural Research and Training, Obafemi Awolowo University, Moor Plantation, Ibadan, Oyo State, Nigeria
202001	108	33614	Effects of Phosphogypsum on Heavy Metal Mobility and Nutrient Dynamics in Saline Soil under Spring Wheat	Evelin Kármén Juhász Institute of Agricultural Chemistry and Soil Science, Faculty of Agricultural and Food

*Subject to change

Poster Sessions

				Sciences and Environmental Management, University of Debrecen,
202001	109	33704	Iron-carbon coupling in salinized drylands	Bin Jia Northwest A & F University
202001	110	33713	Initial changes in soil microbial community structure after combined biochar and straw application to agricultural soil: evidence from a 180-day incubation experiment	Xiaodong Zheng Institute of Agricultural Resources and Environment, Guangdong Academy of Agricultural Sciences
202001	111	33720	CONTROL AND EVALUATION OF ALUMINUM METAL COMPONENTS IN SALINE ACID SULFATE SOIL BY ECO-FRIENDLY AMENDMENTS	Tung Xuan Tan Nguyen Department of Informatics, Natural Resources and Environment (DINRE), Institute for Environment and Resources (IER), Vietnam National University Ho Chi Minh City (VNU-HCM)
202001	112	33840	High resolution mapping of carbon dioxide pollution in the Xi' an megacity, using plant carbon isotopes	Yilong Ren Xi'an Jiaotong University", "State Key Laboratory of Multiphase Flow in Power Engineering
202001	113	33904	Contact-Electro-Catalysis at the Iron Mineral – Water Interface: A New Abiotic Source of Environmental ROS	Xuewei Wang Sun Yat-Sen University
202001	114	34393	Microbial potential to mitigate neurotoxic methylmercury accumulation in farmlands and rice	Kanghua Chen Northwest A&F University
202001	115	34482	Comparison for colloidal stability and aggregation behavior of fulvic and humic acids: effects of cations and pH	Chunli Wang Forschungszentrum Jülich, Germany
202001	116	34759	Plant-Microbe Interactions Mediate Nitrogen Deposition Effects on Soil Carbon Cycling in a Desert Steppe Ecosystem	Jiangbo An Inner Mongolia Agricultural University
202001	117	35218	Geochemical patterns of iron in Cambisols developed from different parent materials, Southern Brazil	Sheila Aparecida Correia Furquim Federal University of São Paulo (UNIFESP)

*Subject to change

Poster Sessions

202001	118	35849	Diurnal Formation and Influence Mechanisms of Multi-interface Reactive Oxygen Species in a Paddy System	Jidong Ying South China Agricultural University
202001	119	36199	Selected forms of potassium in soils of the steppe and desert zones of Mongolia	Tomasz Kaczmarek Department of Soil Science and Microbiology, Poznan University of Life Sciences, Poznan, Poland
202001	120	36534	Concentration of mobile forms of heavy metals in the soils of Djibouti's coastal landscape	Nikiforova Aleksandra Institute The A.O. Kovalevsky Institute of Biology of the Southern Seas
202001	121	36593	Phosphorus fractions in selected soil types located on the desert and steppe zones of Mongolia	Undrakh-Od Baatar Central Asian Soil Science Society
202002	122	32570	Abiotic Methane Production Driven by Soil Reactive Oxygen Species	Ziyan Liu Xi'anJiaotong-Liverpool University", "Liverpool University
202002	123	33296	Insight in the characteristics of humic substances with crop straw derived organic materials amendments	Xiangyun Song Qingdao Agricultural University
202002	124	33672	A Novel Perspective on the Role of Hydroxyl Radicals in Soil Organic Carbon Mineralization within the Detritosphere: Stimulating C- Degrading Enzyme Activities	Kangjie Yang Inner Mongolia Agricultural University
202002	125	34065	Non-linear regulation of soil organic carbon by salinization: aggregate – microbe coupling	Yuanduo Wang Ningxia University
202002	126	35279	Responses of Soil Organic Carbon Mineralization to Temperature and Its Influencing Factors in Caragana microphylla shrubland with Different Restoration years in Alpine Sandy Land	Yuan Wang Qinghai Normal University
202002	127	35303	Multi-elemental Stoichiometric Characteristics of Deep Soil Profiles during Vegetation Restoration in an Alpine Arid Region, China	Qunce Chang Qinghai Normal University
202002	128	35311	Changes in Deep-Profile Soil Organic Carbon and Influencing Factors During Planted Vegetation Restoration in Alpine Regions	Jinlu Guo Qinghai Normal University
202002	129	35467	Investigation on the Relationship between Soil Organic Carbon and Aggregate Pore Structure	Hongye Zhao Inner Mongolia Normal University

*Subject to change



Poster Sessions

202002	130	35623	Typical mineral additions promote soil mineral-associated organic carbon sequestration: Interactions between Fe oxides and microbial-derived peptides	Qi Li Institute of Agricultural Resources and Environment, Guangdong Academy of Agricultural Sciences, Guangdong Key Laboratory of Nutrient Cycling and Farmland Conservation, Key Laboratory of Plant Nutrition and Fertilizer in South Region, Ministry of Agriculture and Rural Affairs
202002	131	35771	Interactions between pyrogenic carbon and soil minerals: from natural processes to practical applications	Liuwei Wang Guangxi University", "Tsinghua University
203001	132	32441	Rhizosphere-triggered viral lysogeny mediates microbial metabolic reprogramming to enhance arsenic oxidation	Xinwei Song Zhejiang University
203001	133	33110	Microbial Community Succession in the Rhizosphere of Citrus Grandis Exocarpium in Response to Fertilization and Huanglongbing Stress	Kaiqing Yang South China Agricultural University
203001	134	33592	Ciprofloxacin- driven purifying selection on viral genomes accelerates soil N ₂ O production	Linfa Fang Southwest University
203001	135	33986	Interactive dynamics between rhizosphere bacterial and viral communities facilitate soybean fitness to cadmium stress revealed by time-series metagenomics	Zhongyi Cheng Zhejiang Provincial Key Laboratory of Agricultural Resources and Environment, Institute of Soil and Water Resources and Environmental Science, College of Environmental and Resource Sciences, Zhejiang University", "Institute of Agricultural Resources and Environment, Jiangsu Academy of Agricultural Sciences
203001	136	34736	Soil virome dynamics and ecological regulation during revegetation of rare earth tailings	Yong He Nanchang University

*Subject to change

Poster Sessions

203001	137	34875	Impact of Warming and Fertilization on Viral Communities in Agricultural Soils	Xinyi Li College of Environmental and Resource Sciences, Zhejiang University
203002	138	33450	Mineral-EPS Interface Coupling Process: Contribution of Maillard Reaction-Driven Geological Polymerization to Carbon and Nitrogen Fixation	Chang Wang Huazhong Agricultural University
203002	139	33922	Changes in extracellular polymeric substances content in response to different storage conditions	Haonan Ouyang Huazhong Agricultural University
203002	140	33923	Mechanisms underlying microbial extracellular polymeric substance (EPS) carbon turnover in response to warming and elevated CO ₂	Zhihan Chen Huazhong Agricultural University
203002	141	33928	Fertilization Practices Drive Microbial Extracellular Polymeric Substance Synthesis and Agricultural Outcomes Mechanisms of Nutrient Limitation and Stoichiometric Regulation in Rhizosphere and Deep Soil	ZhiJun Liu Huazhong Agricultural University
203002	142	34598	Component Characteristics of Different Soil Organic Matter Pools and Their Sensitivity Response to Land Use Practices	Yang Chen Huazhong Agricultural University
203003	143	31531	Interaction of soil Prokaryotic communities and Soil health after nineteen years of conservation agriculture in rice-maize system	Peram Nagaseshi Reddy Dr. Rajendra Prasad Central Agricultural University", "The International Maize and Wheat Improvement Center (CIMMYT-India)
203003	144	31638	Linking Soil Food Web Stoichiometry to Ecosystem Function and Soil Health	Qi Li Institute of Applied Ecology, Chinese Academy of Sciences (Shenyang)
203003	145	31855	Unraveling soil microbial guilds driving phosphorus, nitrogen, and carbon transformations through multi-omics approaches	Felipe Bastida CEBAS-CSIC
203003	146	31941	Interactive Effects of Compost, Clay, and Plant Presence on Soil Aggregate Fractions and Biochemical Properties in Sandy Soil	Linda E. Lindongi UWA School of Agriculture and Environment, The University of Western Australia", "Faculty of Agriculture, University of Papua

*Subject to change

Poster Sessions

203003	147	31984	Impacts of sample storage conditions on extracellular DNA-based assessments of soil biodiversity	Philippe R. Belliard Zoology Department, Universität Innsbruck", "Microbiology Department, Universität Innsbruck
203003	148	32249	Soil Respiration in Intercropping systems: Depth and pH Dominate, with a Negative Link to the Fungal to Bacterial Necromass Ratio	Prabin Ghimire Quebec Research and Development Centre, Agriculture and Agri-Food Canada", "Department of Soils and Agri-Food Engineering, Université Laval
203003	149	32961	Phosphate-Solubilizing Bacteria Enhance Sugarcane Growth: High-Potential Candidates for Sustainable Biofertilizer Development	Pechrada Pinjai Department of Soil Science, Kasetsart University
203003	150	33209	Relations of Soil Microbe-Resource Stoichiometry Varied Across Soil Depth	Enping Yu Institute of Applied Ecology, Chinese Academy of Sciences", "University of Chinese Academy of Science
203003	151	33210	Variations in synergistic benefits among different intercropping systems: evidence from crop, soil and soil biota in agroecosystems	Minghao Yang Institute of Applied Ecology, Chinese Academy of Sciences", "University of Chinese Academy of Sciences
203003	152	33326	Soil microbial community structure in reclaimed and unreclaimed post-mining areas	David Fernandez Calvino Department of Plant Biology and Soil Science, Area of Soil Science and Agricultural Chemistry, Faculty of Sciences, University of Vigo, Ourense, 32004, Spain", "Department of Agricultural Engineering, Universidad Politécnica de Cartagena, Paseo Alfonso XIII 48, Cartagena 30203, Spain
203003	153	33593	Effects of Crop Residue Management Strategies on Soil and Root Nematode	Md Niraul Islam Institute of Applied Ecology, Chinese Academy of Sciences, Shenyang, China

*Subject to change

Poster Sessions

203003	154	33596	The effects of nutrient-loaded biochar on earthworms in boreal agricultural soils	Zannatul Ferdous Department of Agricultural Sciences", "University of Helsinki, Finland
203003	155	33610	SOIL MICROBIAL BIOMASS AND COMMUNITY RESPONSE TO DIFFERENT PESTICIDES UNDER GREENHOUSE CONDITIONS	Costa Gumisiriya Institute of Agrochemistry and Soil Science, Faculty of Agricultural and Food Sciences and Environmental Management, University of Debrecen
203003	156	33732	Effects of sustainable cropping systems on soil fauna and microbial biomass and aggregate structure	Kyota Watanabe Tohoku University
203003	157	33838	Effects of Acai Seed Biochar Amendment on Chemical and Biological Properties of Brazilian Soils	Andre Freire Cruz Kyoto Prefectural University, Graduate School of Life and Environmental Sciences
203003	158	34038	Temporal and Specific Effects of Micronutrient Addition on Soil Microbial Communities in Desert Steppe	Haina Hu Inner Mongolia Agricultural University
203003	159	34044	3D Structure of Ground-nesting Bee Burrows under Fertilization Treatments in Black Soil Areas: A Study Based on X-ray CT	Minghan Liu China Agricultural University
203003	160	34099	Ecological strategies govern fungal performance on soil carbon cycling in agroecosystems	Wenxin Zou Southwest University
203003	161	34397	Effects of compost application on rhizosphere microbial communities of wheat grown in sandy soil under different tillage practices	Xinyu Ma Qingdao Agricultural University
203003	162	34425	Dung-applied anthelmintic drug Moxidectin alters free-living soil nematode communities	Janina Milkereit Kiel University, Institute of Plant Nutrition and Soil Science
203003	163	34455	Soil Carbon Trend Index (SCTI): A Biochemical Tool for Predicting Carbon Dynamics in Agricultural Soils	Guilherme Montandon Chaer Embrapa Agrobiologia
203003	164	34499	Assessment of the Stabilizing Effect of Compost and Phosphogypsum on the Metabolism of <i>Bacillus subtilis</i> and <i>Pseudomonas putida</i> in Sod-Podzolic Soil Contaminated with Lead and Zinc	Anton Nikitenko Department of Ecology, Russian State Agrarian University - Moscow Timiryazev Agricultural Academy (RSAU - MTAA), Moscow, Russian Federation

*Subject to change

Poster Sessions

203003	165	34513	Locally Conserved Microbial Signatures as Global Indicators of Plant Productivity	Berenice Di Biase Soilytix GmbH
203003	166	34667	Rice Paddy Soils Exhibit Greater Biological Sustainability than Upland Soils	Mun Hyeong Park Gyeongsang National University", "Korea National University of Agriculture and Fisheries
203003	167	34763	Title Dynamics of Native Low Molecular Weight Organic Substances (LMWOS) and Their Relationship to Soil Quality Indices in Gray Lowland Soil	Nobchulee Nuanaon Soil and Plant Multi-Dynamics Research Unit, Fukushima Institute for Research, Education and Innovation (F-REI)
203003	168	34854	Comparison of different methods for estimating microbial biomass in biochar-amended soils	Vito Armando Laudicina Department of Agricultural, Food and Forest Sciences, University of Palermo, Palermo, Italy
203003	169	34930	Species-Specific Effects of Earthworm on Soil Modification Functions Across an Ecosystem Development Gradient : Evidence from Miyakejima and Mikurajima, Japan	Ran Sesoko Master' s Programs in Agro-Bioresources Science and Technology, University of Tsukuba, Tsukuba, Japan
203003	170	34947	Optimizing Methods for Selective Removal of Soil Nematodes to Study Their Functional Roles: Toward Effective Techniques with Minimal Impact on Soil and Plants	Robin Beckx Ghent University
203003	171	35370	The impact of veterinary antibiotics on the functional diversity of microorganisms in agro-sod-podzolic soil	Andrey Batakov Severtsov Institute of Ecology and Evolution Problems of the Russian Academy of Sciences
203003	172	35373	Effect of veterinary antibiotics on test plants and enzymes activity and microbiological respiration of sod-podzolic soil	Serikov Konstantin Soil Science Faculty, Moscow State University, Moscow, Russia ", "Severtsov Institute of Ecology and Evolution RAS, Moscow. Russia
203003	173	35847	Disentangling plant community and environmental controls on soil-borne pathogens in grassland ecosystems	Junsheng Ke Lanzhou University
203003	174	36217	From Soil to Shoots: Fungal Communities in Pea-Barley Intercropping	Magdalena Frac Institute of Agrophysics, Polish

*Subject to change

Poster Sessions

				Academy of Sciences, Lublin, Poland
203003	175	36307	Regulation of selenium uptake and translocation and hyphal contribution rate in soybean by co-inoculation with AMF and Rhizobium	Jiao Li Northeast Agricultural University
203003	176	36347	Driving Mechanisms of Antibiotic Resistance Genes in Urban Forest Soils	Ying Zhang Central South University of Forestry and Technology
203003	177	36349	Urbanization-driven forest soil greenhouse gas emissions: Insights from the role of soil bacteria in carbon and nitrogen cycling using a metagenomic approach	Gongxiu He Central South University of Forestry and Technology
203003	178	36594	Can soil protists improve plant growth?	Thi Bao Anh Nguyen School of Agriculture, Food and Ecosystem Sciences, Faculty of Science, The University of Melbourne, Parkville, VIC, 3010, Australia
203005	179	32157	Tradeoffs between microbial life-history strategies drive soil carbon cycling during revegetation in karst ecosystems: A metagenomic perspective	Xiaoyi Cai Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences", "University of Chinese Academy of Sciences
203005	180	32159	Rice aluminum resistance facilitated by bacterial modification of root cell wall in acidic soil	Li Zhang Institute of Soil Science, Chinese Academy of Sciences (Nanjing)
203005	181	32999	Adaptive Responses of Soil N ₂ O-Reducing Bacteria to Fluctuating O ₂ Levels	Siyu Yu Shanghai Jiao Tong University
203005	182	33053	Uncovering Potential Lanthanide-Dependent Enzymes in High-Rare-Earth Environments	Hanpu Yu SunYat-sen University
203005	183	33143	Phosphogypsum Effects on Soil Microbial Communities Revealed by PLFA Analysis in Arenosol and Meadow Chernosem Soil	Andrea Balla Kovács Faculty of Agricultural and Food Sciences and Environmental Management, University of Debrecen
203005	184	33154	Machine-Learning-Driven Decoding of Microbial Quinlorac Cometabolic Degradation	Danning Li South China Agricultural University

*Subject to change



Poster Sessions

203005	185	33359	Culture-Dependent Bacteriome Analysis Reveals PGPB Candidates for Okra Biopriming under Salinity Stress	Felix United Graduate School of Agricultural Science, Tokyo University of Agriculture and Technology, Japan
203005	186	33516	The diverse autotrophic communities of mangrove sediments	Chen Chen South China Institute of Environmental Sciences, Ministry of Ecology and Environment of China
203005	187	33691	Can the conversion to perennial cereal crops simultaneously promote SOC formation and stimulate microbial N-mining?	Xiaojing Yang Lund University
203005	188	33753	Response mechanisms of plant-soil nutrients and microorganisms to N:Ca ratio in poplar plantations of Northeast China	Xiaohang Weng Liaoning Academy of Forest Sciences
203005	189	33866	The impact of trees on soil microbial biomass and CO ₂ emissions from fertilized soil	Anna Walkiewicz Institute of Agrophysics, Polish Academy of Sciences
203005	190	33982	Thermoactive mineral polymer modulates the microbial structure of the soybean rhizosphere under heat and drought stress	Camila Domingos Cabral Department of Soil Science, University of São Paulo
203005	191	34040	Reseeding <i>Caragana korshinskii</i> recovers soil microbiome structure but not stability or complexity after eight years in degraded desert steppe	Haina Hu Inner Mongolia Agricultural University
203005	192	34209	The Regulatory Role of Rhizosphere Microorganisms in Tobacco Resistance to Black Shank Disease	Liuying Wen Tobacco Research Institute, Chinese Academy of Agricultural Sciences, Qingdao 266100, China
203005	193	34223	Unveiling Microbial Interactions at Single-Cell Resolution: Interaction Strength Drives Phenotypic Differentiation	Shiwen Yue Huazhong Agricultural University
203005	194	34276	Easily biodegradable organic materials serve as soil biostimulants to rapidly enhance soil aggregate stability by increasing fungal biomass	Zheng Ma Southwest University
203005	195	34286	Comparison of Soil Microbial Community Structure in the rhizosphere of Diploid, Triploid and Tetraploid Watermelons	Qingshan Li Guangxi University

*Subject to change



Poster Sessions

203005	196	34298	Comparative Analysis of Soil Microbial Community Structures in Rhizosphere of Two Texture-Differentiated Lotus Root Varieties	Xinni Li Guangxi University
203005	197	34299	Effects of Different Fertilization Regimes on Aromatic Components and Root-associated Microbiota in Peppermint (<i>Mentha piperita</i> L.)	Qingshan Li Guangxi University
203005	198	34305	Differences of soil microbial community structures in rhizosphere between gynoeious and monoecious cucumbers	Liyuan Liao Guangxi University
203005	199	34781	Responses of maize aerial roots and their exudates to soil compaction	Jiechao Chang Nanjing Agricultural University
203005	200	35511	Microbial Hydrogen Cycling as a Potential Driver of Drought Resistance in Agricultural Soils	Lijun Hou Xinjiang Academy of Agricultural Science, Crop Research Institute
203005	201	35543	Analysis of the research and development trend of wheat rhizosphere drought-resistant bacteria based on bibliometrics	Yuetao Li Crop Research Institute, Xinjiang Academy of Agricultural Sciences
203005	202	36087	Microbial Drivers of High Fertility in Black Soil: A Metagenomic Perspective on Enhanced Nutrient Cycling and Metabolic Resilience	Lu Zheng State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences
203005	203	36191	Effect of biological nitrification inhibition on the rhizosphere microbiome of maize	Yuxuan Zhang Geo-Biosphere interactions, University of Tübingen; Germany
203005	204	36218	Sustainable Alternatives to Peat-Based Growing Media: Microbial Functionality as a Key Indicator	Magdalena Frac Institute of Agrophysics, Polish Academy of Sciences, Lublin, Poland
203005	205	36402	What fungi can we count on in the mitigation of climate change influence on forests in different climatic regions – comparison of arbuscular and ectomycorrhizal solutions in Serbia and China	Zaklina Marjanovic University of Belgrade – Institute for Multidisciplinary Research, National Institute of the Republic of Serbia, Belgrade, Serbia

*Subject to change

Poster Sessions

203007	206	32558	Bacterial cheating is a widespread resource acquisition strategy in soils	Yingyi Fu Zhejiang university", "University of Edinburgh
203007	207	33126	Maize//Soybean Intercropping Enhances Soil Multifunctionality in Low-fertility Red Soil and Its Response to Biodiversity Effects	Kangxian Zhang College of Resources and Environmental Science, Yunnan Agricultural University
203007	208	33725	The impact of microbial-mediated crop residues and their humification products on soil organic matter transformation	Yifeng Zhang Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences", "Jilin Agricultural University
203007	209	33949	Regulation of methane oxidation in natural grassland by animal urine addition gradients	Yufang Wang Key Laboratory of Microbial Resources Exploitation and Application of Gansu Province, Institute of Biology, Gansu Academy of Sciences
203007	210	34583	Crop rotation and residue management enhance banana health by enriching core antagonistic microbes	Shan Hong Hainan Academy of Agricultural Sciences
203007	211	34627	Magnetoelectric brackish water combined with plant growth-promoting rhizobacteria reshapes the rhizosphere microbial community to enhance cotton yield and fiber quality in arid saline – alkali regions	Qingyuan Lei Xi'an University of Technology
203007	212	34716	Repeated Drying-Rewetting Cycles Maintain Core Soil Microbiota Stability While Driving Metabolic Decline and Network Evolution	Hongwen Liu Key Laboratory of Black Soils Conservation and Utilization, Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences, Changchun, China
203007	213	34753	Long-term cover cropping and nitrogen fertilization tend a stable soil extracellular enzyme stoichiometry	Wanyu He Northwest University
203007	214	34821	Differentiation of Ecological Strategies of Mountain Soil Microbes Along Elevational Gradients and Their Key Roles in Co-occurrence Networks	Lei Chen SungkyunkwanUniversity

*Subject to change

Poster Sessions

203007	215	35671	Soil Bacterial Diversity at the Molecular Level: Origins, Consequences, and Implications	Xue-Xian Zhang School of Biological Sciences, University of Auckland, Auckland 1010, New Zealand
203007	216	35840	Microbial CHON Assimilation and Stoichiometric Strategies in Natural and Agricultural Black Soils Revealed by Multi-Isotope Tracing	Zeyu Cheng Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
203007	217	35918	Stressor combinations shift soil microbial communities from rare to unknown taxa and alter genomic strategies	Shuxun Cheng Zhejiang University
203007	218	36208	Bacterial communities of karst caves in the Chechen Republic	Nataliya Kosenko Lomonosov Moscow State University
203007	219	36553	Effects of Different Land-Use Practices on Soil Microbial Communities in a Temperate Meadow Steppe: The Key Role of Soil Inorganic Carbon	Zhaoxia Jiang Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
204003	220	32185	The mineralogical mechanisms of solid phase aluminum mobilization during soil acidification	Kewei Li State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences
204003	221	32308	Quantifying the direct and indirect effects of soil-forming factors on clay mineral abundance	Rina MATSUKI Division of Environmental Science and Technology, Graduate School of Agriculture, Kyoto University
204003	222	33015	Clay mineralogy of soils from cold environments of Siberia, Russia	Sofia N. Lessovaia St.-Petersburg State University
204003	223	33095	Elucidation of Chemical Structure of Soil Clay Minerals Using Electron Probe Microanalyzer	Satoshi Ushijima Graduate School of Bioresource and Bioenvironmental Sciences, Kyushu University
204003	224	33270	Crystallinity – solubility relationship of phytoliths derived from different gramineous plants: validation using X-ray diffraction analysis	Akihito Fukuoka Graduate School of Life and Environmental Sciences, Kyoto Prefectural University, Kyoto, Japan

*Subject to change

Poster Sessions

204003	225	34217	Clay and Clay Mineral Resources in Africa: Future Applications and Development Opportunities	Megne Tiegoum Adeline University of Venda, South Africa
204003	226	36095	UAV - Sentinel-2 Coupling for Mapping Soil Salinity Patches in an Arid Irrigated Oasis	Chengzhi Ji Xinjiang Agricultural University
301002	227	32448	Study on the Suitability Evaluation and Spatial Zoning of Soil Fertility Enhancement Technologies for Different Cropland Types in Yuanmou County, Yunnan Province, China	Jinglong Liu Yunnan University
301002	228	33348	Data-driven Agroecological mapping for sustainable land use planning in tropical landscapes of Eastern D.R.Congo.	Luc Cimusa Kulimushi Faculty of Agriculture, Université Catholique de Bukavu, Bukavu, Democratic Republic of Congo
301002	229	34277	BASIN APPROACH IN ASSESSING THE STATE OF SOIL AND VEGETATION COVER BASED ON REMOTE SENSING DATA	Ttifonova T. Lomonosov Moscow State University, Faculty of Soil Science
301002	230	34458	Relationships among cultivated land quality, crop yield and economic benefit based on a long-term field experiment with different fertilization and mulching treatments	Jiubo Pei Shenyang Agricultural University
301002	231	34748	Interpretable machine learning models analyze the mechanism of nutrient evolution in red soils of Jiangxi under the dual drivers of climate and social economy	Chao Xiao Jiangxi Agricultural University
301002	232	36398	Assessment of Ginseng potential suitability in Liaoning Province using the MaxEnt model	Han Wang Shenyang Agricultural University
302004	233	31873	Climate-Anthropogenic Interactions Shape Long-Term Agricultural Soil Quality	Wanxue Zhu Institute of Eco-environmental and Soil Science, Guangdong Academy of Sciences
302004	234	32938	Can soil magnetism affect the soil response to the magnetized water?	Alshymaa M. Guda Earth' s Geomagnetism Lab, National Research Institute of Astronomy and Geophysics (NRIAG)
302004	235	33818	Assessing the Cumulative Effects of Land Use, Management, and Climate Change on Flood Risk	Hafsa Muzammal Department of Irrigation and

*Subject to change

Poster Sessions

			and Soil Health in the Upper Indus Basin	Drainage, University of Agriculture
302004	236	36100	Attributing Spatiotemporal Variability of Evapotranspiration in the Weiku Oasis under Climate Change	Wenbo Wei Xinjiang Agricultural University
302005	237	31710	Biochar application ameliorates soil and water loss on the soil-mantled karst slopes: mechanisms and benefits	Longshan Zhao Guizhou University
302005	238	31868	SOIL MANAGEMENT AND CONSERVATION FOR AGRICULTURAL SUSTAINABILITY IN MALI VILLAGES	Marx Leandro Naves Silva Department of Soil Science", "Federal University of Lavras
302005	239	31936	Predicting Current and Future Erosion Risk across NSW, Australia	Esther Qinggaozi Zhu University of Northwest A&F
302005	240	32031	Slope Gradient Modulates Pathways of Soil Erosion-Induced Corn Yield Losses in Northeast China' s Black Soil Region	Yuwen Jin Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences
302005	241	32172	Effects of the size of biodegradable superabsorbent polymers on interrill erosion	Takahiro Tatsuno Research Faculty of Agriculture, Hokkaido University
302005	242	32565	Synergistic Effect of Coal Fly Ash and Polyacrylamide on Enhancing Sandy Soil' s Resistance to Wind and Water Erosion	Kai Yang Beijing Normal University
302005	243	32706	Study on Soil Erosion and the Spatiotemporal Distribution Characteristics of Erosion Factors in the Northeast Cinnamon Soil Region	Yongchao Pang Shenyang Agricultural University
302005	244	32741	Mechanism of Surface Runoff Erosion Transport and Its Verification and Application	Jianen Gao Northwest A&F University
302005	245	32842	Effects of Different Land Use Types on Soil Multifunctionality and Their Driving Mechanisms in Karst Fragile Ecosystems	Zhen Han Guizhou University
302005	246	32879	Arbuscular mycorrhizal fungal community is vulnerable to mining activity but play key roles in runoff regulation in rare earth mining areas	Hongguang Liu Jiangxi Academy of Water Science and Engineering
302005	247	33176	Integrating Multi-Scale Soil Evaluation and Ecosystem Service Assessment for Sustainable	Christopher Marples Humboldt-University of

*Subject to change

Poster Sessions

			Land Use Planning with Targeted Agri-Environmental Measures	Berlin", "Leibniz Centre for Agricultural Landscape Research (ZALF)
302005	248	33331	The Study of Soil Organic Carbon Loss in an Eroded Area of a Linear Engineering Project on the Qinghai – Tibet Plateau	Xinshan Ma Chengdu University of Technology
302005	249	33542	The trade-off between soil active and stable carbon pools in typical planted and natural forests on the eastern Loess Plateau	Tianjiao Feng Beijing Forestry University
302005	250	33767	Conservation Agriculture Practices for Controlling Water Erosion in Mediterranean Hillslopes (SE, Spain)	Víctor Hugo Durán Zuazo Institute of Agricultural and Fisheries Research and Training (IFAPA), Centro “Camino de Purchil”
302005	251	33778	Differences in water erosion between intra-row and inter-row positions of maize in sloping farmland	Shuai Chen China Agricultural University
302005	252	33873	Application of Machine Learning Algorithms in Analyzing the Effect of Fire on Soil Water Repellency in Tushan Watershed, Golestan Province	najafinejad ali gorgan university of agricultural sciences and natural resources
302005	253	33939	Study on the Hydrodynamic Threshold of Soil Erosion Regulated by Vegetation on the Hilly-Gully Complex Slopes of the Loess Plateau	Chenyu Cui Chang'an University
302007	254	31833	Technical Feasibility of Biomass Buffer Strips for Capturing Excess Nutrients from Agricultural Runoff	Tianying Li University of Guelph
302007	255	31896	Modeling the Influent of Pore Structure on Electrical Conductivity in Unsaturated Aggregated Porous Media	Wenjie Li College of Land Science and Technology, China Agricultural University
302007	256	34261	Verification of the effect of controlled drainage on the nitrate discharge from subsurface drainage for paddy fields under upland conditions	Shuichiro Yoshida The University of Tokyo
302007	257	34516	The influence of selected factors on the various phosphorus compounds in soils with a bog iron ore horizon	Lidia Oktaba Department of Soil Science, Institute of Agriculture, Warsaw University of Life Sciences - SGGW, Poland

*Subject to change

Poster Sessions

302007	258	35036	Characteristics, Driving Mechanisms, and Machine Learning Modeling of Nitrogen Runoff Losses from Chinese Rice Cropping Systems	Yi Wang LudongUniversity
302007	259	35053	Machine Learning – Based Modeling of Phosphorus Runoff Losses and Their Component Fractions in Chinese Rice Cropping Systems	Junjia Qi LudongUniversity
302007	260	35138	Influence of Soil Microstructure on Capillary Rise in Disturbed and Undisturbed Sandy Arid Soils, Oman	Afrah Al-Shukaili Sultan Qaboos University
302007	261	35865	Effect of dynamic salt precipitation on water and heat transport in unsaturated saline soil: Experiments and simulations	Hongchao Wang Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences
302007	262	36514	Effects of straw decomposition rate regulated by dosages of microbial inoculants on infiltration properties of Mollisol, Northeast China	Yi Zhang Beijing Normal University
303001	263	31337	Degradation of Sugar Beet Pulp by <i>Klebsiella</i> sp. HDJT1 and <i>Pseudomonas</i> sp. C27: A Metabolic Cross-Feeding Strategy for Soil Health Improvement	Yanli Liu Heilongjiang University
303001	264	31647	Sustainable Management of Soil Health through Optimized Planting Conditions, Nutrient Sources, and Intercropping under vegetable-legume intercropping system in Western Himalayas	Krishan Lal Gautam Department of Tree Improvement and Genetic Resources, Dr Yashwant Singh Parmar University of Horticulture and Forestry, "Department of Silviculture and Agroforestry, Dr Yashwant Singh Parmar University of Horticulture and Forestry
303001	265	31821	Nutrient Management Effects on Sustainable Yield, Soil Fertility, and Carbon Stock in a Cauliflower – Capsicum Cropping Sequence of the Northwestern Himalayan Region	Archana Sharma Department of Soil Science and Water Management, Dr Yashwant Singh Parmar University of Horticulture and Forestry
303001	266	31976	<i>Bacillus megaterium</i> (S2-4a1) Improves Compost Biofertilizers by Solubilizing Potassium from Feldspar	Assistant Professor Dr. Yupa Chromkaew Department of Plant and Soil Sciences, Faculty of Agriculture, Chiang Mai University

*Subject to change

Poster Sessions

303001	267	32013	Spatial Soil Heterogeneity and Its Influence on Maize Response To Human Waste Application in Northern Malawi	Hitoshi Shinjo Graduate School of Global Environmental Studies, Kyoto University
303001	268	32100	Biogeoaccumulation of zinc in hybrid rice (<i>Oryza sativa</i> L.) in an Inceptisol amended with soil zinc application and its bioavailability to human being	Satish Kumar Singh Banaras Hindu University
303001	269	32226	Effects of straw incorporation on soil carbon and nitrogen sequestration in fallow and continuous maize cropping systems in Northeast China	Chao Yan Northeast Agricultural University
303001	270	32290	Differences in soil organic carbon accumulation caused by microbial-mediated tillage and carbon input	Ximing Liu College of Resources and Environment, Jilin Agricultural University", "Institute of Agricultural Resources and Environment, Jilin Academy of Agricultural Sciences
303001	271	32342	Applying a combination of artificial humic acid and microbial agent to increase rhizosphere soil organic carbon content and maize yield	Yue Yuan Shangqiu Normal University
303001	272	32347	Nutrients Leaching In a Maize Stover Biochar Amended Soil	Olubunmi S. SHITTU Soil Science and Land Resources Management, Federal University Oye-Ekiti
303001	273	32860	Advancing Soil Fertility Management Using Tuna Meal Organic Waste: Impacts on Rhizosphere Microenvironment and Tea Quality	Yujie Song United Graduate School of Agricultural Science, Gifu University
303001	274	32933	Fractions of Phosphorus in Broiler Litter and its Fluxes in the Vadose Zone of a Transitioning Organic Farming System	Kokoasse Kpomblekou-A Tuskegee University
303001	275	33027	Degradation of Rice Straw in Paddy Field Soil under Organic and Chemical Management Practices	Quoc Thinh Tran Ritsumeikan University
303001	276	33203	The stability of softwood biochars and their impact on nitrogen retention in contrasting boreal soils over 14 years	Zhouyang Tian Department of Forest Sciences, University of Helsinki, Helsinki, Finland
303001	277	33266	Effect of Biochar from Spent Media Growth on Kimchi Cabbage Cultivation in Upland Area	Kang, Se-Won Sunchon National University

*Subject to change

Poster Sessions

303001	278	33267	Assessing the Agricultural Utilization Potential of Chicken Manure Biochar: Effects on Kimchi Cabbage Growth, Nitrogen Use Efficiency, and N ₂ O Emissions in Upland Soil	Kang, Se-Won Sunchon National University
303001	279	33471	Long-Term Effects of Organic Manure on Rice Productivity and Soil Nutrient in Paddy Systems	Vallentia N.Q. Annida Graduate School of Agriculture Science, Yamagata University, Tsuruoka, Japan
303001	280	33721	Effect of Pusa Decomposer-mediated rice residue management on soil phosphorus dynamics in a rice – wheat system of the Indo-Gangetic Plains	Ranjan Bhattacharyya ICAR-Indian Agricultural Research Institute
303001	281	33731	Mixing Rice straw with various N sources in a sandy soil: organic C stabilization and priming effect	Wimonsiri Pingthaisong School of Crop Production Technology, Institute of Agricultural Technology, Suranaree University of Technology
303001	282	34090	Metagenomics reveals microbial regulation of soil nitrogen retention and supply under nitrogen fertilizer reduction with long-term residue retention	Fangbo Deng Institute of Applied Ecology, Chinese Academy of Sciences
303001	283	34179	Study on the Effects of Different Organic Materials on Soil Humus and Nutrients	Liming Sun Jilin Agricultural University
303001	284	34274	Synergistic Effects of Long-term Biochar Application on Soil Fertility, Microbial Biomass, and Rice Yield in Paddy Fields	Liao Qin Central China Normal University
303001	285	34275	Partial Substitution of Chemical Nitrogen Fertilizer with Organic Fertilizer Enhances Rice Yield by Improving Soil Microbial Activity and Optimizing Soil Nitrogen Supply	Lijia Chen Central China Normal University
303001	286	34319	The influence of organic materials on the chemical structure of humus in salt crust aggregates in the Yellow River Delta	Zichen Xu Qingdao Agricultural University
303001	287	34331	Short-Term Soil Fertility and Crop Yield Responses to Municipal Organic Waste	Stanko Milić Institute of Field and Vegetable Crops, Novi Sad, Serbia
303001	288	34344	Mechanisms of Biochar and Cattle Manure in Regulating the Microstructure of Humic Substances within Saline Fluvo-Aquic Soil Aggregates	RuiZhang Qingdao Agricultural University

*Subject to change

Poster Sessions

303001	289	34349	The influence of the application of sewage sludge compost on the yield of winter oilseed rape	Jovica Vasin Institute of Field and Vegetable Crop, Novi Sad, Serbia
303001	290	34481	Crop Residue Incorporation as a Partial Replacement for Conventional Fertilizers – Evidence from a multilocation trial in India	Gobinath Rajendran Scientist, ICAR-Indian Institute of Rice Research
303001	291	34544	Phytate Degradation and Transformation: Linking Agriculture to Environmental Phosphorus Cycling	Mingjing Sun Kean Univeristy
303001	292	34553	Optimizing Soil Fertilization Processes for Improving 4R Nutrient Stewardship	Sadia Mahajabin School of Environmental Science, University of Guelph, Guelph, ON, Canada
303001	293	34624	Different parts of corn plant residue returning to field caused the differences of humus composition in quantity and humic acid in molecular level in black soil	Yuan-Bo Liu College of Resource and Environmental Science, Jilin Agricultural University,
303001	294	34655	Organic compounds in organically managed farmland in Fukushima and their effects on roots of <i>A. thaliana</i>	Marcel Pascal Beier Soil and Plant Multi-Dynamics Research Unit, Fukushima Institute for Research, Education and Innovation, Fukushima, Japan
303001	295	34683	Spectroscopic Analysis of Humic and Fulvic Acids in Manure-Straw strip Soils by ¹³ C NMR and Fluorescence Spectroscopy	Jing-gui Wu Jilin Agricultural University
303001	296	34706	Plant-Derived Organic Waste and Nitrogen Addition Enhance Capsicum annum Growth and Soil Multifunctionality	Xiaoying Xu Nanjing Institute of Soil Science, Chinese Academy of Sciences
303001	297	34728	Banana growers: Battling with soils for productivity in the Chitwan valley of Nepal	Keshav Raj Adhikari Nepalese Society of Soil Science
303001	298	34841	Biochar Utilization Strategies Based on Feedstock and Application Frequency: Effects of Wood and Chicken Manure Biochars on Crop Productivity	Ju Young Cho Division of Applied Life Science (BK21 four), Gyeongsang National University, Jinju, Korea
303001	299	34873	Impacts of Applications of Three Wood Ash Types on Elemental Dynamics and Crop Growth	Chuanzhen Jian Graduate School of Agriculture, Tohoku University

*Subject to change

Poster Sessions

303001	300	35115	Regulation of Humification and Nitrogen Retention during Organic Waste Composting by Compound Microbial Agents	Fan Luo CSCEC 8TH division environmental technology co.,ltd
303001	301	35319	FUNGAL CONSORTIUM ASSISTED COMPOSTING FOR RAPID STABILIZATION OF POULTRY LITTER	Thiyageshwari Subramaniam Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India
303001	302	35465	Synergistic Influence of Fermented Organic Manure and Chemical Fertilizers in Enhancing Soil Health and Apple Production	Avantika Sharma Department of Soil Science and Water Management, Dr YS Parmar UHF, Nauni 173 230, Solan, India
303001	303	35487	Effects of In-season Poultry Litter Application on Corn Productivity and Quality	Seongmin Park North Carolina State University
303001	304	36388	Organic waste – derived soil amendments for climate-smart soil fertility management	Yihuai Hu Biogas Institute of Ministry of Agriculture
303001	305	36453	The effects of different crop straw retention modes and nitrogen fertilizer rates on nitrogen runoff loss, crop yield and soil fertility in rice-wheat cropping systems	Dejian Wang Institute of Soil Science, Chinese Academy of Sciences
303001	306	38627	Effects of Long-term Organic Fertilization in Tea Gardens on Soil Microbial Communities and Tea Quality	Zhiwei Deng Tarim University
303002	307	32432	Evolution characteristics of soil phosphorus and its availability under long-term fertilization in black soil region, China	Xingzhu Ma Heilongjiang Academy of Black Soil Conservation and Utilization (Heilongjiang Academy of Agricultural Sciences)
303002	308	32469	Nutrient status and fertility constraints of highly weathered oil palm-growing soils in Thailand	Pornpavee Somkiatikul Department of Soil science, Faculty of Agriculture, Kasetsart University
303002	309	32523	Nutrient use and crop production in Japanese national and prefecture scales — A Comparison Between 1985 and 2020 —	Shin-ichiro Mishima NARO
303002	310	32597	Soil fertility and nutrient status of long-term durian orchards under organic – chemical management in Chanthaburi, Thailand	Daojarus Ketrot Department of Soil Science, Faculty of Agriculture, Kasetsart University

*Subject to change

Poster Sessions

303002	311	32617	Soil organic C composition and microbial community regulate soil enzymatic stoichiometry in <i>Camellia oleifera</i> land with cover crops	JiajunTian Central South University of Forestry and Technology
303002	312	32653	Effects of Foliar Potassium Nitrate on Chlorophyll and Leaf Macronutrients in Sugarcane	Weeraya Lekwong Department of soil science, Faculty of agriculture, Kasetsart University
303002	313	32716	Evaluation of Soil Chemical Properties and Growth Characteristics of Ginger (<i>Zingiber officinale</i> Roscoe) under Different Fertilization Types	Eun-Su Song Department of Rural Construction Engineering, Jeonbuk National University
303002	314	32773	The Effect of Nutrient Management on Yield and Fruit Quality of Nam Hom Coconut in Thailand	Jiraphat KWANSUE Department of Soil Science", "Kasetsart University
303002	315	32774	Effects of Agricultural Film Microplastics on Soil Nitrogen Transformation	Hao Zhang Inner Mongolia Agricultural University
303002	316	32880	Study on the Effect of Controlled-release Fertilizers on Ammonia Volatilization from Upland Soils in Chengdu Plain	Ling Song Institute of Mountain Hazards and Environment, CAS
303002	317	33279	Synergistic Effects of Mineral and Bio-organic Fertilizers Combined Application on Soil Multifunctionality and Yield and Quality of Coffee	YunHao Feng Yunnan Agricultural University
303002	318	33288	Nutrient Use Efficiency in Long-Term Experiments at Argentina	Fernando O. Garcia Consultant
303002	319	33485	Organic Fertilizer Substitution Reshapes Carbon Component Distribution in Soil Aggregates Driving Niche Differentiation of Nitrogen Functional Microorganisms and Regulating Nitrogen Use Efficiency	Bingqian Xu Chinese Academy of Agricultural Sciences
303002	320	33702	Ability of different enhanced efficiency nitrogen fertiliser to improve yield and nitrogen use efficiency of dryland grain cropping	Dr Arjun Pandey The University of Melbourne
303002	321	33806	An organic nitrogen metabolite shapes soil – plant – microbe interactions and plant nitrogen acquisition	Qing Zheng Department of Plant Sciences, University of California
303002	322	33915	Zinc amendment to safflower grown under calcareous soil and saline water conditions: From phytotoxic to beneficial impacts	Parviz Ehsanzadeh Isfahan University of Technology

*Subject to change

Poster Sessions

303002	323	34006	Water and Nitrogen Management for Intercropping Systems Based on COMSOL Modelling: Crop Growth and Soil Environment	Yan Qiu Yunnan Agricultural University
303002	324	34089	Exploiting Iron-Efficient Groundnut Genotypes to Combat Iron Deficiency in Calcareous Soils	S. Meena Tamil Nadu Agricultural University Coimbatore
303002	325	34145	Effects of gypsum application on rice growth and yield in paddy soils with varying heavy metal content	Toru HAMAMOTO Tohoku University
303002	326	34272	Project SoilFer-Vacs Framework- Enhancing Integrated Soil – Crop Management for Sustainable Food Systems in Tunisia	ATTIA Rafla DGACTA, Ministry of Agriculture, Tunisia
303002	327	34386	Spatial distribution of medium and trace elements in tea garden soil of Laoshan District, Qingdao	Zhenghuan Kong Qingdao Agricultural University
303002	328	34587	The transcription profile and the underlying ‘star’ genes orchestrate the wheat responses to phosphate deprivation	Ruonan Wang Institute of Soil Science, Chinese Academy of Sciences
303002	329	34863	Effect of Manganese Foliar Application in Combination with <i>Bacillus australimaris</i> KU32 on the Stalk Elongation Growth Stage of Sugarcane Variety Khon Kaen 3 Planted in Calcareous Soil	Aunthicha Phommuangkhuik Department of Soil Science, Faculty of Agriculture at Kamphaeng Saen, Kasetsart University
303002	330	34876	Nanoscale imaging reveals the kinetics of potassium release from biotite and its thermodynamic mechanism	Zhihao Xiong College of Resources and Environment, Huazhong Agricultural University", "Key Laboratory of Arable Land Conservation (Middle and Lower Reaches of Yangtze River), Ministry of Agriculture and Rural Affairs", "Microelement Research Center, Huazhong Agricultural University
303002	331	34888	Comparative Effects of Long-Term Chemical-Organic Blending, and Slow-Release Fertilizer Application on soil Fertility in a Fluvo-Aquic Soil	Fang Wan Institute of Agricultural Resources and Environment, Shandong Academy of Agricultural Sciences
303002	332	34929	Cropland Nitrogen Balance and Environmental Mitigation Potential in Drip-Irrigated Potato	Yang Chen Inner Mongolia Agricultural

*Subject to change



Poster Sessions

			Fields	University
303002	333	34949	Variation in Nutrient Requirements of Rice (Oryza sativa L.) Under Elevated CO ₂ and Temperature	Seung Ju Shin Division of Applied Life Science (BK21), Gyeongsang National University, Jinju 52828, Korea
303002	334	35140	Balanced NPK Nutrition via TNAU-Water Soluble Fertilizer for Higher Yield and Nutrient Efficiency in Cotton	M R Backiyavathy Professor Department of Soil Science and Agricultural Chemistry Tamil Nadu Agricultural University (TNAU) Coimbatore India
303002	335	35212	Update on liming and fertilization recommendations for vineyards in southern Brazil	Cauan Guerra Martins Federal University of Santa Maria
303002	336	35759	SOIL NUTRIENT STATUS ASSESSMENT OF SOME SOILS REPRESENTING THE GREENBELT ZONE, SOUTH SUDAN	Pio Kur Deng Department of Agricultural Sciences School of Natural Resources and Environmental Studies, 1 University of Juba,
303002	337	35937	Calibration and Validation of a Site-Specific Nutrient Expert Tool for Sorghum in the Sudano-Sahelian Region of Nigeria	Jibrin Mohammed Jibrin Department of Soil Science/Centre for Dryland Agriculture, Bayero University, Kano, Nigeria
303002	338	36094	Estimation of Cotton Aboveground Biomass under Different Fertilization Treatments Using UAV Multispectral Imagery	Xu Zhao Xinjiang Agricultural University
303002	339	36128	Paddy-Upland Rotation in Southern China's Red-Yellow Soils: A Meta-Analysis Reveals Short-Term Benefits and Long-Term Risks	Xiaofang Zhu State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences
303002	340	36348	Vegetation types and management practices reshape mineral element cycling in tropical soil – plant systems	Hao-Zhe Zhang State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences, Nanjing, China", "University of Chinese Academy of Sciences, Beijing, China

*Subject to change

Poster Sessions

303002	341	36433	Potassium Management Strategies for Soybean – Corn Rotation Under No-Tillage in a Brazilian Oxisol	Paulo César Teixeira Brazilian Agricultural Research Corporation - Embrapa Soils
303002	342	36519	Cropland Nutrient Balance and Use Efficiency: Global Trends	Nikita Kumari Meel Department of Agronomy, College of Agriculture, Agriculture University Jodhpur, Jodhpur, Rajasthan, 342304, India
303002	343	36539	Potash application or omission: conflicts and trade-offs in the management of clay minerals stability	Dr Amlan Kumar Ghosh Banaras Hindu University
303002	344	36588	Biostimulants enhance the morphological, biochemical and ionic characteristics of radish and turnip	Abdur Rehman Department of Soil Science, Faculty of Agricultural Sciences and Technology, Bahauddin Zakariya University, Multan 60800, Pakistan
304003	345	32102	Pedogenic Carbonates and Calcimetry Near Detection Limits: Field-scale weathering dynamics in wollastonite-amended clayey/acidic soils	Rafael M. Santos Department of Civil, Environmental, and Water Resources Engineering, University of Guelph
304003	346	32301	Reframing Soil Carbon Stabilization: The Reactive Mineral Sink (RMS) Model and Its Synergy with Enhanced Mineral Weathering	Songlin Wu Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
304003	347	32654	Impact of Enhanced Silicate Rock Weathering on Soil CO ₂ Dynamics in Agricultural Field: Field Monitoring and Numerical Simulation	Shoichiro Hamamoto Research Faculty of Agriculture, Hokkaido University
304003	348	32861	Column experiment and numerical simulation for quantification of carbon fixation by enhanced rock weathering	Takuhei Yamasaki The Graduate School of Agricultural and Life Sciences, The University of Tokyo
304003	349	33286	Waste management: surface CO ₂ mineralization for soil stabilization and carbon sequestration	Egor Vasilchenko Aramco Innovations LLC
304003	350	35027	Enhanced weathering technology using blast furnace slag(BFS) for carbon sequestration in soil	Seong-hyeon Nam Department of Biological Environment, Kangwon National University

*Subject to change

Poster Sessions

304003	351	36264	Second-year effects of basalt application on maize growth and soil carbon sequestration under field conditions.	Itsuki Ogawa Graduate School of Agriculture, Hokkaido University, Sapporo, Japan
304007	352	33714	High-activity soil microbiomes confer enhanced colonization resistance against invading pathogens	Hongzhe Li State Key Laboratory of Urban and Regional Ecology, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
304007	353	34004	Evolutionary engineering of microbial communities to combat aluminum toxicity in acidic soils	Meitong Jiang, Yuting Liang State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences
304007	354	34063	Discrimination and Quantification of Soil Nanoparticles by Dual-Analyte Single Particle ICP – QMS	Kengbo Ding Sun Yat-sen University
304007	355	34752	A Spiral Microfluidic Chip for Reagent-Free Separation of Soil Microorganisms	zuxian pan Chinese Academy of Sciences
305002	356	32458	Remediation of Cadmium-Contaminated Soil via the Coupling of Marigold-Water Spinach Intercropping and Passivation	Hui Sun Shandong Agricultural University
305002	357	32633	Biohydrogen Utilization in Legume-rhizobium Symbiosis Reveals a Novel Mechanism of Accelerated Tetrachlorobiphenyl Transformation	Yongfeng Xu Institute of Soil Science Chinese Academy of Sciences
305002	358	32658	Organic acid extraction for heavy metal removal and ecological risk reduction in contaminated soil	Gang Wu Huazhong Agricultural University
305002	359	32919	Differential responses of phoC- and phoD-harboring bacterial communities to cadmium stress and microbial inoculation in a rapeseed pot system	Tongyu Feng ISSAS, CAS
305002	360	33264	Plant-Based Remediation Pathways in Boreal Soils: From Chelate-Assisted Phytoextraction to Biochar-Enhanced Phytostabilization	Srimathie Indraratne University of Winnipeg
305002	361	33775	Phytomining of rare earth elements from phosphogypsum waste heaps using silver birch (Betula Pendula Roth)	Beata Rustowska Warsaw University of Life Sciences – SGGW, Institute of Agriculture, Department of Soil

*Subject to change

Poster Sessions

				Science
305002	362	34096	Historically Exposed Soil Microbiomes Serve as Living Bioenhancers for Antibiotic Remediation	Jialin Tan South China Agricultural University
305002	363	34284	Biochar and microorganism-assisted remediation of brownfields	Agnieszka Medyńska-Juraszek Institute of Soil Science, Plant Nutrition and Environmental Protection, Wrocław University of Environmental and Life Sciences
305002	364	35381	Temporal Dynamics and Metabolic Profiling of Vetiver Root Exudates Under Atrazine Stress	Faming Zhang Yunnan Open University
305002	365	319B61	Genotypic Variability in Bioaccumulation and Dietary Risks of PFAS across 30 Wheat Cultivars: A Field Assessment	JunYing Wang College of Environmental Science and Engineering, Tongji University
305002	366	319B66	Comparative Study on the Efficiency of Multiphase Extraction Combined with Bioremediation and Thermal Enhanced Coupling Process	Gubai Luo Center International Group Co., Ltd.
305002	367	319B67	More Than Containment: An Innovative Attempt to Solve Groundwater Contamination at Landfills — The Application of a Nation's First Full-Process Technical System Integrating Source, Pathway, and End-of-Pipe Treatment	Ying Chao Center Environmental Technology Co., Ltd.
305005	368	31812	Anthropogenic activities and hydrologic environment of Danjiangkou Reservoir regulate soil microplastics in the water level fluctuation zone	Zhao Yajun Huazhong Agricultural University
305005	369	32235	Do biodegradable PBAT plastic films alter C – N coupling in ways that benefit soil functioning?	Diego Pinzon-Nunez Tsinghua University
305005	370	32480	Global Sustainability Tradeoffs of Agricultural Plastic Mulch Film	Haihe Gao Chinese Academy of Agricultural Sciences Institute of Environment and Sustainable Development in Agriculture

*Subject to change

Poster Sessions

305005	371	32816	Aging of plastic polymers used in agriculture affects sorption of pesticides and their subsequent release	Marco Contin Department of Agricultural, Food, Environmental and Animal Sciences, Udine University
305005	372	32872	Assessment of the reliability to extract soil microplastics by a flotation sieving method	Yen-Cheng Chen Department of Agronomy, National Chung Hsing University
305005	373	32997	Microplastic accumulation in wastewater-irrigated soils and sediment cores from the Mezquital Valley, Mexico: preliminary evidence from a combined soil – sediment approach	Carla Hudler Schimpf Postgraduate Program, in Earth Sciences, National Autonomous University of Mexico, Av. Universidad 3000, Ciudad Universitaria
305005	374	33049	National Inventory of Plastic Mulch Residues in Chinese Croplands from 1993 to 2050	Jizhao Dai Shenyang agricultural university
305005	375	33232	Impact of Biosolids Amended Soils on Crop Growth and Physiology	Vanaja Kankarla Florida Gulf Coast University
305005	376	33244	Revealing Microplastic Contamination in Coastal Soils in Southern Italy via ATR-FTIR and SEM	Martina Cusano University of Molise
305005	377	33289	Effects of microplastics on microbial communities and antibiotic resistance genes in the soil-plant system	Nuo Chen Anhui University
305005	378	33365	Combined ecotoxicological effects of different size of polyethylene microplastics and imidacloprid on the earthworm (Eisenia fetida)	Lizhen Zhu Institute of Plant Protection, Chinese Academy of Agricultural Sciences
305005	379	33549	Microplastic Quantification in Urban Farmland Soils Using Elutriation: Insights from a Compost-Amended Site	Luigi Paolo D'Acqui National Research Council (CNR), Research Institute on Terrestrial Ecosystems (IRET), Via Madonna del Piano 10, 50019 Sesto Fiorentino (FI), Italy", "National Biodiversity Future Center (NBFC), Piazza Marina 61, 90133 Palermo, Italy", "Department of Agriculture, Food, Environment and Forestry, University of Florence, Piazzale delle Cascine

*Subject to change

Poster Sessions

				18, 50144 Firenze, Italy
305005	380	33748	Effects of microplastics on litter decomposition in Shengjin Lake wetlands	Ziyuan Liang Anhui Province Key Laboratory of Wetland Ecosystem Protection and Restoration, School of Resources and Environmental Engineering, Anhui University
305005	381	33769	Screening of microplastic-degrading bacteria and their effect on lettuce growth under pollution stress	Qiming Lu Anhui University
305005	382	34340	Long-term Field Evidence on Microplastic Generation and Altered Soil Functioning by Biodegradable Film Mulch	Rui Jiang Soochow University
305005	383	34659	Quantification of Micro- and Nanoplastics in Agricultural Soil and Application in Japan	Nozomi Kagami Graduate School of Agriculture, Hokkaido University, Sapporo, Japan
305005	384	34702	Microplastic Contamination in Soil around the Aral Sea in Uzbekistan	Natsuto Okubo Graduate School of Science and Technology, University of Tsukuba, Tsukuba, Japan
305005	385	34941	Characterization of Small Microplastics in Japanese Agricultural Soils and Their Effects on Soil Aggregate Structure	Maki Asano Institute of Life and Environmental Sciences, The university of Tsukuba
305005	386	35101	Uptake Process and Toxicity Mechanism of Microplastics and Phthalate Esters in Plant	Yu Wang State Key Laboratory of Soil & Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences
305005	387	35602	Chemical and biochemical approaches to assess the biodegradation of polyhydroxyalkanoates in soil	Maria Antonietta Rao Department of Agricultural Sciences, University of Naples Federico II, Portici, Italy
305005	388	35672	Changes in Soil Biological Activity Induced by Increasing Doses of Aged Microplastics in Agricultural Soil	Humberto Aponte Universidad de O'Higgins

*Subject to change

Poster Sessions

305005	389	35897	Ecological effects of micro/nanoplastics on plant-associated food webs	ILYAS MUHAMMAD Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences,
305005	390	35914	Effects of secondary microplastics input on the mineralization of soil organic carbon	Xiaoyun Li, MengJie Yuan Shaanxi Normal University
305005	391	35994	Microplastic-Induced Alterations in Soil Properties and Plant Growth Responses: Assessment of Soil Fauna, Subterranean and Aerial Plant Components	Angela Lartey - Young University of Cape Coast
305005	392	36256	Synthesis of Hierarchical Porous Magnetic Zeolite-Biochar Composites from Solid Waste for Micro/Nanoplastics Adsorption in Soil-Groundwater Systems	Jiyuan Zhang China University of Geosciences (Wuhan)", "Institute of Soil Science, Chinese Academy of Sciences
305005	393	36302	Microplastics in Australian Plastic-Mulched Soils	Md Mehedee Hasan Australian Rivers Institute and School of Environment and Science, Griffith University, Nathan, QLD 4111, Australia", "Australian Rivers Institute and School of Environment and Science, Griffith University, Nathan, QLD 4111, Australia
305005	394	36555	Insights into the vertical transport of microplastics in agricultural soil: impact of soil pore networks	Xiaolong Wu, Bingze Li, Yaxin Lin and Miao Chen Chinese Academy of Tropical Agricultural Sciencesv
305005	395	319B35	Revealing Microplastic Contamination in Coastal Soils in Southern Italy via ATR-FTIR and SEM	Martina Cusano Department of Agricultural, Environmental and Food Sciences, University of Molise
305006	396	31656	Biological Strategy for Identification and Elimination of Organic Pollutants in Agro-Environments	Yanzheng Gao Nanjing Agricultural University
305006	397	32016	Enhanced Sorption of Per- and Polyfluoroalkyl Substances by Soils from Water via Cation Bridging Interaction	Hui Li Michigan State University

*Subject to change

Poster Sessions

305006	398	32050	Bioremediation of soil contaminated with boron by using biochar and barley plants	José Luis Moreno CEBAS-CSIC
305006	399	32173	A <i>Bacillus paramycoides</i> strain and its application in wastewater treatment	Yinglu Tao Qingdao University of Technology
305006	400	32287	Sustainable Nanocomposite Carriers for Safe Agrochemical Application and Soil Recovery	Vera Butova Academy of Biology and Biotechnology, Southern Federal University", "Institute of General and Inorganic Chemistry, Bulgarian Academy of Sciences
305006	401	32621	Functional Resilience and Network Reorganization: How Plant-Associated Microbiome Maintain Ecosystem Services Under Antibiotic Pressure	Karabo Tsholo Unit for Environmental Sciences and Management, North-West University
305006	402	32711	Microbially Mediated Degradation Processes and Mechanisms of Flame Retardants in Soils	Ziyi Shao Research Center for Eco-Environmental Sciences
305006	403	32768	Enhanced Metal Immobilization by Biochar/MIL-100(Fe) composite	Mikhail V. Kirichkov Academy of Biology and Biotechnology, Southern Federal University
305006	404	32988	Micro- and Nanoplastics Undermine Soil Health: A Global Meta-Analysis and Integrated Risk Assessment	Fengyu Huang Inner Mongolia Agricultural University
305006	405	33257	Bacterial Extracellular Vesicles as Vectors of Antimicrobial Resistance in Agricultural Soils	Haining Huang Department of Applied Microbial Ecology, UFZ - Helmholtz Centre for Environmental Research, Permoserstraße 15, 04318 Leipzig, Germany
305006	406	33390	Combined Aged Polyethylene Microplastics and Fluridone Pollution Causes Synergistic Damage to the Maize Seedling-Rhizosphere-Soil System	Lizhen Zhu Institute of Plant Protection, Chinese Academy of Agricultural Sciences, Beijing 100193, People's Republic of China
305006	407	33394	Photodegradation of clindamycin by biochar-derived dissolved organic matter is simultaneously regulated by ROS generation and binding effect	Lin Wang Institute of Agricultural Resources and Environment, Sichuan Academy of Agricultural

*Subject to change

Poster Sessions

				Sciences, Chengdu, 610066, China", "Yunnan Provincial Key Laboratory of Soil Carbon Sequestration and Pollution Control, Faculty of Environmental Science & Engineering, Kunming University of Science & Technology, Kunming, 650500, China
305006	408	33533	Fluorinated Pesticides Pose Emerging Global Environmental Risks	Yunqiao Zhou China Agricultural University
305006	409	33608	Screening Non-Antibiotic Antimicrobial Agents in Environmental Matrices Using Interpretable Machine Learning and High-Resolution Mass Spectrometry	Zirou Zhao China Agricultural University
305006	410	34125	Exposure to cypermethrin pesticide disturbs the microbiome and disseminates antibiotic resistance genes in soil and the gut of <i>Enchytraeus crypticus</i>	Ming-Kang Jin Research Center for Eco-Environmental Sciences
305006	411	34529	Zinc Content in Particle-Size Fractions of Soils with Different Degrees of Pollution	Zamulina Inna V. Southern Federal University
305006	412	34792	Migration of Veterinary Antibiotics in a Chicken-Raising Orchard Entisol: From column to plot-scale observation	Chen Liu Institute of Mountain Hazards and Environment, Chinese Academy of Sciences
305006	413	35545	Non-monotonic Reproductive Toxicity of F-53B in Earthworm: Environmental Relevance from Northwest China Industrial Soils	Zeliang Liu Xi' an University of Architecture and Technology
305006	414	35899	Antibiotic resistance at environmental multi-media interfaces through integrated genotype and phenotype analysis	Chenxi Fu Zhejiang Academy of Agricultural Sciences
305006	415	35948	Pollution characteristics, sources and risk assessment of per- and polyfluoroalkyl substances (PFASs) in river water, sediments, soils of the Inner Mongolia Section of the Yellow River	Mao Wang Inner Mongolia Agricultural University
305006	416	36392	The effect of high doses contamination of heavy metals on the physical and chemical properties of textural chernozem	Boldyreva Veronika Southern Federal University

*Subject to change

Poster Sessions

305007	417	33517	Stimulating Feammox-Associated Microbial Communities in Iron-Rich, Acidic Sediments from AFFF-Impacted Sites to Promote PFAS Defluorination	Chen Chen South China Institute of Environmental Sciences, MEE
305007	418	33789	Microbially mediated organohalide cycling in soil	Shanquan WANG Sun Yat-sen University
305007	419	34035	Anaerobic degradation of chloromethane by " Candidatus Chloromethanibacter formatiformans " strain JHJ	Huijuan Jin Institute of Applied Ecology, Chinese Academy of Sciences
305007	420	34201	Synergistic integration of in situ generated Fe-S species and organohalide-respiring bacteria for complete dechlorination of carbon tetrachloride in soil	Boyu Jia Sun Yat-sen University
305007	421	34734	Nitrate Reduction Influences the Structure and Function of Dehalogenating Community	Jingjing Wang Institute of Applied Ecology, Chinese Academy of Sciences
305007	422	34796	Coupling Sulfidated Zero-Valent Iron with Organohalide Respiring Bacteria for Remediation of Mixed Chlorinated Hydrocarbons Contamination	Yutong Zhu Zhejiang University of Technology
305007	423	34809	From Antagonism to Synergy: Porous Media Regulate the Coupled Degradation of Trichloroethylene by Nanoscale Zero-Valent Iron and Reductive Dechlorinating Bacteria	Yujie Fan Zhejiang University of Technology
305007	424	35268	Rare Chlorinated Pesticide-Degrading Microorganisms from Aral Sea Sediments	Vladimir Tikhonov Lomonosov Moscow State University, Faculty of Soil Science, Department of Soil Biology
305007	425	35459	A Field Study to Examine Applicability of a Novel Groundwater in-situ Bioremediation Method to Co-optimize Dechlorination of Chlorinated Ethenes and Subsurface Ecological Stability	Hyunsoo Lim Yonsei University
305007	426	319B62	Spatiotemporal pattern and Mitigation Potential of Carbon Emissions from Ex-Situ Thermal Desorption for Contaminated Sites in China	Zhaoyue Liu State Key Laboratory of Environmental Criteria and Risk Assessment, Chinese Research Academy of Environmental Sciences

*Subject to change

Poster Sessions

305009	427	30974	Trace Elements Accumulation Patterns in Cryoconites and Periglacial Soils of the Central Caucasus Mt (Russia) and Northern Tian Shan Mt (Kazakhstan)	Ivan Kushnov Department of Applied Ecology, St Petersburg State University
305009	428	31680	Phytoremediation of Cd-Contaminated Soil: Role of Tropical Grasses in Modulating Cadmium Speciation	Flávio Henrique Silveira Rabêlo University of São Paulo
305009	429	31792	Effect of 5-year continuous phosphogypsum application on soil quality, heavy metal accumulation, and maize growth	Quanen Guo, Yuerong Wang, Shiyu Cao, Zhuo Wang Gansu Academy of Agricultural Sciences Institute of Soil and Fertilizer
305009	430	31809	抗坏血酸基凝胶修复土壤铬污染	Zhixuan Gong Hunan University
305009	431	31914	Methylmercury Accumulation and Risk Mitigation in Chinese Paddy Soils	Yusef Kianpoor Kalkhajeh Department of Environmental Science, College of Science, Mathematics and Technology", "Department of Biology, College of Science, Mathematics and Technology, Wenzhou-Kean University", "Center for Integrative Plant Sciences, Wenzhou-Kean University
305009	432	32087	Bioaugmentation effects of three ecological categories of wild earthworms on phytoextraction of Sedum plumbizincicola in Cd and Zn contaminated soils of South China	Menghao Zhang ISTO UMR 7327 CNRS-Université d'Orléans
305009	433	32303	Heavy Metal Immobilization Potentials of Some Agricultural Wastes in Contaminated Arable Soil	Augustus O. A. ILORI Soil Science and Land Resources Management, Federal University Oye-Ekiti
305009	434	32546	Long-Term Effects of Repeated Organic Amendment Applications on Cadmium Bioavailability: Insights from a Five-Year Pot Experiment	Sibylle Comeliau University of Liège (Gembloux Agro-Bio Tech, Water – Soil – Plant Exchanges)
305009	435	32547	Managing Cadmium Uptake in Vegetables with Repeated Applications of Amendments: Lessons from a Multi-year Field Experiment	Sibylle Comeliau University of Liège (Gembloux Agro-Bio Tech, Water – Soil – Plant Exchanges)

*Subject to change

Poster Sessions

305009	436	32554	Effects of plant growth-promoting bacteria and its mechanisms towards Brassica juncea L. growth and Cd phytoextraction	Qiong Wang Anqing Normal University
305009	437	32604	Sulfur enhances iron plaque formation and stress resistance to reduce the transfer of Cd and As in the soil-rice system	Fei Miao Huazhong Agricultural University
305009	438	32609	Dual function of sulfur in Cd-As co-contaminated soils: enhancing phytoremediation with mustard and ensuring rice safety under drought-flood rotation systems	Fei Miao Huazhong Agricultural University
305009	439	32908	Quantifying Metal Transport by Water Erosion: A Field-Based Assessment in a Semiarid Mediterranean Former Mining Area (SE Spain)	María Nazaret González Alcaraz Universidad Politécnica de Cartagena
305009	440	33269	Study on the coupled processes of Cd and Fe transfer in the soil-rice system: a remedial strategy using functional fertilizer	Yichun Li Institute of Agricultural Resources and Environment, Guangdong Academy of Agricultural Sciences
305009	441	33281	Long-term persistence of immobilizing agents for reducing the phytoavailability of heavy metal(loid)s in contaminated soil	Hyunmin Lee Gyeongsang National University
305009	442	33300	Immobilization of Arsenic and Cadmium in Alkaline Soil Using Combined Red Mud – Phosphogypsum Amendment	Namhee Yi Gyeongsang National University
305009	443	33322	Bioaccumulation and health risk assessment of heavy metals in the soil-rice system in Iran	Mehdi Beheshti Soil and Water Research Institute (SWRI), Agricultural Research, Education and Extension Organization (AREEO), Karaj, Iran
305009	444	33411	Evaluation of Environmentally Important Elements from Glacial Ice-Water and Associated Glacial Sediments	Kashmala Jadoon Nanjing University
305009	445	33493	Monitoring Cadmium in Soils, Fertilizers, and Baby Leaf Vegetables in Southern Italy: Regulatory and Environmental Insights	Paola Adamo Department of Agricultural Sciences, University of Naples Federico II, Portici (Naples), Italy
305009	446	33605	Mechanisms and Risk Control of Chromium Uptake in Rice: The Pivotal Role of Colloidal Formation	Kai Xu Sun Yat-sen University

*Subject to change

Poster Sessions

305009	447	33641	Assessing Heavy Metal Pollution Levels and Associated Ecological Risks in Peatland Sediments of the Mekong Delta, Viet Nam	Ngoc Son Hai Nguyen Faculty of Resource Management, Thai Nguyen University of Agriculture and Forestry
305009	448	33700	Effect of Biochar Application on Heavy Metal Bioavailability and Leaching in Contaminated Urban Soils from Barcelona (Spain)	Núria Roca University of Barcelona
305009	449	33715	Speciation of Heavy Metals in Soil and Their Influencing Factors in a Tailings-Affected Area of Eastern Inner Mongolia	YiBo Ma Inner Mongolia Agricultural University
305009	450	33853	Regulatory Effects of Nitrogen and Acetate on Arsenic Adsorption by Bentonite in an Anaerobic System	Xinyun Meng Southwest University
305009	451	33893	Microbial taxonomic and functional turnover under cadmium contamination in paddy fields: patterns and implications	Yuntao Li Jiangsu Academy of Agricultural Sciences
305009	452	34142	Study on the Effects of Different Types of Humic Acids and Iron-Manganese Oxides on the Speciation of Heavy Metals in Soil	Xueqiong Zhang College of resources and environment, Inner Mongolia Agricultural University
305009	453	34415	Two-stage heavy metal enrichment during carbonate rock weathering-pedogenesis Micro-scale evidence from soil-rock interface	Jian Wu Sichuan University
305009	454	34437	Assessment of Livestock Carrying Capacity in Typical Agro-Pastoral Transition Zones Based on Heavy Metal Pollution in Cultivated Land: The Case of Chifeng City	Ru Bai Inner Mongolia Agricultural University
305009	455	34824	Arbuscular Mycorrhizal Fungi and Iron-Modified Peat Synergistically Drive Soil Metal(loid) Immobilization and Organic Carbon Stabilization	Minghan Wang Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
305009	456	34907	Speciation Differentiation and Controlling Mechanisms of Mercury Across Full Soil Profiles in Upland Croplands of Guizhou Province	Yixuan Shu Guizhou University
305009	457	34914	Land-Use-Driven Patterns of Heavy Metal Contamination in Surface Soils	Binh Thanh Nguyen Industrial University of Ho Chi Minh City
305009	458	35235	Soil Water Regimes Control Cadmium Bioavailability and Translocation in Rice Systems	Wanjin Wang Southwest University

*Subject to change

Poster Sessions

305009	459	35289	Heavy Metal Contamination and associated ecological risks in Soils around Buddha Nullah drain, Punjab, India	Rishabh Pawar Ph.D. Student, Department of Soil Science, Punjab Agricultural University, Ludhiana 141004, India
305009	460	35336	Mitigation of Heavy Metal Transfer from Soil to Lettuce Using Pyrophyllite: A Soil - Plant Study	Emina Sijahovic University of Sarajevo - Faculty of Agriculture and Food Sciences, Plant Nutrition, Sarajevo, Bosnia and Herzegovina
305009	461	35564	Effect of polymeric materials on mobile forms of heavy metals the upper soil horizon at different levels of contamination in Umbric Albeluviso	Vanessa Katherine Calero Herrera, Victor Yu. Berezkin, Alexander P. Degtyarev, Olga S. Yakimenko, Vera A. Terekhova 1 Vernadsky Institute of Geochemistry and Analytical Chemistry of the Russian Academy of Sciences, Moscow, Russian Federation 2 Patrice Lumumba Peoples' Friendship University of Russia, Moscow, Russian Federation 3 Lomonosov Moscow State University, Moscow, Russian Federation
305009	462	35747	Multiscale Risks-Bioaccessibility Coupling Framework for Improving Derivation of Soil Cadmium Threshold	Shiyan Yang Shanghai Academy of Agricultural Sciences
305009	463	36020	Soil-based assessment of lead release and contamination risks associated with lead-saturated biochars	Chong Li University of Alberta
305009	464	36076	Role of Metal-Organic Framework-Biochar Composites in Heavy Metal Stress Remediation in Plants: Mechanisms, Applications, and Future Prospects	SWARNENDRA BANERJEE Academy of Biology and Biotechnology, Southern Federal University, 344090, Rostov-On-Don, Russia
305009	465	36081	Machine Learning Modeling of Biochar Performance in Remediating Heavy Metals from Contaminated Soil	Vicky Anand Academy of Biology and Medicine, Southern Federal University, 344090, Rostov-On-Don

*Subject to change

Poster Sessions

305009	466	36084	Organic fertilization reduces cadmium bioavailability via enhanced binding to organic fractions and Fe-bearing minerals	Fu-Sheng Sun Tianjin University
305009	467	36467	Use of energy crops for phytoremediation of chromium-contaminated soils and bioenergy	Mariane Porto Muniz Soils Sector of the School of Agronomy, Goiás Federal University (UFG), Goiânia - Goiás, Brazil.", "Faculty of Science and Technology, Goiás Federal University (UFG), Aparecida de Goiânia - Goiás, Brazil.", "Department of Crop Production Ecology, Swedish University of Agricultural Sciences (SLU), Uppsala, Sweden.
305009	468	36474	Synergistic Remediation of Cadmium-Contaminated Soil and Antibiotic Resistance Gene Mitigation by Anaerobic Soil Biological Treatment	Jianxiao Song Northwestern Polytechnical University
305009	469	319B37	Distribution and Environmental Preference of Potential Mercury Methylators in Paddy Soils across China	Rui Sun Huazhong Agricultural University
306003	470	31971	Sustainable Management of Saline and Sodic Black Soils in the Lowlands of Eastern Georgia	Giorgi Ghambashidze Agricultural University of Georgia
306003	471	32563	Sustainability of using salt affected lands in saline agriculture	Leila Jahanbazi Aarhus University
306003	472	32700	Synergistic Control of Soil Salinity via Ridge – Furrow Cultivation, Straw Mulching, and Mechanical Desalination in the Yellow River Delta	Lili Tan Ludong University
306003	473	32784	GeoAI-Informed Inversion A Hierarchical Environmental Embedding Transformer (HEET) for Interpretable Soil Heavy Metal Mapping	Tianhao Guo; Zhongqiu Zhao; Kening Wu China university of geoscience, beijing
306003	474	32837	Slope-Induced Surface Drainage and Climate Stress Interactions Affecting Soybean Growth in Korean Reclaimed Tidelands	Seung-Beom Lee Department of Rural Construction Engineering, Jeonbuk National University

*Subject to change

Poster Sessions

306003	475	32951	Halophytes reclamation soil through improving soil structures, decreasing salinity and enhancing SOC storage in coastal saline land	Huanyu Chen Jiangsu Coastal Area Institute of Agricultural Sciences
306003	476	33020	Pedogenesis and classification of halomorphic soils in the Parnaíba Delta, Brazil	João Victor Alves Amorim Federal University of Paraíba, Brazil", "Federal University of Paraíba
306003	477	33708	Lab evaluation of the SoilVUE10 time domain reflectometry sensor under drying and wetting conditions of saline soils	Xuan Yu State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences
306003	478	33825	Synergistic Phyto-Microbial Strategies for Salinity Amelioration	Salma Santhosh S Tamil Nadu Agricultural University
306003	479	33927	Effectiveness of salinity mitigation measures under extreme climate conditions in a coastal reclaimed farm	Xuan Yu Nanjing Institute of Soil Science, Chinese Academy of Sciences
306003	480	34778	Context-dependent efficacy of soil amendments — A meta-analysis guides the optimal application of desulfurization gypsum, biochar, and organic fertilizer in saline-alkaline agriculture	Yalin Gao Xian university of technology
306003	481	34861	Integrating Hydrological Modeling and Explainable Machine Learning to Reveal the Key Drivers of Soil Salinization in the Huolin River Basin	peng guo China Agricultural University
306003	482	35315	Bio-Organo Silicon Granules: A Strategy for Salinity Tolerance in Tomato	Selvi Duraisamy Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India
306003	483	35630	Mechanisms of Ammonia Volatilization Mitigation in Saline-Alkali Soils Amended with Biochar-Compost: Linking Reduced pH and Enhanced Aggregate Stability to Microbial Shifts	WENPING XIE Institute of Soil Science, Chinese Academy of Sciences
306003	484	35631	Optimal Groundwater Depth Thresholds for Sunflower in Salt-affected Farmland: A Process-Based Modeling Approach Across Hydrological Years in the Hetao Irrigation District	Xiangping Wang Institute of Soil Science, Chinese Academy of Sciences

*Subject to change

Poster Sessions

306003	485	35835	The Construction of a Soil Profile Image Segmentation Dataset (SPISD) Based on Typical Soil Series Profile Photos from 13 Provinces in China	WU Weimo Tarim University
306003	486	36072	Future global salinization dynamics and their coupled driving mechanisms	Aiwen Wang China Agricultural University
306003	487	36092	Spatio-temporal dynamics of soil salinity over 17 years under drip irrigation in an arid irrigation district	BoSun Xinjiang Agricultural University
306003	488	36412	Effects and Mechanisms of Plant Growth-Promoting Bacteria in Enhancing Salt Tolerance of Soybean in Coastal Saline Soils	Gaidi Ren Institute of Agricultural Resources and Environment, Jiangsu Academy of Agricultural Sciences
306003	489	36543	Organic and inorganic carbon losses in straw amended saline and sodic soils	Yuyi Li State Key Laboratory of Efficient Utilization of Arid and Semi-arid Arable Land in Northern China (the Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences)
306003	490	319B38	Digital Mapping for Spatial Prediction of Soil Properties Using Machine Learning Models for Soil Management in Rice Cultivation Areas Affected by Salt: A Case Study of Muang Phia, Ban Phai, Khon Kaen	Waramporn Wongwarapas Land Development Department, Bangkok, Thailand
307001	491	31590	ON THE POSSIBILITIES OF USING NIR SPECTROSCOPY TO ESTABLISH THE GENETIC TYPE OF SOILS	Mikhail Stsepaniuk Scientific and Practical Center of the State Forensic Examination Committee of the Republic of Belarus
307001	492	31591	Differentiation of Urban Lawn Soils on the Basis of a Combination of Physico-Chemical Methods (for Forensic Purposes)	Anna Khokh Scientific and Practical Center of the State Forensic Examination Committee of the Republic of Belarus
307001	493	31866	Patterns of formation of the soil cover of historical urban parks (using the example of St. Petersburg, Russia)	Kseniia Bakhmatova Saint Petersburg State University

*Subject to change



Poster Sessions

307001	494	31982	Carbon dioxide emissions from technogenic soils of the Central forest steppe	Tikhonova Elena Department of Landscape Architecture and Soil Science, Voronezh State University of Forestry and Technologies named after G.F. Morozov
307001	495	32019	Urbanization Affects Soil Microbiome Profile Distribution in the Russian Arctic Region	Korneykova Maria RUDN University
307001	496	32021	Relationships between soil health and dynamics of soil potential pathogenic microbiota in functional domains of Xi' an urban greenspaces, China	Yang Liu Northwest University
307001	497	32092	Changes in the content of labile organic matter in the upper horizons of urban soil under mulching substrates in a multi-year field experiment	Olga Semina Faculty of Soil Science, Lomonosov Moscow State University
307001	498	32176	Specific Features of Constructozems Functioning in Cities of the Steppe and Subtropical Zones of Southern Russia	Gorbov Sergey International Research Center for Ecology and Climate Change Issues, Sirius University of Science and Technology
307001	499	32275	Threshold sand content of sand-clay mixtures is affected by clay mineralogy and compaction effort	Evan C Mascitti University of Massachusetts - Amherst
307001	500	32295	Hydrothermal Carbonization of Urban Organic Waste: Is it a sustainable pathway for soil restoration in highly urbanized regions?	Laurence Le Brun Suarez UNAM
307001	501	33547	Ecological Significance of Rare Earth Element Hyperaccumulation	Wen-Shen Liu 刘文深 School of Environmental Science and Engineering, Sun Yat-sen University, Guangzhou 510006, China
307001	502	33964	Heavy Metal Background in Urban Soils of the Llobregat Sector of Barcelona City (Spain)	Susana Mangas University of Barcelona
307001	503	34295	Bioremediation of Explosive-Contaminated Soil at Military Sites: New Perspectives on Bioavailability and Ecotoxicological Effects	Sanping Zhao State Key Laboratory of Chemistry for NBC Hazards Protection

*Subject to change



Poster Sessions

307001	504	34329	Ecological Assessment of the Aftereffect of Phosphogypsum and Compost on the Carbon Balance of Soils in Model Lawn Ecosystems Considering the Seasonal and Inter-Seasonal Dynamics of Its Components	Petr Vasenev Department of Ecology, Russian State Agrarian University - Moscow Timiryazev Agricultural Academy (RSAU - MTAA), Moscow, Russian Federation
307001	505	34392	Effects of Urbanization Intensity on Soil Physicochemical Properties and Heavy Metal Distribution in Urban Parks of Haikou City: A Multi-Dimensional Assessment	Zhi Cao Hainan University
307001	506	34416	The Impact of urbanization on the physicochemical properties and microbial nutrient limitations of inland wetland soils	Ping Zhong Hainan University
307001	507	35033	Urban soils mulching: temperature and moisture regulation in urban soils under different substrates	Makar Silaev Faculty of Soil Science, Lomonosov Moscow State University, Moscow, Russia
307001	508	35221	Phytoremediation Potential of Native Garden Plants in Urban Soil	Young-Nam Kim Kyungpook National University
307001	509	35245	N ₂ O Cycling in the SUITMA Urban Subsurface: Isotopocule and Gene Evidence from Sewers	Nan Zou Tsinghua University
307001	510	35348	Multidimensional approach to anthropogenic markers - evidence from urban soils in Krakow (SE Poland)	Kinga Jarosz Jagiellonian University in Krakow Faculty of Geography and Geology, Krakow, Poland
307001	511	35643	Urbanization Promotes Topsoil Black Carbon Accumulation: A Meta-analysis	Min Wang Zhongkai University of Agriculture and Engineering
307001	512	35855	Improving Cherry Blossom Growth and Landscape Performance via Soil - Microbe Synergy: A Case Study in Lingang, a Coastal New City of Shanghai	Hongbing Wang Shanghai Normal University
307001	513	36082	Upcycling Rare Earth Element Hyperaccumulator Biomass toward High-Performance Catalysts	Cuiling Huang Sun Yat-Sen University
308001	514	31597	Humate Boosts Liming value? Insights into humate-assisted lime dissolution across acidic environments	Oshadi Hettithanthrige Dona UWA School of Agriculture and Environment, The University of Western Australia

*Subject to change

Poster Sessions

308001	515	32478	Sensitivity of Soil Organic Matter Priming to Warming Depends on Diurnal Temperature Cycle	Qiong Xiao Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences (CAAS)
308001	516	32815	Building a Stable Mineral - Microbial Buffering System for Al ³⁺ Detoxification and Productivity Recovery in Acidified Purple Soils	Debo He Institute of Mountain Hazards and Environment. CAS
308001	517	33069	Microbial driven soil carbon cycling in red soil aggregates under different fertilization	Ming Liu Institute of Soil Science, Chinese Academy of Sciences", "University of Chinese Academy of Sciences", "Ecological experimental Station of Red Soil, Chinese Academy of Sciences
308001	518	33128	Mycorrhiza-Mediated Soil Aggregate Stability under Maize//Soybean Intercropping in Acid Soil	Jian Jiao College of Resources and Environmental Science, Yunnan Agricultural University
308001	519	33256	Synergistic effects of Rice Straw-Pyrolyzed Biochar and Com-post on Acidity Mitigation and Carbon Sequestration in Acidic Soils: A Comparative Study	Xiao-ying Pan Zhongkai University of Agriculture and Engineering
308001	520	33626	Incorporating lime into acidic subsoil improved root growth and rhizosphere microbial activity in wheat	Bingchen Li School of Agriculture and Environment, The University of Western Australia
308001	521	34656	Acidification Discrepancy in Soils with Contrasting Surface Charge	Zhanyu Guo LudongUniversity
308001	522	34668	Effect of Intermittent Irrigation on Rice Growth and GHG Emission in Rice Paddies on Acid Sulfate Soils	Sakura Yamaguchi Japan international research center for agricultural sciences(JIRCAS)", "Tukuba university
308001	523	34862	Liming regulates MAOC-POC trade-offs in paddy soils through a coupled mineral-microbial mechanism	Xiaobin Guo Institute of Subtropical Agriculture, Chinese Academy of Sciences

*Subject to change

Poster Sessions

308001	524	34983	Straw return exacerbates soil acidification in major Chinese croplands	Fei Liang Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
308001	525	35099	Effect of straw incorporation on the formation of roots-surface iron plaque in rice and soil cadmium availability	Jing Mu Anhui Agricultural University
308001	526	35207	Mechanisms of organic matter accumulation and pH buffering enhancement in Ultisol under long-term straw-derived amendments	Zhou Zhang Institute of Soil Science, Chinese Academy of Sciences
308001	527	35607	Aluminum Toxicity is Key to Regulate Maize Yield in Ultisol under Different Nitrogen Fertilizer Treatments: A Long-Term Field Trial	Linling Ran Institute of Soil Science, Chinese Academy of Sciences
308001	528	36054	Machine learning reveals that duration dominates rate in driving soil nitrogen cycling responses to long-term fertilization	Beilei Wei Guangxi University
308001	529	36058	The amelioration effects of different biomass and their derived biochars on acidified yellow cinnamon soil under equal raw material mass conditions	Yonggang Xu Huaiyin Normal University
308001	530	36260	Inorganic amendments increase soil carbon sequestration across global acidic agroecosystems and long-term liming experiment	Tianfu HAN Zhengzhou University
308002	531	32434	Coupling of microbial iron and sulfate reduction with organic carbon stabilization in mangrove soil	Heyimo Xia Sun Yat-sen University
308002	532	32892	Coastal Acid Sulfate Soils and Their Mapping in Finland	Jaakko Auri Geological Survey of Finland (GTK)
308002	533	33021	'Blue Carbon' stocks and thiomorphism in mangrove soils of the Parnaíba Delta, Brazil	João Victor Alves Amorim Federal University of Paraíba
308002	534	34509	Sulfur Geochemistry of a Sulfuric Wetland in Ostrobothnia, Western Finland	Anton Boman Geological Survey of Finland (GTK), P.O. Box 97, FI-67101 Kokkola, Finland
309001	535	31727	Grazing alters plant biomass allocation by regulating soil available nutrients and root biomass distribution in alpine meadows	Jianwei Zhang, Yi Sun, Yan Zhang, Yang Liu, Fujiang Hou State Key Laboratory of Herbage Improvement and Grassland Agro-ecosystems; Key

*Subject to change

Poster Sessions

				Laboratory of Grassland Livestock Industry Innovation, Ministry of Agriculture and Rural Affairs, Engineering Technology Research Center for Ecological Restoration and Utilization of Degraded Grassland in Northwest China, National Forestry and Grassland Administration, College of Pastoral Agriculture Science and Technology, Lanzhou University
309001	536	31728	Tibetan sheep grazing and selenium addition promote soil carbon and nitrogen mineralization in alpine meadow	Jianwei Zhang State Key Laboratory of Herbage Improvement and Grassland Agro-ecosystems; Key Laboratory of Grassland Livestock Industry Innovation, Ministry of Agriculture and Rural Affairs, Engineering Technology Research Center for Ecological Restoration and Utilization of Degraded Grassland in Northwest China, National Forestry and Grassland Administration, College of Pastoral Agriculture Science and Technology, Lanzhou University
309001	537	33699	Analysis of environmental gradients on the growth of <i>Pinus pinea</i> in the Llobregat delta	Núria Roca University of Barcelona
309001	538	33987	Root exudate-mediated microbial gene activation drives phosphorus mobilization in mixed Chinese Fir species plantations	Yijie Ding Research Institute of Forestry, Chinese Academy of Forestry
309001	539	34189	A Comparative Study of Biochars Derived from Four Typical Forestry Residues: Effects of Pyrolysis Temperature on Their Properties	Han Wanzhen Research Institute of Forestry Chinese Academy of Forestry
309001	540	34573	Successive Planting Alters C:N:P Stoichiometric Patterns in the Leaf-Litter-Soil-Microbial Biomass Continuum of Chinese Fir (<i>Cunninghamia lanceolata</i>) Plantations in China: A Meta-Analysis	Lei Liu Research Institute of Forestry, Chinese Academy of Forestry

*Subject to change



Poster Sessions

309001	541	34847	Characteristics of Serpentine Soils in Northern Hokkaido	Mei Tsuchihashi Master' s Programs in Agro-Bioresources Science and Technology, University of Tsukuba, Tsukuba, Japan
309001	542	35057	Effects of moss diversity on soil multifunctionality following vegetation restoration on the Loess Plateau	Jianqing Wang Shanxi University
309001	543	35528	Soil organic carbon fraction mediated microbial community assembly along stand age and seasonal gradients in temperate poplar plantations	Qiwu Sun Research Institute of Forestry, Chinese Academy of Forestry
309001	544	35597	White clover does not increase soil N ₂ O emissions compared to ryegrass in non-Frozen winter, but increases CH ₄ uptake	Guodong Shao South China Agricultural University
309001	545	36059	Soil Carbon and Soil Health Across a Prairie Restoration Chronosequence in Southern Wisconsin	Mengmeng Luo University of Wisconsin-Madison
309001	546	36187	Decadal Spatiotemporal Dynamics of Boreal Soil Chemistry in Response to Industrial Atmospheric Loading	Francis Zvomuya University of Manitoba
309004	547	31641	Microbial Community Assembly, Network Resilience, and Nitrogen Functional Stability Under Canopy Gap Disturbance in Karst Forest Soils	Guangqi Zhang Guizhou University
309004	548	31826	Climate-driven shifts in microbe-mediated home field advantage in litter decomposition	Yixing Deng CAS Key Laboratory of Forest Ecology and Silviculture, Institute of Applied Ecology, Chinese Academy of Sciences", " University of Chinese Academy of Sciences
309004	549	32599	Decoupling effect of removal of leaf litter and roots inputs on microbial biomass and functions	Sirui Peng Fujian Agriculture and Forestry University
309004	550	33262	Age-related shifts in soil microbial community structure and metabolic pathways in <i>Picea schrenkiana</i> var. <i>Tianschanica</i> plantations	Liu Li Xinjiang Agricultural University
309004	551	33544	Connecting Vegetation Biodiversity and Microbial Communities Role in Carbon Cycling Dynamics along a Post-Earthquake Vegetation Natural Restoration Sequences	Yingyan Wang Mianyang Teacher' s College

*Subject to change

Poster Sessions

309004	552	33809	Identification of key bacterial taxa from native microbiome for soil monitoring after wildfire	Dr. Ricardo Romero Arguelles Facultad de Ciencias Biologicas, Universidad Autonoma de Nuevo Leon
309004	553	35608	Hidden Signals After the Flames: Integrating Soil Properties and Enzyme Dynamics in a Post-Fire Landscape	Sara Di Lonardo National Research Council (CNR), Research Institute on Terrestrial Ecosystems (IRET), Italy ", "National Biodiversity Future Center (NBFC), Italy
309004	554	35647	Nutrient availability drives the ecological linkage between microbial functional diversity and soil organic matter molecular complexity during forest restoration	Jing Zhang South China Botanical Garden, Chinese Academy of Sciences
310002	555	32720	Effect of dry direct-seeded and seedling-transplanted rice cultivation on methane emissions from a paddy field in Hokkaido, Japan.	Mariko Shimizu Civil Engineering Research Institute for Cold Region
310002	556	32848	Utilization of Chemically Recycled Bio-based Plastic as Nitrogen Fertilizer in Paddy Soil: A Pot Culture Study for Brassica rapa	Mizuhiko Nishida Tohoku University
310002	557	32868	Potential for Rapid Improvement of Low-Fertility Soils by Cattle Manure Compost Application	Muxiye Tohoku University
310002	558	33453	Higher Efficiency of Nano-Sized Lime for Improved Limestone Conservation	Saw Chin Chien Department of Land Management, Faculty of Agriculture, Universiti Putra Malaysia, 43400, Serdang Selangor, Malaysia
310002	559	34182	Trade-off between water saving and carbon retention: irrigation determines the fate of microalgal inputs and yield in saline – alkali paddy soil	Shuxuan Zhang School of Land Engineering, Chang’ an University
310002	560	34350	Dual Benefits of Nano-Iron Oxide: Enhancing Rice Yield and Mitigating Greenhouse Gas Emissions Across Diverse Paddy Soils	Lihong Xue Jiangsu Academy of Agriculture
310002	561	34730	Feasibility of Pot-Grown Seedling Transplanting as an Alternative Strategy to Mitigate CH ₄ Emissions and Enhance Rice Productivity in a Paddy Field	Mingyeong Lee Department of Agricultural Chemistry & Interdisciplinary Program in IT-Bio Convergence System, Sunchon National

*Subject to change

Poster Sessions

				University, Suncheon 57922, Korea
310002	562	34840	Evaluating Rice Ratoon as a Novel Carbon Source and Identifying Growth-Regulating Factors in Mono-Rice Paddies in a Monsoon Region	Gayeon Jang Department of Agricultural Chemistry & Interdisciplinary Program in IT-Bio Convergence System, Suncheon National University, Suncheon 57922, Korea
310002	563	35874	Methane production potentials and methanogenic communities in winter-flooded rice paddy soils	Sun Zhijie China West Normal University
310002	564	35952	Synergistic Effects of Water and Straw Management on Greenhouse Gas Dynamics and Carbon Sequestration in Subtropical Rice Ecosystems using Multichannel Automated Chamber System	Chuan Fu Kao Chuan Fu Kao
310002	565	36575	Mineral-microbial coupling mechanisms in rice root iron plaques regulate paddy greenhouse gas emissions	Jinzhi Yao The Center for Agricultural Resources Research, Institute of Genetics and Developmental Biology of CAS
310004	566	32171	Field investigation for 11 years revealed periodic fluctuations in the abundance and composition of bacterial and archaeal communities in paddy-upland rotational field	Takeshi Watanabe Graduate School of Bioagricultural Sciences, Nagoya University
310004	567	32783	Denitrifier community responses to irrigation and straw management in subtropical paddy soils	Pei-Ju Lu Department of Bioenvironmental Systems Engineering, National Taiwan University
310004	568	33416	Non-metabolic metal Cd overrides beneficial metalloid As effects on microbial methane emissions from paddy soil under future incubation conditions	Tianyu Wang Helmholtz Centre for Environmental Research – UFZ
310004	569	33814	Organic rice cultivation boosts microbial carbon use efficiency by modulating soil nutrient availability and microbial resource acquisition strategies	Zhuxiu Liu, Junjie Liu, Guanghua Wang State Key Laboratory of Black Soils Conservation and Utilization, Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences

*Subject to change



Poster Sessions

310004	570	34003	Nitrogen fertilization increases rice productivity at the expense of endophytic bacterial community stability and diversity	Jinyuan Zhang, Xiaojing Hu, Jian Jin, and Guanghua Wang* State Key Laboratory of Black Soils Conservation and Utilization, Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
310004	571	34058	Long-term Compost-based Soil Amendment Management Enhances Inorganic and Organic Carbon Storage in Paddy Soils	Chang Hoon Lee Korea National University of Agriculture and Fisheries
310004	572	34120	Effects of nitrogen application on rhizosphere microorganisms, metabolites, and plant growth of rice under controlled irrigation in paddy fields	Yuxuan Zha Sichuan University
310004	573	34221	Synergistic Effects of Comprehensive Cultivation Measures on Soil Health and Crop Productivity in Newly Reclaimed Cropland	Yanfang Chen ZHEJIANG INSTITUTE OF GEOSCIENCES
310004	574	34746	The functional divergence and biogeographic patterns of electron-transferring flavoprotein (Etf) in paddy soil	zhibin He PekingUniversity
310004	575	34782	Divergent Methanogenesis in Chinese Paddy Soils Driven by Organic Matter Composition under Climate Warming	Jianpeng Li PekingUniversity
310004	576	34989	Effective suppression of methane emission using ethephon and polymer mixture	Sin Ho Jun Division of Applied Life Science (BK21 Four), Gyeongsang National University, Jinju, Republic of Korea
310004	577	35006	Contrasting water regimes reshape anaerobic denitrification-primed organic nitrogen mineralization	Bing Han State Key Laboratory of Black Soils Conservation and Utilization, Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences, Changchun, Jilin, China
310004	578	35046	Impact of land use and soil types on microbial N ₂ O reduction potential mediated by nosZ communities	Xin Xia, Yong Li Zhejiang University
310004	579	35443	From DOM to Methane and Arsenic Release: Soil as a Key Control in Paddy Soils	Shuqiong Kong Yangtze University

*Subject to change

Poster Sessions

310004	580	35463	Drivers of N ₂ O flux in paddy soils: Insights from flooding-drying processes and mitigation strategies	Rong Sheng Institute of Subtropical Agriculture, Chinese Academy of Sciences
310004	581	35866	The microbial community characteristics of soda saline-alkali paddy with flue gas desulfurization gypsum reclamation	Bangyan Liu Tsinghua University
310004	582	36254	Effects of rice-mushroom rotation systems on soil fungal communities and rice yield	王艳 Yan Wang 淮阴师范学院 Huaiyin Normal University
310005	583	32482	Multitemporal Mapping of Soil Degradation to Support Environmental Restoration and Land-Use Planning in Minas Gerais, Brazil	Costa A.M Department of Geography, Federal University of Minas Gerais
310005	584	32724	Cloud-Based Soil Erosion Drivers and Sediment Yield Assessment Using RUSLE - SDR Modeling in a Himalayan Watershed.	Saffi Ur Rehman College of Agricultural Science and Engineering, Hohai University
310005	585	33051	Soil and crop growth heterogeneity increase under agri-photovoltaic systems	Sonoko Bellingrath-Kimura Leibniz Centre for Agricultural Landscape Research (ZALF)", "Humboldt University of Berlin
310005	586	33515	Effect of autumn ratoon biomass on the rice growth and biomass during the following summer rice season under organic cultivation	Atana Melingui Elie Desire 1The United Graduate School of Agricultural Sciences, Iwate University, Morioka, Japan 2Ministry of Agriculture and Rural Development, Cameroon
310005	587	33663	Effects of fertilizers on arsenic accumulation in ratoon rice: implications for human health risks	Chang-Shiu Li Department of Agronomy, National Chung Hsing University
310005	588	34101	Evaluating Cross-Regional Models for Predicting Soil Carbon and Properties in Taiwan Using Mid-Infrared Spectroscopy and Machine Learning	Cheng-Hsien Lin Department of Soil and Environmental Sciences, National Chung Hsing University
310005	589	34108	DNDC Simulation of Soil Organic Carbon and methane in Taiwan's Rice Fields: Short- and Long-Term Validation and Application	Yu-Yu Kung National Chung Hsing University

*Subject to change

Poster Sessions

310005	590	34486	Effects of broiler litter and inorganic nitrogen on soil chemical indicators under varying row spacings in rainfed, no-till cotton systems	Sainfort Vital Mississippi State University
310005	591	34489	Rye – clover cover crop configuration (random vs alternating rows) with poultry litter: soil chemistry and cotton yield in Mississippi	Sainfort Vital Mississippi State University
310005	592	34771	Biochar application improves soil health and tomato growth under drip irrigation in acidic soil	Tingting Chang HOHAI UNIVERSITY
310005	593	34787	The Potential of Returning Lignified Sesbania and Sun Hemp to the Soil to Increase Soil Organic Matter in Tropical Farmlands	Chia-Hsing Lee Department of Plant Industry, National Pingtung University of Science and Technology
310005	594	34820	Highly Efficient Aflatoxin B ₁ Removal by Humic-Like Substances Formed via Microbial – MnO ₂ Catalyzed Rapid Humification	Yu-Min Tzou Department of Soil and Environmental Sciences, National Chung Hsing University, Taichung, Taiwan
310005	595	34842	Optimizing Water-saving Irrigation Strategies: Integrative Assessment of Soil Quality, Crop Yield, Greenhouse Gas Emissions, and Microbial Ecology in Rice Paddies	Chia-Chia Lin Department of Soil and Environmental Sciences, National Chung Hsing University, Taichung, Taiwan
310005	596	34869	Changes in soil microbial community structure and carbon, nitrogen and sulfur functional genes under different cultivated land use patterns	Hengji Qin Hohai University
310005	597	34890	Modified biochar enhances the growth of pepper and reduces the accumulation of cadmium in soil contaminated with cadmium	Hengji Qin Hohai University
310005	598	34915	Organic amendments affect soil organic carbon and water-salt transport under subsurface drainage in a coastal reclamation area	Yujie Zhang Nanjing Hydraulic Research Institute
310005	599	34978	Phytotoxic Effects of Sodium Dodecylbenzenesulfonate (SDBS) on Rice (<i>Oryza sativa</i> L.) Germination and Seedling Growth: Laboratory and Soil-Based Bioassays with Relevance to Industrial Effluent Irrigation	Md. Imam Hossain Department of Soil Science, University of Chittagong, Chittagong-4331, Bangladesh
310005	600	35025	Effects of subsurface drainage spacing and organic fertilizer application on water and salt transport characteristics of saline – alkali soil	Yujie Zhang Nanjing Hydraulic Research Institute

*Subject to change

Poster Sessions

310005	601	35223	Microbiome-enabled biochar tightens nitrogen cycling and boosts wheat water productivity under regulated deficit irrigation	Mir Moazzam Ali Talpur College of Agricultural Science and Engineering, Hohai University, Nanjing, China
310005	602	36285	Performance of sediment microbial fuel cells to inhibit arsenic availability in soil porewater: A laboratory study of three different Japanese paddy soils	Adhena Tesfau Bekele Graduate School of Agricultural Science, Tohoku University, Miyagi, Japan
310005	603	36442	Earthworm burrows enhanced rice root growth under a no-tillage rice-rapeseed rotation system	Lingling Liu Hunan Cultivated Land and Agricultural Eco-Environment Institute
401002	604	32708	Soil β -Diversity responses to global change: mediated by assembly processes and multi-trophic interactions	Zhenxin XU Institute of Applied Ecology, Chinese Academy of Sciences
401002	605	34117	Multi-trophic interactions in the rhizosphere promote network complexity to synergize with root genetic programs for improve P acquisition in maize	Ming Lang College of Resources and Environment, Academy of Agricultural Sciences, Southwest University", "Interdisciplinary Research Center for Agriculture Green Development in Yangtze River Basin, Southwest University
401002	606	34609	Testing the scaling effects and mechanisms of N-induced belowground biodiversity loss	Liheng Zhang Research Center for Eco-Environmental Sciences
401002	607	34651	The Effect of Soil Microorganisms on Organic Carbon Sequestration in Saline-Alkali Soils of the Hetao Irrigation District under Exogenous Organic Matter Addition	Fei Chang Inner Mongolia Agricultural University
401002	608	35393	Effects of earthworms and their combined application with functional attractant on soil organic carbon dynamics: Regulation of organic carbon fractions, aggregate formation, and their carbon sequestration	Yinsheng Li Shanghai Jiao Tong University
401002	609	35938	Responses of the soil micro food web to natural and managed systems at a global scale	Meng Yuan Hubei Minzu University
402005	610	31829	Transferring Global Pedogenon Insights for Soil Security in Australia	Wartini Ng The University of Sydney

*Subject to change



Poster Sessions

402005	611	31836	A soil security perspective: Reframing soil indicators for effective governance	Sandra Evangelista The University of Sydney
402005	612	31839	A Decade of Soil Security: From Concept to Global Action	Alex McBratney The University of Sydney", "Sydney Institute of Agriculture", "Aroua Global Soil Think Tank
402006	613	31621	Mycobacterium vaccae: The Interconnection between Soil Health and Human Health	Winfred Espejo Department of Soils & Natural Resources, Facultad de Agronomía, Universidad de Concepción
402006	614	32166	Improving soil organic carbon sequestration through conservation tillage incorporating legume-based crop rotations	Wenxuan Liu China Agricultural University
402006	615	32513	Climate-Driven Resuspension of Contaminated Particles and Potential Health Risks in Areas Impacted by Tailings Deposition	Tamires P. Souza University of Manchester ", "University of São Paulo
402006	616	32847	Intercropping and partial substitution of synthetic fertilizer enhance production efficiency and mitigate N ₂ O emissions in maize and soybean production	Bowen Ma State Key Laboratory of Nutrient Use and Management, Institute of Agricultural Resources and Environment, Shandong Academy of Agricultural Sciences
402006	617	32928	Revisiting global land – food nexus from cropland degradation perspective	Keke Li Henan University
402006	618	32972	Risks of Wheat Yields Reduction Under Future Climate Extremes	Guanmo Li Chinese Academy of Agricultural Sciences
402006	619	33221	Improvement and Validation of the APSIM-Maize Model for Maize Waterlogging Response under Different Tillage Systems	Xian Man China Agricultural University
402006	620	33834	Deciphering the Role of Ethylene Signaling in Endoplasmic Reticulum Stress Response and Crop Resilience	Chuanfa Liu Nanjing Institute of Soil Science, CAS
402006	621	33887	Effects of Quinoa Cultivation on Greenhouse Gas Emissions and Soil Properties in Different Saline-Alkali Ecosystems	Hongna cui Institute of soil science, chinese academy of sciences

*Subject to change

Poster Sessions

402006	622	34051	Low-Carbon Wheat Program: Integrating Soil Quality and Soil Carbon Dynamic into Life Cycle Assessment	Vanderlise Giongo Brazilian Agriculture Research Corporation (Embrapa)
402006	623	34053	Green recycling food waste management - a comparative case study in China	Yu Liu China Agricultural University
402006	624	34282	The compensation by elevated CO ₂ for the impacts of warming yields a net positive overall effect of climate change on ecosystem services	Yu Liu Institute of Soil Science, Chinese Academy of Sciences
402006	625	34371	Sustainable Management of Zinc in the Soil - Plant - Animal Continuum	Suganya, S Assoc. Professor (SS&AC)", "AICRP-MSPE, Dept. of SS&AC", "Tamil Nadu Agricultural University", "Coimbatore", "India
402006	626	34505	The evolution of assimilable elements in the soil, and in the Sorrento Lemon PGI during growth	Simona Vingiani Department of Agricultural Sciences, University of Naples Federico II, Piazza Carlo di Borbone 1, Portici (NA), Italy
402006	627	34620	Distribution and Driving Environmental Factors of Antibiotic Resistance Genes in River Water and Sediments on the Qinghai-Tibet Plateau	Feng Zhang Chinese Academy of Sciences, Institute of Mountain Hazards and Environment
402006	628	35021	Abiotic Dephosphorylation of Nucleotides by Manganese oxides	Xiao Yu Nanjing University
402006	629	35669	Legacy soil information in the Northern Regions of Ghana: Implications for Integrated Soil Fertility Management (ISFM)	Edward Yeboah Soil Microbiology Division, CSIR-Soil Research Institute, Kumasi, Ghana
403002	630	32057	Arenization in the Bauru Basin, Mato Grosso do Sul, Brazil	Viviane Capoane and Robert A. Burrow Universidade Estadual de Mato Grosso do Sul, Campo Grande, Brasil), Universidade Federal de Santa Maria
403002	631	32074	Evaluating the Impact of Stakeholder-Driven Agricultural Scenarios on Nitrogen Footprint and Virtual Nitrogen Factor using SWAT	Ryosuke Ogino Graduate School of Agriculture, Hokkaido University

*Subject to change

Poster Sessions

403002	632	32168	Long-Term Land-Use Change in a Mediterranean Agroforestry System: Assessing and Restoring Soil Health in Apple Orchards of Pelion, Greece	Eleftherios Evangelou Institute of Industrial and Forage Crops, Hellenic Agricultural Organization\ "Dimitra\ "
403002	633	32375	Innovating Truffle Agroforestry for Sustainable Mediterranean Landscapes: The TAIE Project	Luisa Massaccesi Institute for Agricultural and Forest Systems in the Mediterranean, National Research Council
403002	634	32407	Impact of soil amendments, irrigation regimes, and subsurface drainage on wheat yield in coastal saline soils	Saffi ur Rehman College of Agricultural Science and Engineering, Hohai University
403002	635	32414	Decoding the Rubik's Cube of Soil Health: A Genoform-Management-Phenoform Framework for Cropland in Northeast China	Tao Wang China University of Geosciences, Beijing
403002	636	32417	Soil and plant responses to the direct addition of organic residues without prior decomposition	Mohammed Gamal College of Natural Resources and Environment, Northwest A&F University, Key Laboratory of Green and Low Carbon Agriculture on Dryland in Northwest China, Ministry of Agriculture and Rural Affairs", "Department of Soil Science and Plant Nutrition, Ondokuz Mayıs University", "Department of Soil and Agricultural Chemistry, Alexandria University, Faculty of Agriculture
403002	637	32438	Changes in salinity and vegetation growth under different land use types during the reclamation in coastal saline soil	Linlin Chu Hohai University
403002	638	32564	Soil Aggregate Composition and Stability and Their Relationship with Soil Organic Carbon under Different Crop-Forage Rotations on the Loess Plateau	Li Yajuan Gansu Agricultural University
403002	639	32753	Effects of straw returning method and irrigation lower limit on soil water and salt regulation and crop physiological characteristics in saline-alkali	Jie Zhang College of Agricultural Science and Engineering, Hohai

*Subject to change

Poster Sessions

			land of the Yellow River Delta	University
403002	640	32863	Scale-dependent mechanisms of grazing-induced soil carbon sequestration: Mediated by soil nitrogen quantity vs. heterogeneity in grasslands	Yue Bai Northwestern Polytechnical University
403002	641	32991	Rate of decomposition of litter fall and nutrients recycling in three soil use systems in the Peruvian Amazon	Julio Alegre Soil Science Department Universidad Nacional Agraria La Molina
403002	642	33624	Functioning of a Constructed Technosol at a post-dam collapse rehabilitation site: Evidence from Brumadinho, Brazil	Rugana Imbaná Department of Soil Science, Universidade Federal de Viçosa, R. Purdue SVN, Campus Universitário
403002	643	33646	Applicability of the Deterioration Index for Assessing Soil Quality in Cocoa-Based Agroecosystems of Cameroon	Georges K. Kome Department of Land Surveying, National Advanced School of Public Works
403002	644	33709	SoilBio Reveals the Power of Forage Grasses to Improve Biological Functioning, Soil Health and Long-Term Soybean Yield in Maranhão, Brazil	Fabio B. Reis Junior Embrapa Cerrados
403002	645	33965	Soils in the Great Green Wall of the Sahel (Mauritania): The Role of ecological restoration	S. Mangas University of Barcelona
403002	646	33977	Effect of ecologically significant secondary sowing on changes in soil organic matter content	László Zoltán University of Debrecen, Faculty of Agricultural and Food Sciences and Environmental Management, Institute of Agricultural Chemistry and Soil Science
403002	647	34018	Biochar amendment mitigates negative effects of controlled irrigation on paddy soil structure: insights from micro-pore network analysis	Jiazhen Hu Jiangxi University of Water Resources and Electric Power
403002	648	34029	Biochar application influenced soil quality in China's Loess Plateau	Yuanyuan Li Zhengzhou University
403002	649	34287	Multispecies pastures and the soil science dilemma	Gary Clark La Trobe University

*Subject to change

Poster Sessions

403002	650	34321	Four Decades of Soil Organic Carbon Dynamics in Seasonally Flooded Haor Wetlands of Northeastern Bangladesh amid Landscape Transformation	Md. Jashim Uddin Department of Soil, Water and Environment, University of Dhaka
403002	651	34474	Soil Physical and Chemical Responses Along a Pasture-to-Forest Succession in the Alps	Valeria Cesarini University School for Advanced Studies IUSS, Piazza della Vittoria 15, 27100 Pavia, PV, Italy
403002	652	34636	Effects of Different Land Use Types on Soil – Microbial Ecochemical Stoichiometry in Agro-Pastoral Ecotones	Yutong Zhang Inner Mongolia Agricultural University
403002	653	34700	Mechanisms underlying conservation tillage regulation of maize brace root numbers in the black soil region	Xiaoqing Wei China Agricultural University
403002	654	34846	Iceland’ s degradation history is taking a hopeful turn through revegetation and ecosystem monitoring	Sólveig Sanchez Land and Forest, Iceland
403002	655	34894	Impact of Cropland Use Stability on the Spatiotemporal Evolution of Soil Organic Carbon Storage in the Sichuan Basin over the past 40 years	Yuchen Zhong Sichuan Agricultural University
403002	656	34948	Aggregate-Size-Specific Carbon and Nitrogen Responses to Reduced and Deep Tillage in Japanese Andosols	Ulendo Taizya Graduate School of Science and Technology, Doctoral Program in Agricultural Sciences, University of Tsukuba, Tsukuba, Japan
403002	657	34975	Influence of Land Use and Agroforestry Systems on Water Quality in the Córrego Rico Watershed, São Paulo, Brazil	Teresa Cristina Tarle Pissarra Engeneerig Department, São Paulo State University (Unesp), School of Agricultural and Veterinarian Sciences, Jaboticabal, SP, Brazil
403002	658	34982	Poultry litter application increases soil carbon and soil health under land use change in farmland soil of the United States	Tingting Chang Mississippi State University
403002	659	35110	Enhancing soil-wheat resilience with biochar-based microbial fertilizer application under deficit irrigation	Xu Yang Nanjing Forestry University

*Subject to change

Poster Sessions

403002	660	35148	Microbiome-enabled biochar mitigates drought impacts and improves soil nutrient availability and maize growth in under deficit irrigation	Zimei Miao Nanjing Forestry University
403002	661	35173	The effect of organic farming systems and cover crops on soil health after land use change in southeastern USA	Yujie Zhang Mississippi State University
403002	662	35251	Regional scale mapping of a soil health index using machine learning and digital soil mapping with driver attribution	Junfu Li School of Land Science and Technology, China University of Geosciences, Beijing
403002	663	35287	Transformation patterns of precipitation-soil water-crop water in karst regions and their impact on maize yield	Xu Yang Nanjing Forestry University
403002	664	35844	Grassland legacy effects regulate nutrient leaching losses in cropland phases in long-term grassland-crop rotations	Sen GU Institute of Hydrobiology, Chinese Academy of Sciences
403002	665	35910	Assessing Nutrient Status of Selected Lowland Rice Soils in Siniloan, Laguna, Philippines	Nicola Louise Timbas Division of Soil Science, Agricultural Systems Institute, College of Agriculture and Food Science, University of the Philippines Los Baños, Laguna, Philippines
403002	666	35911	Influence of the 2020 Taal Volcanic Eruption on Selected Soil Properties and Finger Pepper (<i>Capsicum annum</i> L.) Production in Batangas, Philippines	Maria Nereza D. Francia Division of Soil Science, Agricultural Systems Institute, College of Agriculture and Food Science, University of the Philippines Los Baños, Laguna, Philippines
403002	667	36324	Synergistic Effects of Irrigation Regimes and Duckweed Species on Microplastic Dynamics in Paddy soil	Zhenchang Wang Hohai university
403002	668	36333	Organic slow-release nitrogen fertilizer affects soil organic carbon sequestration, greenhouse gas emission, and rice yields under water-saving irrigation	Shurong Hao Hohai University
403002	669	36520	Soil attributes in the cultivation of organic medicinal plants in Itapuranga, Goiás, Brazil.	Wilson Mozena Leandro School of Agronomy, Goiás Federal University (UFG), Goiânia - Goiás,

*Subject to change

Poster Sessions

				Brazil.", "Institute of Chemistry, Goiás Federal University (UFG), Goiânia - Goiás, Brazil.", "School of Architecture and Civil Engineering, University of Wuppertal (BUW), Wuppertal, Germany.
407001	670	32012	Root-soil interactions govern soil organic nitrogen dynamics under acid rain and nitrogen deposition	Xiongfei Zhang Nanjing Forestry University
407001	671	32101	Substantial underestimations of soil nitrogen gaseous losses from global croplands under warmings	Feng Zhou Peking University
407001	672	32162	Comparative experiments and analysis of water and nitrogen dynamics in bare and rice fields using HYDRUS-1D	Juxiu Tong China University of Geosciences, Beijing
407001	673	32297	The process of dissimilatory nitrate reduction to ammonium mediated by microorganisms	Xuejiao Huang Guangxi University
407001	674	32351	Aligning nitrogen form with rice preference raises yield and cuts emissions	Shending Chen Zhejiang University
407001	675	32421	Harnessing soil pore functionality for enhanced nitrogen dynamics understanding and fertilizer management in pastures	John Clunes Institute of Agricultural Engineering and Soils, Faculty of Agricultural and Food Science, Austral University of Chile
407001	676	32450	Optimizing water and potassium management enhances yield and water-nutrient use efficiency through improved soil nitrogen availability in citrus orchards	Yuxuan Zha Sichuan University
407001	677	32484	Bio-Derived Modulation of Nitrogen Cycling in Wheat Using Husk Extract Formulations	SHUBHAM ANIL DURGUDE International Maize and Wheat Improvement Center (CIMMYT)
407001	678	32529	Climate change effects on nitrogen cycles in global grasslands	Miao Zheng Zhejiang University
407001	679	32709	Identifying the driving factors of soil nitrate nitrogen via MLs-GIS framework in an intensive plain agricultural area, China	Jianwei Liu Henan Agricultural University

*Subject to change

Poster Sessions

407001	680	32739	Mitigation and Synergistic Effects of Management Practices on Pollution Reduction, Carbon Sequestration, and Emission Reduction in Sloping Farmland: A Meta-Analysis	Chuanzong Wang Sichuan Agricultural University
407001	681	32770	Integrated Modelling and Technological Tools to prevent Agricultural Non-Point Source Nitrate Pollution of Shallow Groundwater in Arborea Area, Sardinia, Italy	Andrea Vacca Department of Chemical and Geological Sciences (DSCG), University of Cagliari
407001	682	32918	Short-term intercropping reduces symbiotic nitrogen fixation and alters the proportion of nitrogen pool derived from soil free-living nitrogen fixation	Runfu Li Beijing Forestry University
407001	683	33142	Regenerative Management Reduces Nitrous Oxide Emissions from Dairy Pastures	Tharindi Lakshani Department of Soil and Physical Sciences, Lincoln University
407001	684	33332	Evaluation of nitrogen mineralization characteristics of paste fertilizer in Japanese paddy soils	MOHAMED Sayid Ali Yusuf Graduate school of Agriculture, Yamagata University, Tsuruoka, Japan
407001	685	33609	Fairy Ring Presence Alters Fungal-Soil Carbon/Nitrogen Dynamics and Stable Isotope Ratios	Sijia Wang Forschungszentrum Jülich GmbH.
407001	686	33902	Organic fertilization reduces microbial nitrogen use efficiency by increasing resource availability and alleviating stoichiometric imbalances	Xinran Wang Chinese Academy of Agricultural Sciences
407001	687	33913	Patterns and Mechanisms of Nitrogen Uptake, Utilisation and Loss in Different Rice Varieties	Yuanyuan Lei Institute of Soil Science, Chinese Academy of Sciences
407001	688	34263	Substantial ammonia emissions from sludge drying pans in wastewater treatment plants	Mei Bai School of Agriculture, Food and Ecosystem Sciences, Faculty of Science, The University of Melbourne
407001	689	34838	Nitrogen Characteristics and Sustainable Management in Global Sloping Croplands	Wenjing Zhou Sichuan Agricultural University
407001	690	34928	Nitrogen cycling in the soil-plant continuum in multispecies swards: insights from a miniature sward experiment	Rifaath Hassan The University of Melbourne

*Subject to change

Poster Sessions

407001	691	35576	An open-path nitrous oxide laser analyzer for eddy covariance flux	Ruisheng Jiang Healthy Photon Co., Ltd.
407001	692	35694	Dynamic safe nitrogen boundary for maintaining surface water quality in China	Yiyang Zou Zhejiang University
407001	693	35746	Cutting global nitrogen emissions by one-third for balanced and achievable SDGs by 2030	Yi Zhou Zhejiang University
407001	694	35787	Effects of film mulching and straw retention on soil labile nitrogen pool, enzymes and ammonia volatilization in the root zone of winter wheat	Huitong Li Yan'an University
407001	695	35916	Oxygen isotope anomaly identifies selective nitrate leaching from forest soils	Zhong-Cong Sun Institute Of Geochemistry, Chinese Academy of Sciences
407001	696	35933	High organic fertilizer substitution stimulates soil N ₂ O emissions by reshaping the ammonia-oxidizing bacterial community in a Fluvo-aquic soil	Haiyang Liu Henan Agricultural University
407001	697	36102	The Impacts of Different Soil Textures and Salinity Levels on Soil Nitrification	Feirong He Xinjiang Agricultural University
407001	698	36117	Detritosphere heterogeneity and moisture fluctuations interact to control N ₂ O hot moments and priming in agricultural soils	Hongyu Ran Hainan University
408001	699	33463	Comprehensive Assessment and Spatial Variability of Soil Health in Fruit Sugarcane Fields of Wengyuan, Northern Guangdong	Ke Yi Shaoguan University
408001	700	34186	Enhancing NDVI Trajectory Analysis for Improved Productivity Metrics in National-Scale Land Degradation Assessment: The Case of Italy	Piero Manna National Research Council, Institute for Agricultural and Forestry Systems in the Mediterranean, Portici, Italy
408001	701	319B83	Integrating Soil Remediation and Land Valuation: Evidence from the UK and China under an Environmental – Economic Framework	Wang Feng Soil Scientist and Real Estate Valuation Expert, RICS Member
409002	702	33407	Comparison the feasibility of Bayesian spatial model and machine learning method on mapping soil property in different geomorphic regions	Yi Lin Jiangxi University of Finance and Economics
409002	703	33604	Mapping soil organic carbon across China using ensemble modelling at 30 m spatial resolution	Yi Zhao Zhejiang University

*Subject to change

Poster Sessions

409002	704	33623	Deep soil carbon accrual by perennial energy crops offers large potential for atmospheric CO ₂ removal	Wei Yao China Agricultural University
409002	705	34043	Soil vertical gradients shape soil respiration but not its temperature sensitivity	Ting Sun Zhejiang University
409002	706	34095	Is the tobacco carbon footprint influenced by soil attributes?	Vanderlise Giongo Brazilian Agriculture Research Corporation (Embrapa)
409002	707	34124	Counteracting warming-induced soil organic matter loss via cyanobacteria-enhanced glomalin-mediated aggregation	Haowei Ni Institute of Soil Science, Chinese Academy of Sciences
409002	708	34304	Land use change and management strategies promoting soil organic carbon sequestration in LAC countries	Mariana Rosas-Alenicov Instituto Nacional de Investigación Agropecuaria (INIA)
409002	709	34825	Vegetation restoration of degraded meadows by non-dominant species decreased cumulative CO ₂ emissions and temperature sensitivity of soil respiration rates	Bangliang Deng Jiangxi University of Water Resources and Electric Power
409002	710	34898	Refining the RothC Model's Decomposition Rate Modifier for Moisture to Improve Soil Organic Carbon Estimation in Paddy Fields	Sunyoung Joo Department of Applied Environmental Science, Kyung Hee University
409002	711	35176	Analytic derivation of a carbon turnover time stabilization model from a standard two-pool model	Beatriz Aria Valladão Embrapa Digital Agriculture
409002	712	35345	Assessing pedotransfer functions for bulk density to improve predictions of soil carbon stocks in Retisols (Moscow region, boreal zone)	Olga I. Manakova Soil Science Faculty, Moscow State University, Moscow, 119991 Russia
409002	713	35374	Spatial heterogeneity of soil organic matter composition in Chernozems: A Case Study	Farkhodov Yu.R V.V. Dokuchaev Soil Science Institute
409002	714	36047	Depth-resolved soil organic carbon estimation: a scalable approach	Moa van Kretschmar Precision Agriculture, Hydrology & Geoinformation Sciences Laboratory, Sydney Institute of Agriculture, School of Life & Environmental Sciences, The University of Sydney, Sydney,

*Subject to change

Poster Sessions

				Australia
409006	715	34174	Combined Effects of Elevated Ozone and Warming on Methanogenesis in Paddy Soil Across Depths	Jinfeng Ma State Key Laboratory of Climate System Prediction and Risk Management, Key Laboratory of Ecosystem Carbon Source and Sink, China Meteorological Administration (ECSS-CMA), School of Ecology and Applied Meteorology, Nanjing University of Information Science and Technology, Nanjing 210044, China
409006	716	34216	Combined Effects of Elevated Ozone and Straw Return on Plant-Soil-Microbial Mechanisms Regulating Paddy Methane Emissions	Yijia Zhang Key Laboratory of Climate System Prediction and Risk Management, Key Laboratory of Ecosystem Carbon Source and Sink, China Meteorological Administration (ECSS-CMA), School of Ecology and Applied Meteorology, Nanjing University of Information Science Technology, Nanjing 210044, China
409006	717	34303	Microbial-Driven Humification of Sugarcane Leaf Residues in Lateritic Soils	Xi-Mei Xue State Key Laboratory of Regional and Urban Ecology, Institute of Urban Environment, Chinese Academy of Sciences", "University of Chinese Academy of Sciences
409006	718	34323	Metabolic versatility of acetogens in ruminants and their potential to reduce methane production	Bo Fu Wuxi university
409006	719	34817	The overlooked methanogenic N ₂ -fixation revealed during rice straw incorporation by metatranscriptomics	Feiran Jia Institute of Soil Science", "Chinese Academy of Science

*Subject to change

Poster Sessions

409006	720	35216	Differential roles of methanotrophs in methane oxidation across wetland and meadow soils	Yongcui Deng Nanjing Normal University
409008	721	32233	Root exudates-mediated rhizosphere microbiome participate in carbon fixation along the chronosequence	Yuanji Wang Northwest A&F University
409008	722	32373	Chemical Composition of Soil Organic Carbon and Its Relationship with Soil Properties and Carbon Dynamics in Tropical Soils of Thailand	Phongsakon Tantarawongsa Nuclear Science and Engineering Center, Japan Atomic Energy Agency
409008	723	32589	Management' s Role in Loss of Color and Organic Carbon in Great Plain Soils of the United States	Isaac Nelson Kansas State University
409008	724	32607	Nitrification-induced acidity controls CO ₂ emission from soil carbonates	Jingjing Tao Northwest A&F University
409008	725	32619	The Impact of Soil Heterogeneity on Organic Carbon Mineralization	Yan Jing Central South University of Forestry and Technology
409008	726	32748	Global warming potential in rice paddy soil applied with different fertilization and tillage management	Mu Seong Kim Department of Life Science and Environmental Biochemistry, Pusan National University
409008	727	33084	Impact of Land Use and Windbreak Establishment on Soil Carbon Pools in Dryland Agroecosystems	Giorgi Ghambashidze Scientific-Research Centre of Agriculture, Soil Fertility Research Service
409008	728	33146	Effects of alley cover crops on soil carbon and nitrogen along the soil profile in almond orchards under a Mediterranean climate	Jesús Aguilera-Huertas Departamento de Ingeniería Agronómica, Universidad Politécnica de Cartagena", "Instituto de Biotecnología Vegetal (IBV), Campus Muralla del Mar
409008	729	33361	A Large Carbon Stock in Global Coarse Woody Debris and Its Contribution to Soil Carbon Dynamics	Yuxin Zhang Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences
409008	730	33362	Soil Calcium Carbonate Leaching Process of Millennial Soil Chronosequence in Coastal Regions	Yajing Cai Nanjing University of Information Science and

*Subject to change

Poster Sessions

				Technology
409008	731	33464	Soil Carbon Storage Enhances Nitrogen Fixation by Accumulating Necromass-Bound Micronutrients	Guanghui Yu Tianjin University
409008	732	33707	Distinct decomposition dynamics of heterogeneous carbon components in cultivated agricultural soils controlled by flexible microbial substrate utilization strategy	Hongbo He Institute of Applied Ecology, Chinese Academy of Sciences
409008	733	33951	Regulating soil organic – inorganic carbon trade-offs through integrated nitrogen and organic fertilization	Jinling Lv Institute of Plant Nutrition, Resources and Environmental Science, Henan Academy of Agricultural Sciences
409008	734	34069	Soil Organic Matter Stocks and Nutrient Availability in Volcanic-Affected Landscapes Surrounding Mount Marapi, Indonesia	Yulnafatmawita Universitas Andalas
409008	735	34172	Effect of crop rotational diversity on latosol DOM molecular chemodiversity and biochemical transformations in tropical regions	Yueqin Liu Environment and Plant Protection Institute, Chinese Academy of Tropical Agricultural Sciences
409008	736	34192	Soil microbiomes exhibit threshold responses to oxygen isotope enrichment	Fangying Qu Institute of Applied Ecology, CAS
409008	737	34379	Spatial variations of organic matter content in cultivated land topsoil in North China based on updated soil databases	Dongheng Yao Hebei Agricultural University
409008	738	34827	Temporal Dynamics of Soil Organic Carbon Fractions and Microbial Activity Across a Chronosequence of Abandoned Paddy Fields in Korea	Seoyeon Kim Department of Applied Environmental Science, Kyung Hee University, Republic of Korea
409008	739	34830	Enrichment of Persisting Microbial Functional Traits Drives Accelerated Soil Carbon Mineralization During the Fallow Period	Cong Ma University of Chinese Academy of Sciences
409008	740	34887	Impact of Blast Furnace Slag-Based Enhanced Rock Weathering Alters Soil Organic Carbon Dynamics through Microbial Activity	Ye Lim Park Department of Applied Environmental Science, Kyung Hee University, Yongin, Republic

*Subject to change

Poster Sessions

				of Korea
409008	741	35035	Nature based solution for restoring soil carbon in the Indian Himalayas	Subhash Babu Division of Agronomy, ICAR-Indian Agricultural Research Institute, New Delhi-110012, India
409008	742	35089	Can Biochar Truly Achieve Negative Emissions and Better Soil Quality? ——Opportunities and Potential in Land Use from a Global Perspective	Qi LIU Nanjing Forestry University
409008	743	35258	Effects of Historical Land Use Changes on Deep Soil Carbon, Nitrogen and Microbial Communities in Alpine Sandy Region	Jinlu Guo Qinghai Normal University
409008	744	35281	Modeling of carbon sequestration in future climate conditions in a long-term field experiment on light-textured Retisol in the Tver Region, Russia	Igor Ilichev Faculty of Soil Science, Lomonosov Moscow State University, 119991 Moscow, Russi
409008	745	35313	Effects of 50-year long-term land-use and management changes on soil C and N stocks and their stable isotope ratios at the Yamagata University Farm, Japan	Phansa Udkham Graduate School of Agriculture Science, Yamagata University, Tsuruoka, Japan
409008	746	35781	Chemical carbon sequestration dominates leguminous green manure return, whereas physical carbon sequestration prevails in non-leguminous systems	Huitong Li Yan'an University
409008	747	35887	Beyond Methane: Reassessing the Role of Rice Paddies in Global Warming	Pil Joo Kim Division of Applied Life Science (BK 21 Plus), Gyeongsang National University, Jinju, South Korea
409008	748	35984	Biochar alters soil aggregate organic carbon component distribution and stability under nitrogen fertilization	Jun Zhang Shenyang Agricultural University
409008	749	36050	Spatial Distribution Patterns and Coupling – Decoupling Characteristics of Soil Mercury and Organic Carbon on Hainan Island, China	Zhe Hao Jiangsu Key Laboratory of Ocean-Land Environmental Change and Ecological Construction, School of Marine Science and Engineering,

*Subject to change

Poster Sessions

				Nanjing Normal University, Nanjing 210023, China
409008	750	36361	Land use effects on soil carbon retention through glomalin-mediated aggregation	Ying Zhao Northeast Institute of Geography and Agroecology Chinese Academy of Sciences
409008	751	36515	Demonstration and application of zero-carbon Taoyuan biochar carbon sequestration technology	Zhenya Wang The Agriculture and Rural Affairs Committee of the Fujian Provincial Committee of the China Democratic National Construction Association
409011	752	31867	Priming Decomposition of Soil Organic Carbon Under Anoxia	Ting Liu Institute of Botany, Chinese Academy of Sciences
409011	753	31952	Root exudates drive grass-specific carbon sequestration through microbial networks in citrus orchards	Ludan Chen Institute of Mountain Hazards and Environment, Chinese Academy of Sciences
409011	754	32123	Short-term effects of Amyntas earthworms on litter decomposition and CO ₂ emissions in a temperate forest	Doy Kim 1Department of Environmental Science and Ecological Engineering Graduate School, Korea University
409011	755	32346	Straw input altered the composition of aggregate-associated organic carbon in soils with different initial carbon status	Xu Liu Shenyang Agricultural University
409011	756	32632	Distribution Characteristics of Soil Labile Organic Carbon Fractions in Coastal Paddy Profiles with Different Fertility Levels	Le YANG Shenyang Agricultural University
409011	757	32657	Straw-Induced Carbon Dynamics in Saline Soils: Insights from CO ₂ Emissions to Soil Organic Carbon Sequestration	Cailing Shi Qingdao University of Technology
409011	758	32834	Effects of Fluorescence Spectral Characteristics of Humic Acid on Soil Organic Carbon Sequestration in Black Soil Slope Farmland of under Long-term Soil and Water Conservation Measures	Shan-shan CAI Heilongjiang Academy of Black Soil Conservation and Utilization

*Subject to change

Poster Sessions

409011	759	33179	Soil pH modulates the global soil organic carbon stabilization	Cuijuan Liao Key Laboratory of Ecosystem Network Observation and Modeling, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, China
409011	760	33212	Effects of Long-term Chemical Fertilizer Reduction Combined with Bio-organic Fertilizer on Soil Organic Carbon Fractions and Aggregate Stability in Tobacco-planting Soil	Ting Li College of Resources and Environmental Science, Yunnan Agricultural University
409011	761	33216	Effects of soil acidity on organic matter stabilization in <i>Cryptomeria japonica</i> and <i>Chamaecyparis obtusa</i> plantations	Ryota Hayashi Nagoya University
409011	762	33236	Mechanistic Shifts in Organic Carbon Stabilization in Black Soil under Acidification Stress Induced by Fertilization	Yantian Cui Jilin Agricultural University
409011	763	33912	Influence on the structural stability of aggregates and soil organic carbon sequestration with different organic materials application: Analyzed from the perspective of the structure and properties of humic acid in aggregates	Liuyu Zhang University of Chinese Academy of Sciences", "Key Laboratory of Mountain Surface Processes and Ecological Regulation, Institute of Mountain Hazards and Environment, Chinese Academy of Sciences
409011	764	34212	The vertical distribution of organic-inorganic carbon in saline alkali soil affected by the addition of organic materials in Hetao Irrigation District, China	Tian Lan Inner Mongolia Agricultural University
409011	765	34631	Soil Carbon Stabilization and Site-Specific Drivers in Large-Diameter Timber Plantations of Southern China's Acidic Red Soils	Hongting Quan South China Agricultural University
409011	766	34662	Soil Aggregation and Macro-Aggregate Stabilization Enhance Organic Carbon Storage in Organic Paddy Compared with Upland Soils	Mun Hyeong Park Gyeongsang National University", "Korea National University of Agriculture and Fisheries
409011	767	34681	Soil Carbon Stocks and Stable Isotope Profiles in South Korean Forested Wetlands across Successional Stages	Tae Kyung Yoon Kookmin University

*Subject to change

Poster Sessions

409011	768	34761	Effects of organic amendments on soil carbon stocks and their distribution between particle and mineral-associated organic carbons in a red pepper field	Sohee Yoon Department of Agricultural Chemistry & Interdisciplinary Program in IT-Bio Convergence System, Sunchon National University, Suncheon 57922, Republic of Korea
409011	769	34808	Iron-mediated mechanisms of soil organic carbon stabilization in paddy soils under warming and altered flooding	Claudio Zaccane Dept. Biotechnology, Univ. of Verona, Verona, Italy
409011	770	35030	Distribution Patterns and Their Controlling Factors of Phytolith Abundance and Carbon Content in Mollisols (Phaeozems) of Northeast China	Yuan Zhou Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
409011	771	35040	Linking litter dynamics and soil organic matter formation in an urban forest remnant of the Eastern Amazon	Silvia F. Mardegan Laboratory of Botany, Institute of Biological Sciences, Federal University of Pará, Belém - PA, Brazil
409011	772	35054	Soil organic carbon formation and stabilization in estuarine wetland	He Xiaoqian Tianjin University
409011	773	35310	Effects of carbon-equal straw return on active organic carbon fractions in the black soil plow layer and maize growth	Yan Shi Institute of Applied Ecology, Chinese Academy of Sciences
409011	774	35648	Soil Organic Carbon Fraction Dynamics Across Paddy Soil Profiles: A Critical Role of Parent Material	Chu Zheng Sichuan Agriculture University
409011	775	35703	Effects of increasing salinity on organic carbon concentration and chemistry in a mangrove soil mesocosm	Francisco Ruiz "Luiz de Queiroz" College of Agriculture\University of São Paulo
409011	776	319B45	Trade-off between Pore-Throat Structure and Mineral Composition In Modulating the Stability of Soil Organic Carbon	Lingke Guo Huazhong Agricultural University
503005	777	32272	Agricultural land assessment using a web portal in Michoacán, Mexico	Francisco Bautista Centro de Investigaciones en Geografía Ambiental, Universidad Nacional Autónoma de México

*Subject to change

Poster Sessions

503005	778	34073	Assessing Land Degradation and Groundwater Vulnerability with the Landsupport DSS Tools: Local Applications within the SOILS4MED Project	Piero Manna National Research Council CNR – ISAFOM Institute for Agricultural and Forest Systems in the Mediterranean
503005	779	35329	CSDMS BMI model coupling for Soil Digital Twins	Danila Bardashov V. V. Dokuchaev Soil Science Institute
503005	780	35801	Machine learning framework to enhance the predictive performance of the relative availability of heavy metals in soils around a gold mine in Hainan Island	Xiaoyu Wang State Key Laboratory of Environmental Criteria and Risk Assessment, Chinese Research Academy of Environmental Sciences
Panel Discussion 05	781	35150	Combined Application of Organic and Inorganic Fertilizers Increases Maize Yield in Upland Acidic Red Soils by Enhancing soil chemical properties and aggregate characteristics	Jinhong Li Agricultural Environment and Resources Institute, Yunnan Academy of Agricultural Sciences
	782	33848	Effects of Different Acidic Intensities on the Yield of Peanut Genotypes	XiaoRui Jiang State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences
	783	34569	Advancing the rhizosphere metabolic circular economy framework	Kunkun Fan Institute of Soil Science, Chinese Academy of Sciences
	784	36414	A leaf sheath-localized Mn-nicotianamine complex transporter OsYSLc coordinates manganese distribution and detoxification in rice	Fei Gao Hunan agricultural university
	785	36468	Variation in Nitrogen Utilization Efficiency and Yield of Different Peanut Varieties	ZiYan Zhao State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science



Poster Sessions

Expo Center, Hall 5A			Thursday, June 11, 15:30-16:30 Friday, June 12, 15:00-16:30	
Poster Session 2			001~447	
Session number	No.	ID	Title	Presenter
101002	001	31882	Monitoring spatial changes in soil organic carbon in response to land-use and slope direction	Morteza Gheysouri Former Ph.D. Student, Department of Watershed Management Sciences and Engineering, Faculty of Natural Resources, Tehran University. At Present: Post-Doctorate Fellow, State Key Laboratory of Water Engineering Ecology and Environment in Arid Area, Xi' an University of Technology
101002	002	33104	Long-term nitrogen fertilization effects on soil mineralogy and micromorphology: The Magruder Plots	DeAnn R. Presley Department of Agronomy, Kansas State University
101002	003	34532	Medieval Urban Cultural Layers in Contrasting Arid and Humid Waterlogged Environments: Morphological and Chemical Properties, and Genesis	Yulia Karpova Institute of Geography, Russian Academy of Sciences
101002	004	34673	The Pedology of Wet Spots: Causes for Ponding in Micro Depressions Other than Topography	Nickolas Kioutas University of Maryland
101002	005	35305	Micro-scale pedogenic features in cold volcanic soils of Iceland: evidence from thin sections and SEM-based microanalysis	Carlos Ernesto Gonçalves Reynaud Schaefer Federal Institute of Minas Gerais
101002	006	35418	Toward Sustainable Phosphorus Fertilization: Co-Encapsulation of Rock Phosphate and Phosphate-Solubilizing Microorganisms for a Novel Biofertilizer Formulation	KHAWLA WIFAK Laboratory of Biotechnology, Agrifood, Materials & Environment, Faculty of Science and Technology, Hassan II University, Casablanca, Morocco

*Subject to change

Poster Sessions

101002	007	35419	Development and Evaluation of a Novel Biopolymer-Based Hydrogel on plants growth under Different Hydric Stress Conditions for Sustainable Agriculture	Yousra BELAYACHI Laboratory of biotechnologies, agrifood, materials and environment, URAC 24, Faculty of Science and Technology, Hassan II University, Casablanca, Morocco
101002	008	36037	Impact of Cultivation Duration on the Sustainability of Alfalfa/Maize Intercropping Systems	YingChang Institute of Grassland Research of CAAS
101002	009	36038	Micro-morphological characterization of dry-farming soils at Yangshao site in China	Lisi Zha Guangdong University of Finance and Economics
102003	010	32467	Viral Diversity in Different Types of Purplish Soils	XieluyaoWei Sichuan Agricultural University
102003	011	32817	Prediction of Soil Structural, Hydraulic, and Chemical Properties: A Comparison of NIR and MIR Across the Critical Zone	Yasas Gamagedara Department of Agricultural & Biological Engineering, Mississippi State University
102003	012	32859	Analysis for structure of soil layer composed of large clods using X-ray CT image	Yoshihiro Matsumoto National Agriculture and Food Research Organization, NARO
102003	013	33805	Seasonal Soil Hydraulic Function and Pore Size Dynamics throughout Cover Crop – Corn Rotation in a Reduced-Tillage System	Rui Peng The University of Tennessee
102003	014	33843	Multifractal scaling of soil particle size distribution validates aggregate stability and pedogenic processes along a semi-arid erosional gradient.	Peter N. Eze Botswana International University of Science & Technology
102003	015	34024	Co-applying straw biochar with green manure promotes rice yield and soil C, N stocks by increasing stability of macroaggregate and its associated C, N allocations in reddish paddy fields	Zhijian Xie College of Land Resources and Environment, Jiangxi Agricultural University
102003	016	34030	Microbiomes hold the key to build up high soil fertility beyond organic fertilization	Chunkai Li Nanjing Forestry University
102003	017	34640	Pore-Scale Mechanics of Soil Thawing in the Black Soil Zone: Tillage Effects on Water – Heat Coupling	Jiayun Wang China Agricultural University

*Subject to change

Poster Sessions

102003	018	35199	Drivers of nitrification in surface soils of Oxisols and Ultisols in tropical forests of the Central Highlands, Vietnam	Makoto SHIBATA Graduate School of Global Environmental Studies, Kyoto University, Kyoto, Japan", "Graduate School of Agriculture, Kyoto University, Kyoto, Japan
102003	019	36101	Quantifying Soil Quality for Sustainable Crop Production: A Case Study from some Lowland Rice Fields in Nigeria	Adeyolanu, Olateju Dolapo Institute of Agricultural Research and Training, Obafemi Awolowo University
102003	020	36204	Soil aggregate stability index independent from pre-stress aggregate size distribution: A test from soils affected by the water level fluctuation in the Three Gorges Reservoir, China	Gratien Nsabimana Key Laboratory of Mountain Surface Processes and Ecological Regulation, Institute of Mountain Hazards and Environment, Chinese Academy of Sciences, Chengdu 610299, Sichuan, China", "University of Chinese Academy of Sciences, 100049 Beijing, China", "Research for Sustainable Agriculture and Environmental Conservation (RSAEC), Kigali-Rwanda, P.O. Box: 1280, Kigali, Rwanda
105001	021	32878	Visualization Analysis of Machine Learning in Soil Research Based on CiteSpace	Jin Wu Tianjin Institute of Geological Environment Monitoring
105001	022	36118	Field-scale prediction of black soil thickness based on wavelet decomposed components and multi-model validation	Lei Qiao State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences", " College of Resources and Environment, Shanxi Agricultural University
108004	023	32905	Modeling soil organic carbon changes using signal-to-noise analysis: a case study using European soil survey datasets	Xuemeng Tian OpenGeoHub", "Wageningen University and Research
108004	024	34434	Sampling density and mapping methods for soil organic carbon in southern Brazil	Noeme da Costa Santos Soil Science Graduate Program, Federal University of Santa Maria, Santa Maria, Rio Grande

*Subject to change

Poster Sessions

				do Sul, Brazil
108004	025	35239	Assessing quality gains from physically supervised harmonic fitting for apparent soil thermal diffusivity estimation.	Martín Francia Department of Soils and Water, Faculty of Agronomy, Universidad de la República, Montevideo, Uruguay
108004	026	35253	Landscape-scale Detection of the Spatio-temporal Variations of Soil Total Nitrogen and Its Influencing Factors in a Grassland by Soil Mapping	Yuxin Feng State Key Laboratory of Earth Surface Processes and Disaster Risk Reduction, Faculty of Geographical Science, Beijing Normal University, China
108005	027	31969	Determination of the Cultivated Land Quality Red Line in Northeast China	Jiahui Shi Shenyang Agricultural University
108005	028	33233	Digital Soil Mapping and Predictive Modelling for Soil Organic Carbon	Vanaja Kankarla Florida Gulf Coast University
108005	029	34576	Cloud-based NDVI time-series: insights from soil – climate interactions in Pinus taeda in Southern Brazil	José Alves Ferreira Neto Universidade do Estado de Minas Gerais (UEMG) - Campus Ibitiré V / Brazil
108005	030	34885	Explainable Artificial Intelligence and Multi-source Remote Sensing Integration for High-resolution Digital Soil Mapping	Jun Chen Guangzhou Institute of Geography, Guangdong Academy of Sciences
108005	031	34959	Digital Mapping of Soil Organic Carbon Using Machine Learning in Different Land Uses in Kermanshah Province, West of Iran	Yahya Parvizi 1 Professor, Soil Conservation and Watershed Management Research Institute, Agricultural Research, Education and Extension Organization, Tehran, Iran
108005	032	35204	Spatio-Temporal Variations in Soil Organic Carbon Stocks in Different Erosion Zones of Cultivated Land in Northeast China Under Future Climate Change Conditions	Xinyu Zhang Shenyang Agricultural University
108005	033	35264	Digital mapping of Solonetz within forest-steppe landscapes of the Oka-Don Lowland	Kornilov Daniil Lomonosov Moscow State University, Moscow, 119999

*Subject to change

Poster Sessions

				Russia
108005	034	35360	Spatially-Explicit Uncertainty and Feature Attribution in Landscape-Scale Topsoil Carbon Mapping in Forest-Steppe	Danila Baradashov V.V. Dokuchaev Soil Institute
108005	035	36580	Enhanced Soil Property Estimation using PINNs with Alternate Training Methods	Na Li China University of Geosciences (Beijing)
108005	036	36630	Modelling and mapping land susceptibility to degradation and desertification in Europe	Remus Prăvălie University of Bucharest
110001	037	32423	Smartphone-based soil color analysis and SVM for predicting iron oxides in subtropical B-horizon soils	Feilong Shen Czech University of Life Sciences Prague
110001	038	32651	Advances in Soil Health Monitoring Using Proximal	Yuheng Li Jiangxi University of Finance and Economics
110001	039	32849	Sensor-based monitoring of Soil EC responses to nitrogen and potassium fertilization under laboratory and field conditions	Su Kyeong Shin Chungbuk National University
110001	040	32866	Multi-elevation Unmanned Aerial Vehicle-borne Frequency-Domain Electromagnetic Induction (UAV-FDEM) Technology for Large-Scale Shallow Subsurface Water Resource Survey	Qinbo Cheng Hohai University
110001	041	33125	Multi-Element Synergy-Driven Transfer Learning Model for Enhancing the Generality of Soil Heavy Metal Concentration Estimating	Chang Meng Inner Mongolia Agricultural University
110001	042	33470	Accuracy improvement of spatial prediction for soil organic matter using receptive field fusion module in hilly areas	Yangfan Xie Hunan Agricultural University
110001	043	33813	Metagenomic tools for soil health – oriented microbial monitoring in agricultural systems in Mexico	Dra. Mayra Alejandra Gomez Govea Universidad Autónoma de Nuevo Leon. Facultad de Ciencias Biológicas. Laboratorio de Biología de la Conservación y Desarrollo Sostenible.
110001	044	33968	Monitoring Soil Health at Field Scale and Recent Advances in Proximal Sensing	Waqas Raza Arshad University of Agriculture Faisalabad Pakistan

*Subject to change



Poster Sessions

110001	045	36551	Quantitative Monitoring and Inversion of Soil Moisture Content Based on Ground Penetrating Radar: Progress, Methods, and Prospects	Ping Wang Qufu Normal University
112001	046	34744	Transformation of Aluminum Forms During Andosol Genesis in Japan	Syuntaro Hiradate Kyushu University
201002	047	31654	Irrigation regimes and fertilizer management improved soil aggregate stability and hydro-physical properties of a lowland rice field under the Sudan savanna, Nigeria	Abubakar Halilu Girei Department of Soil Science, Faculty of Agriculture, Federal University
201002	048	32381	Construction of the Integrated Soil Database for Hydrological Modeling in Brazil	Luis Carlos Timm Rural Engineering Department, Federal University of Pelotas (UFPEl)
201002	049	32779	Impacts of Conservation Agriculture on Soil Properties and Fauna in Vegetable Production: A Comparative Study in Battambang and Siem Reap, Cambodia	Pao Srean Faculty of Agriculture and Food Processing, National University of Battambang
201002	050	33023	Impact of Dry-wet Cycles on Nitrogen and Phosphorus Mineralization in Soils Amended with Cattle Manure	Theresa Adesanya Department of Geography Earth and Environmental Sciences, University of Northern British Columbia
201002	051	33812	Straw incorporation depth drives microbial carbon sequestration by remodeling physical habitat in Mollisols	Ming Gao Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
201002	052	33979	Volcanic rock fragments and water infiltration in soils from southern Brazil	Fabício de Araújo Pedron Federal University of Santa Maria
201002	053	34255	An analytical solution for measuring thermal properties with heat pulse method under convective boundary conditions at the soil-atmosphere interface	Tianyue Zhao China Agricultural University
201002	054	34406	Variation in soil hydraulic properties under different land use in long term experimental plots across Canada	Yuhong Zhou School of Environmental Sciences, University of Guelph, Guelph, ON N1G 2W1, Canada", "School of Environmental Sciences, University of Guelph, Guelph,

*Subject to change

Poster Sessions

				ON N1G 2W1, Canada
201002	055	34542	Impacts of model root exudates (Pectin and Oxalic Acid) on multiscale soil structural, hydraulic, and surface properties	Hui Ao University of Aberdeen
201002	056	34755	Effect of organic matter on isothermal thermogravimetric profiles in the low temperature range (60° C – 200° C)	Zizheng Deng China Agricultural University
201002	057	34865	How Water-Salt Stress Reshapes the Rhizosphere and Regulates Growth in Suaeda salsa	Bindeliya Inner Mongolia Agricultural University
201002	058	34973	Effects of long-term fertilization on soil macropore structure and hydraulic conductivity in paddy soils	Zhiduo Zhou Research Faculty of Agriculture, Hokkaido University
201002	059	34995	Submergence-Avoidance Behavior of Coastal Endangered Tiger Beetle Larvae Cicindela anchoralis	Hiyori Yamamoto Ishikawa Prefectural University
201002	060	35788	Effects of grass hedgerow measures on physical crust development and slope runoff and sediment of southern Quaternary red clay in China	Huiyun Xu State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences", "College of Urban and Rural Construction, Shanxi Agricultural University
201002	061	35789	Interfacial hydrodynamic isotope fractionation of infiltrating rainfall in soil pore water is independent of evaporation	Peng Zhao Sichuan Agricultural University
201002	062	36313	Characteristics of Aggregates and Their Response to Nutrients in Dark Brown Soil under Different Nitrogen and Phosphorus Fertilizer Levels	Shuxiang Zhang Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences\State Key Laboratory of Efficient Utilization of Arid and Semi-arid Arable Land in Northern China
201002	063	36332	Effects of Spatial Resolution on Spectral Characteristics of Soil Salinity in Plastic-Mulched Farmland	Weitong Ma Ludong University

*Subject to change

Poster Sessions

201002	064	36336	Sensitivity analysis of agricultural hydrological processes to climate change in the North China Plain	Shen' ao Feng Ludong University
201002	065	36482	Impacts of precipitation and heat changes on agricultural water resources and grain production in the North China Plain	Wang Xin College of Hydraulic and Civil Engineering, Ludong University, Yantai 264025, China
201002	066	319B26	From Sedimentation to Laser Diffraction: A New Particle Size Distribution Classification Based on Soil Mechanical Properties	Fomin Dmitriy V.V. Dokuchaev soil Science Institute
203004	067	34420	The Water Table Crux for Peatland Recovery	Haojie Liu Faculty of Agriculture, Civil and Environmental Engineering, University of Rostock, Rostock, Germany
203004	068	34701	Iron Speciation as an Interpretive Framework for Padochemical Variability in CO ₂ -Degassing Mofette Ecosystems	Christian Dave R. Alonzo Uniwersytet Rolniczy w Krakowie (Krakow, Poland)
206001	069	31894	Identifying spatiotemporal patterns of hillslope subsurface flow in an alpine critical zone on the Qinghai - Tibetan Plateau based on three-year, high-resolution field observations	Guangrong Hu Beijing normal university
206001	070	31948	Hydropedological Responses to Anthropogenic Soil Importation and Wadi Channel Narrowing in Arid Oman	Said Al-Ismaily Department Soils, Water, and Agricultural Engineering, Sultan Qaboos University
206001	071	32418	Biochar-Induced Changes on Soil Nutrient Retention and Hydraulic Characteristic of Sandy Loam Soil in Lahar-laden Area of Zambales, Philippines	Jacob B. Labita Soil and Water Resources Research Division, Bureau of Soils and Water Management
206001	072	33066	Non-monotonic Snow Cover Control on Frozen-Soil Hydrothermal Regimes and Spring-drought Propagation in a Warming Semi-arid Forest Steppe	WEI Jiang-sheng Inner Mongolia Agricultural University
206001	073	33245	Irreversible soil carbon and nitrogen loss during the thermokarst lake succession under climate change in the Tibetan Plateau	Yuanhong Deng Beijing Normal University
206001	074	33428	Paddy cultivation history affects soil water dynamics and water balance by altering soil physical and hydraulic parameters	Qian Yang Yangtze University

*Subject to change

Poster Sessions

206001	075	33941	Coupling relationships and threshold effects between vegetation cover and soil moisture across eco-geographical zones on the Loess Plateau.	Guiming Hu Chang'an University
206001	076	34022	Divergent ecohydrological adaptation mechanisms of restored vegetation driven by micro-topography: Structural decoupling, hydro-thermal trade-offs, and competitive depletion	Fengwei Tuo Chang'an University
206001	077	34306	Process-Oriented Watershed Delineation in Human-Modified Plain Farmlands: Key Constraints and Recent Advances	JiahaoLiu Northeast Forestry University
206001	078	35843	An Eco-Friendly Dual-Tracer Method Combining Synthetic DNA Fragments and Heat for High-Resolution Characterization of Aquifer Hydraulic Conductivity	Xinlin Li China Agricultural University
206001	079	36196	Interactions between pollutants, antibiotic resistance and pathogens during transition from untreated to treated wastewater irrigation: a multiscale approach	Christina Siebe Instituto de Geología, Universidad Nacional Autónoma de México, Mexico City, Mexico", "Julius Kühn Institute (JKI), Federal Research Centre for Cultivated Plants, Institute for Epidemiology and Pathogen Diagnostics, Braunschweig, Germany
206001	080	36344	A Hybrid SWAT-LSTM Framework for Daily Sediment Load Prediction in the Data-Scarce Songhua River Basin, Northeast China	Junjie Xu Beijing Normal University Faculty of Geographical Science
206001	081	36379	A physics-guided representation embedding framework for transferable estimation of soil water content and bulk density in Mollisols using TDR	Jienan Xu Institute of Soil Science, Chinese Academy of Sciences
206001	082	319B10	A Novel Rainfall-Based Model for Forecasting Soil Moisture Content	Daniel B. Gu Hamilton High School, Chandler, Arizona, USA
207001	083	32201	The impact of agricultural land use on soil hydraulic properties and hydrological functioning across the lowlands of England and Wales	Yong Wang University of Reading

*Subject to change

Poster Sessions

207001	084	34210	Improving Digital Soil Hydraulic Characterization: A Workflow for Enforcing Periodic Boundary Conditions on Tomographic Soil 3D Images	Marina V. Karsanina Moscow Institute of Physics and Technology (Moscow Region, Russia)
207001	085	34345	A New Nonlinear Method for Simulating Nitrogen Pollutant Transport in Farmland	Yuan Zhao Northeast Normal University
207001	086	34531	Estimating soil water storage near an estuary with HYDRUS-1D	Carlos Faúndez Urbina Pontificia Universidad Católica de Chile
207001	087	34653	Simulating Soil-Plant-Climate Interactions and Greenhouse Gas Exchange in Boreal Grasslands Using the DNDC Model	D. Forster Fukushima Institute for Research, Education and Innovation (F-REI)
207001	088	34970	Process-based modelling of river sediment composition incorporating pedogenetic processes at the catchment scale: the Sendaigawa River basin, Japan	Atsunobu Kadono Tottori University of Environmental Studies
207001	089	35157	Generalizability optimization of soil thermal conductivity models: unified estimation of dry- and saturated-soil thermal conductivity	Xin Zhao Inner Mongolia Agricultural University
207001	090	35263	Quantifying the Sensitivity of Soil Organic Carbon to Climate Change and Soil Properties: Implications for Greenhouse Gas Mitigation in Mediterranean Agroecosystems Using the DNDC Model	ibtissame lembaid National Institute for Agricultural Research of Rabat (INRA), Morocco
207001	091	35432	The Hidden Oxygen Sink: Carbon Dynamics in Closed Systems	Zheng Chen Xi'an Jiaotong - Liverpool University
207001	092	35889	A spatially explicit model for watershed nitrogen fate through multi-scale integration of soil biogeochemistry and hydrology	Liang Hao Hohai University", "Peking University
207001	093	35950	Fusion simulations based on process-based modeling and AI-technology for groundwater storage and quality in the Mollisol Regions	Xiaoyu Zhang China Agriculture University
207001	094	35956	Assessing Future Climate Change Impacts on Soil Erosion, Agricultural Nonpoint Source Pollution, and Crop Growth in the Huai River Basin	Jiaren Hu China Agricultural University

*Subject to change

Poster Sessions

207002	095	32040	Soil susceptibility to wind erosion under threshold wind speed	Rafał Wawer Institute of Soil Science and Plant Cultivation – State Research Institute
207002	096	32106	Assessing the effects of integrated technologies on maize production and erosion control in the Mollisol regions of China and the United States	Yingxuan Li China Agricultural University
207002	097	34381	Influences of slope gradient and length on runoff and soil erosion of arable farmland in Northeast China: A modeling approach with APSIM	Cheyu Zhai China Agricultural University
207002	098	34939	Unraveling Drivers of Soil Erosion in the Pearl River Basin: A High-Fidelity Data Fusion and Interpretable Machine Learning Framework	Jun Chen Guangzhou Institute of Geography, Guangdong Academy of Sciences", "College of Environmental Science and Engineering, Guilin University of Technology", "School of Geographic and Information Engineering, China University of Geosciences
301001	099	31605	Characteristics of char-based multifunctional fertilizers produced from sugarcane harvest residue	Jim Wang Louisiana State University
301001	100	31813	Synergistic Microbial Consortia from the Black Soldier Fly Mediate Broad-Spectrum Suppression of Plant pathogens	Yudong Ren Shanghai Jiao Tong University
301001	101	33597	PFRD-Net: An Optimized U-Net Architecture for Robust Detection of Agricultural Plastic Film Residue in UAV Imagery	Hasituya Inner Mongolia Agricultural University
301001	102	34443	study on spatial distribution characteristics of soil organic matter in tea gardens of laoshan district, qingdao based on gis and the impact of different altitudes	pengfei sun Qingdao agricultural university
301001	103	35522	SOIL AMENDMENT POTENTIAL OF SHEA BUTTER PROCESSING RESIDUES AND THEIR EFFECTS ON GROWTH AND YIELD OF OKRA IN MINNA, NIGER STATE, NIGERIA	Aniyikaye Rashidat Federal University of Technology Minna
301001	104	36046	Revalorization of spent coffee ground as peat alternative for soilless culture	Rui Yang Institute of Urban Agriculture, Chinese Academy of Agricultural

*Subject to change

Poster Sessions

				Sciences
301001	105	36338	Industrial-scale compost reactor with gas-circulating system holds significant value in terms of humification process	Yan Li Heilongjiang Academy of Black Soil Protection and Utilization", "Heilongjiang Academy of Black Soil Protection and Utilization
303003	106	32920	Fungal-mediated synergy between nitrogen fixation and phosphorus acquisition in a maize-lablab mixture	Runfu Li Beijing Forestry University
303003	107	34164	Characterization and Dynamics of NaOH-Extratable Organic Phosphorus Species in Soils	Yaqin Wang Xi'an Jiaotong-Liverpool University
303003	108	34377	Improved recommendations for phosphate fertilizer application to promote soil health and reduce carbon emissions	Chin-Hua Ma chinhuama6@gmail.com
303003	109	34643	Relationship Between Phosphorus Concentrations Extracted by Mehlich-1 and Mehlich-3 in Soils of Southern Brazil with Different Textures	Eduardo Bernardt Department of Soils, Federal University of Santa Maria, Santa Maria, Brazil
303003	110	34965	Biological Approach to Phosphorus Stewardship in Calcareous Soils	Mahdi Shahabirokni Department of Soil Science, Ferdowsi University of Mashhad, Mashhad, Iran", "Department of Soil Science, University of Tehran, Tehran, Iran
303003	111	36289	Soil Phosphorus Status in Lowland Rice Areas of Laguna, Philippines	Jose Robert N. Remillion Division of Soil Science, Agricultural Systems Institute, College of Agriculture and Food Science, University of the Philippines Los Baños, College, Laguna, Philippines
303004	112	31845	Calibration of N, P, and K for Orange-Fleshed Sweet potato (<i>Ipomoea batatas</i> (L) Lam) Production in an Ultisol at Ikwo, Ebonyi State, Nigeria	Iroegbu Chidinma Susan Alex Ekwueme Federal University Ndufu Alike Ikwo Ebonyi state
303004	113	31923	Short-term effects of molasse-derived digestates from one- and two-stage anaerobic digestion on	Jerzy Jonczak Warsaw University of Life

*Subject to change

Poster Sessions

			wheat crop and chosen soil properties	Sciences-SGGW, Department of Soil Science
303004	114	31986	Optimization of ethyl cellulose-coated urea for high-performance controlled release	Yuanfang Zhou Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences, Chinese Academy of Agricultural Sciences
303004	115	32039	Rhizobial Isolate YL 14 Biofertilizer Substitutes for Urea Fertilizer and Improves Yardlong Bean Growth and Nutrient Content	Yupa Chromkaew Department of Plant and Soil Sciences, Faculty of Agriculture, Chiang Mai University
303004	116	32116	Development of carrier-based microbial inoculant and the assessment of soil application impact on Faba bean (<i>Vicia faba</i>) growth	Sajeevee S. Sarathchandra The University of Western Australia, Imtrade CropScience
303004	117	32181	Use of polyhalite as an ameliorant for sodic soils	Tomalika Roy PhD student, The University of Queensland, School of Agriculture and Food Sustainability
303004	118	32250	Potassium availability but not movement from fertilizer bands is affected by the form of potassium, soil type, and co-application of phosphorus	Yunyun Zheng The University of Queensland, School of Agriculture and Food Sustainability
303004	119	32363	Diatomaceous bio-silicon as a sustainable alternative to mineral silicon fertilizers: Impacts on rice yield, soilfertility, and heavy metal dynamics	Qin Zhang Jiangxi Agricultural University
303004	120	32602	Potassium Precipitation Efficiency at Different Dilution Ratios in Thai Sugarcane Molasses	Karima Amphong Department of soil science, Faculty of agriculture, Kasetsart university
303004	121	32687	Biofortification of Wheat with Zinc Oxide Nanoparticles: Efficacy, Uptake, and Toxicity in Arid and Semi-Arid Regions	Ezzat R. Marzouk Department of Soil and Water, Faculty of Environmental Agricultural Sciences, Arish University", "Department of Agricultural Research, Ministry of Municipality

*Subject to change

Poster Sessions

303004	122	33017	Black soldier fly bioconversion improves phosphorus solubilization and nutrient balance in organo-mineral fertilizers	Richard Malingumu International Center of Insect Physiology and Ecology", "Department of Agricultural Science and Technology, Kenyatta University", "Faculty of Agriculture and Environmental Sciences, Muni University
303004	123	33273	Synergistic Effects of Calcium and Humic Acid in Water-Soluble Fertilizers on Greenhouse Tomato Growth, Yield Formation, and Nutrient Utilization Efficiency	Guohua Li Israel Chemicals Ltd. (ICL)
303004	124	33426	Pure Water-Based Nano Pesticide-Fertilizer Co-delivery for Soil-Friendly Crop Nutrition and Protection	Changcheng An University of Science and Technology of China
303004	125	33466	MOF-303 Reinforced Bio-based Coatings for Precision Nitrogen Release in Agriculture	Mingchuan Yang Shandong Agricultural University
303004	126	33742	Influence of a tailored composite amendment on soil health and wheat productivity in reclaimed tidal land	Won Chae Youn Kangwon national university college of agriculture and life sciences school of natural resources and environmental sciences
303004	127	33765	Synthesis and characterization of Zinc-Copper nanofertilizer and its evaluation in maize crop for growth and yield	Kriti Sharma Ph.D Scholar, Department of Soil Science and Agricultural Chemistry, Rajasthan College of Agriculture, MPUAT
303004	128	33841	Effects of polyhalite placement on wheat seedling establishment using X-ray Computed Tomography	Roman A. Sadeghian University of Nottingham
303004	129	34144	Artificial humic acid: structure models and application in plant growth promotion and soil improvement	Li Liu Inner Mongolia University
303004	130	34197	Potassium fertilisers in contrasting soils: solubility, speciation and potential plant availability of alternative and conventional formulations	Casey Doolette Adelaide University, School of Physics, Chemistry and Earth Sciences, Adelaide, 5000 SA, Australia

*Subject to change

Poster Sessions

303004	131	34476	Enhancing crop and soil fertility through Co-granulated Urea and Polyhalite under rice-wheat cropping system in calcareous soils of eastern India	Shiveshwar Pratap Singh Dr. Rajendra Prasad Central Agricultural University, Pusa, Bihar, India
303004	132	34922	Field evaluation of dual-inhibitor urea in baby spinach on clay soil: implications for NH ₃ and N ₂ O mitigation in high-input horticulture	Brendon Costello The University of Melbourne
303004	133	35325	Slow-releasing of Phosphorus fertilizer by coating with organic and inorganic materials and its evaluation in aqueous media	Paria Ghaemian M.Sc Student, Department of Soil Science, faculty of Agriculture, University of Tehran, Karaj, Iran
303004	134	35454	Evaluation of Nano Urea-Based Fertilization System for Sustainable Rice Production in Bangladesh	Syed Zahid Hasan Research Associate, Climate-Smart Agriculture Lab (CSA Lab), Department of Agroforestry and Environmental Science, Sylhet Agricultural University (SAU), Sylhet.
303004	135	35605	Effects of multifunctional Phosphate Solubilizing Bacteria on the Growth and Soil Properties of Chinese Fir Seedlings	Yuhong Dong Research Institute of Forestry, Chinese Academy of Forestry
303004	136	35946	The Synergistic Effect of Silicate and Calcium in Inhibiting Na ⁺ Uptake: A Mechanism for Mitigating Salt Stress in Wheat	Yaofeng Wang Xinjiang Agricultural University
303004	137	36233	Effects of Chlorella Application on Soil Quality and Crop Productivity in Saline - Alkali Soils of Xinjiang, China	Zhi QU Xi' an University of Technology
303004	138	36530	Optimising Nitrogen Nutrition Index (NNI) for maize cultivation with controlled release fertilizer treatments guided by UAV remote sensing technology	Hongyu Ma State Key Laboratory of Water Engineering Ecology and Environment in Arid Area, Inner Mongolia Agricultural University, Huhhot, China", "Department of Agricultural and Food Sciences, Alma Mater Studiorum-Università di Bologna, Bologna, Italy
303004	139	36578	Regulatory Effects of Soil Acidification Amendments Application on Enzyme Activity,	Xianmei Zhang The Institute of Agricultural

*Subject to change

Poster Sessions

			Aggregates and Rice Yield in Red Soil	Resources and Regional Planning, Chinese Academy of Agricultural Sciences, Beijing, China
303004	140	36585	Silicic Acid and Silicon Nanoparticle Application Enhance Drought Resilience in Maize	Sara Zafar Department of Botany, Government College University, Faisalabad, Pakistan
303005	141	31851	Transcriptomic and metabolic analysis reveals molecular response of wheat phyllosphere under wheat-faba bean intercropping in response to Pst infection	Lili Mao Yunan Vocational College of Agriculture
303005	142	32221	ISOPENTENYL TRANSFERASE3 activation triggers root ammonium hypersensitivity via the cytokinin ARR10/ARR12 CAP1 signaling pathway	Dong-Wei Di Institute of Soil Science, Chinese Academy of Sciences
303005	143	32223	The role of the nitrate transporter NRT1.1 in plant iron homeostasis and toxicity on ammonium	Zhaoyue Wang Institute of Soil Science, Chinese Academy of Sciences (Nanjing)
303005	144	32264	Forest fine root litter incorporation reduces NH ₃ and N ₂ O emissions from N-applied farmland soil in agroforestry intercropping ecosystem	Wu Si Nanjing Forestry University
303005	145	32288	Effects of biochar- and hydrochar-amended organic fertilizer on crop production, NH ₃ loss, and fertility of coastal saline-alkali soil	Chang Liu Nanjing Forestry University
303005	146	32601	Comparative Analysis of Arbuscular Mycorrhizal Fungi Characteristics in the Rhizosphere and Roots of Wheats with Different Ploidy Levels under Saline-Alkaline Soils	Li Chen State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences
303005	147	33057	Characteristics of soil fertilizer nitrogen turnover and microbial impact mechanism under the combined application of organic fertilizer and nitrogen fertilizer	Shen Xiaoqing Shenyang Agricultural University
303005	148	33124	Effects of Biological Nitrification Inhibitors on Maize Yield and Nitrogen Utilization in Red Soil	Xingkui Zhu College of Resources and Environmental Science, Yunnan Agricultural University
303005	149	33303	The Theoretical Framework and Technical Pathway of "Rhizosphere Suitable Microzones" for Crops in Saline-Alkali Soils	Guangjie Li Shandong Academy of Agricultural Sciences

*Subject to change

Poster Sessions

303005	150	33307	Ion Toxicity in Waterlogged Soils: Mechanisms of Root Response and Adaptive Strategies	Guangjie Li Shandong Academy of Agricultural Sciences
303005	151	33384	Multivariate Analysis of Biomass Production and Nutritional Efficiency of Marandu Palisadegrass Fertilized with Bioinputs	Reges Heinrichs Crop Science Department, São Paulo State University (UNESP), College of Agricultural and Technological Science, Dracena, Brazil
303005	152	33997	Intercropping enhances soil nitrogen mineralization through C/N ratio- induced microbial network synergy	Jianlin Wu Yunnan Agricultural University
303005	153	34577	Hyperspectral imaging explains the leaf base to tip nitrogen spatial dynamics in maize	Yuzhe Tang Inner Mongolia Agricultural University
303005	154	34648	Optimized Water-Nitrogen Management Enhances Soil Nitrogen Cycling and Microbial Functions to Enhance Wheat Yield	Fangyuan Shen Xi' an University of Technology
303005	155	34650	Water-Nitrogen Coupling under Film Mulching Synergistically Enhances Soil Quality and Winter Wheat Yield by Restructuring Soil Microbial Co-occurrence Networks	Fangyuan Shen Xi' an University of Technology
303005	156	34801	Does the ability of Vigna unguiculat to improve soil nitrogen vary according to it's genetic variability?	Jangorzo Salifou Nouhou Unité Mixte de Recherche Diversité et Adaptation des plantes, Université Dan Dicko Dankoulodo de Maradi, Niger
303005	157	34936	From methodological to mechanistic frameworks: assessing BNI efficiency by integrating varying levels of plant growth realism	Xiaoping Fan University of Aberdeen
303005	158	35087	The contribution of N derived from deep-rooting cover crop mixture to soil N dynamics and subsequent maize nutrition	Juanjuan Ai Institute of Agricultural Resources and Environment, Guangdong Academy of Agricultural Sciences, Guangzhou, 510640, China
303005	159	35428	Ammonium-nitrate uptake in cereal-legume intercropping varies with phosphorus availability: A 15N labelling approach	Md Zillur Rahman University of Sydney, Australia

*Subject to change

Poster Sessions

303005	160	35954	Nitrogen, manganese, iron and carbon resources acquisition are potential functions of wild rice <i>Oryza rufipogon</i> core rhizosphere microbiome	Changji Wang Netherlands Institute of Ecology (NIOO-KNAW)", "Utrecht University
303005	161	36069	Effects of Nitrogen and Phosphorus on N ₂ O Emissions from <i>Leymus Chinensis</i> and the Underlying Microbial Mechanisms	Yujie SHI Northeast Normal University
303005	162	36097	Discriminating Water and Nitrogen Stress in Cotton Using UAV Multispectral Imagery	Xudong Song Xinjiang Agricultural University
303006	163	32452	One-time root-zone nitrogen application enhances nitrogen utilization and yield of faba bean by reducing nitrogen loss in the plateau of southwestern China	Xinyuan Lu Institute of Soil Science, Chinese Academy of Sciences
303006	164	32726	Soybean rhizospheric carbon metabolism modulated by neighbouring oat through increased isoflavonoids	Rong Jia China Agricultural University
303006	165	32921	Contrasting rhizosphere strategies of maize: How drought severity and duration affect root and rhizosphere traits in soils of varying texture	Andreas J. Wild University of Bayreuth (Agroecology)
303006	166	33353	Accelerating Soil Nutrient Supply and Enhancing Tomato Antioxidant System and Yield via <i>Bacillus subtilis</i> -Assisted Micro-Nano Bubble Irrigation	Xinyu Nie Shaanxi Normal University
303006	167	33529	The Theoretical Framework and Technical Pathway of "Rhizosphere Suitable Microzones" for Crops in Saline-Alkali Soils	Guangjie Li Shandong Academy of Agricultural Sciences
303006	168	34279	Integrating plant – microbial diversity and mixed litter decomposition to enhance nutrient coupling and productivity in intercropping systems	Shumin Li Resource and Environmental College, Northeast Agricultural University, Harbin, China
303006	169	34297	Rhizosphere bacterial communities mediate host genetic effects on agronomic traits in soybean	Yue Gao Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences, Changchun, China
303006	170	34680	AMF modulation of sweet potato plant performance and rhizosphere microecology depends on soil potassium availability: shared and differential strategies	Jie Yuan Jiangsu Academy of Agricultural Sciences

*Subject to change

Poster Sessions

303006	171	35839	Arbuscular mycorrhizal fungi enhance plant phosphorus uptake through stimulating hyphosphere soil microbiome functional profiles for phosphorus turnover	Guiwei Wang Shandong Agricultural University
303006	172	35845	Mild to moderate drought stress reinforces the role of functional microbiome in promoting growth of a dominant forage species (<i>Neopallasia pectinata</i>) in desert steppe	Zhenzhen Huang Inner Mongolia Agricultural University
303006	173	36179	Instant organic carbon addition increasing the soil phosphorus availability in calcareous soil	Xiaoran Qin Xinjiang Agricultural University
303007	174	32094	Phosphorus mineralization potentials of some soil amendments applied to degraded tropical Ultisol	Nnaemeka Henry Okoli Federal University of Technology
303007	175	32167	Biotechnological Strategies to Enhance Phosphorus Use Efficiency in Soybean/Maize Cropping Systems	Mikaella Meira Monteiro University of São Paulo
303007	176	32256	Freeze-Thaw Effects on the Mass Loading Rate of Organic Phosphorus in Soil Aggregates of Apple Pear Orchards	Cai Jiaxin Yanbian University
303007	177	32257	Effects of Freeze-Thaw Cycles on Soil Organic Phosphorus in Longjing Apple Pear Orchards	Liang Yunjiang Yanbian University
303007	178	32551	Phosphorus supply intensity and neighboring alfalfa: effects on maize growth, phosphorus uptake, and interaction intensity	Ziqi Li Inner Mongolia Agricultural University
303007	179	32694	Phosphorus availability and legacy in highly weathered soils: unveiling the interplay with soil aggregation across diverse agricultural land uses as integrated systems	Mauricio Cunha Almeida Leite The University of Queensland
303007	180	32729	Effectiveness of using the poultry-litter biochar pyrolyzed by different processes on soil available P	Che-Yu Chih Ph.D. program of Agriculture Science, College of Agriculture, National Chiayi university
303007	181	33123	Rhizosphere AMF-Bacteria Synergy Driving Soil Phosphorus Activation in Maize//Soybean Intercropping	Jiaqi Han College of Resources and Environmental Science, Yunnan Agricultural University
303007	182	33225	Microbial Contributions to Soil Phosphorus Availability in Grass-Legume Mixtures	Adesuwa Sylvia Erhunmwunse University of Florida, Southwest Florida Research and Education

*Subject to change

Poster Sessions

				Center, Immokalee, USA
303007	183	33536	Evaluating the phosphorus release efficiency of duo-biochar to spring wheat	Christina van Midden Agri-Food and Biosciences Institute
303007	184	33639	Biochar surface modifications after pyrolysis and their effect on nutrient retention	Subin Kalu Department of Crop and Soil Sciences, North Carolina State University
303007	185	33993	Trait-mediated rhizosphere phosphorus strategies drive functional complementarity among coexisting desert shrubs	Mingzhu He Northwest Institute of Eco-Environment and Resources, Chinese Academy of Sciences
303007	186	34280	Characteristics of soil phosphorus profile distribution in degraded black soil areas and effects of tillage patterns on root zone phosphorus supply barriers	Huajie Zhang China Agricultural University
303007	187	34326	Does particle size of digestate-derived biochar affect phosphorus losses and fertilizer value? Evidence from a lysimeter study in a temperate soil.	Oliver Lindunda Daka Department of Agroecology, Aarhus University, Blichers All' e 20, 8830 Tjele, Denmark
303007	188	34348	Cultivar-Dependent Cluster-Root Strategies Underpin Phosphorus Use Efficiency in Macadamia Grown Under Low Phosphorus Conditions	Yu Pin Li Yunnan Agricultural University
303007	189	34457	Organic P Mineralization in Agricultural Soils: Process Dynamics and Microbial Drivers	Jinzheng Zhan Sun Yat-sen University
303007	190	34625	Incorporating Chinese milk vetch and rice straw promoted inorganic phosphorus mobilization through assembling phosphate-solubilizing bacteria in rhizosphere	Qiang Zhu Huazhong Agricultural University
303007	191	34635	Multi-benefits of wastewater phosphorus recovery for croplands in China	Zijie Tang Zhejiang University
303007	192	34709	Integrating Long-Term Field Data and Machine Learning for Optimized Phosphorus Management and Sustainable Wheat Yield	Jagdeep Singh Department of Soil Science, Punjab Agricultural University, Ludhiana, Punjab, India -141004

*Subject to change

Poster Sessions

303007	193	34772	Genetic improvement of phosphorus use efficiency in chickpea through soil – plant interactions under low soil phosphorus conditions	ANUPRIYA RANA Department of Genetics and Plant Breeding, Govind Ballabh Pant university of Agriculture and Technology Pantnagar, 263145 Uttarakhand India
303007	194	34853	Earthworms enhance soil phosphorus cycling but plant responses differ among earthworm ecological categories	Wenli Ding Beijing Forestry University
303007	195	35050	Phosphorus adsorption in a calcareous soil under forage palm cultivation in an integrated crop-livestock-forestry system in the semi-arid Lower Jaguaribe region, Ceará, Brazil	Natanael Santiago Pereira Instituto Federal do Ceará (IFCE)
303007	196	35293	Phosphorus Dynamics and Growth Response of Perennial Ryegrass to Mg-modified Biochar Application	Sofia Vitsa Trinity College Dublin
303007	197	35344	VALORIZATION OF ROCK PHOSPHATE AND ORGANIC WASTE THROUGH COMPOSTING: AN ASSESSMENT OF ITS MATURITY FOR SUSTAINABLE APPLICATION IN AGRICULTURE	COULIBALY MADOUSSOU Biotechnology, Agri-Food, Materials and Environment Laboratory, URAC 24, Faculty of Science and Technology, Hassan II University, B.P. 146, Casablanca, Morocco
303007	198	35453	Phosphorus Maximum Sorption Capacity in Soils from Paraná State in Southern Brazil	Antonio Rafael Sánchez-Rodríguez University of Córdoba
303007	199	35579	Soil Phosphorus Transformation and Crop Response of Maize under Different Phosphorus Management Practices in Typic Haplustepts	Surykant Sharma Maharana Pratap University of Agriculture and Technology, Udaipur (Rajasthan), India
303007	200	35589	Keystone microbes mediate root traits and phosphorus uptake to enhance maize crop productivity in intercropping systems	Yi-Wen Zhao, Ran An, Jiu-Dong Zhang, Rui-Peng Yu, Yi Xing, Xing-Guo Bao, Jing-Jing Peng, Long Li China Agricultural University
303007	201	35688	Integrating regional critical boundaries and nitrogen-phosphorus limitation for global water quality	Yuanyuan Chen Zhejiang University

*Subject to change

Poster Sessions

303007	202	36266	Iron-based Adsorbents for Wastewater Treatment and Phosphorus Recovery	Roselle E. Madayag 1Division of Soil Science, Agricultural Systems Institute, College of Agriculture and Food Science, University of the Philippines Los Baños, College, Laguna, Philippines 4031", "Division of Soil and Water Management, Department of Earth and Environmental Science, KU Leuven, Kasteelpark Arenberg 20, Heverlee B-3001 (Belgium)
303007	203	319B34	Nutrient Management and N ₂ O Emissions from Agricultural Peatlands in Ireland	Wenxuan Shi Teagasc, Climate Centre, Ireland
304004	204	33652	Combined Application of Straw and Biochar: A Synergistic Strategy to Enhance Fertilizer Efficiency, Boost Yield, and Reduce Greenhouse Gas Emissions in Northeast China	Aizheng Yang Northeast Agricultural University
304004	205	34146	Reductive soil disinfestation alleviates Paulownia fortunei replant disease via Fusarium suppression by microbially produced 2,6-pyridinedicarboxylic acid	Xuanzhen Li College of Forestry, Henan Agricultural University, Zhengzhou, 450002, China
304004	206	34300	Application of Bionic Anti-Adhesion Technology in Soil-Contacting Components	Baoguang Wu Jilin University
304004	207	36000	Carbonic Anhydrase Enabled Synergies for Enhanced Microalgal CO ₂ Fixation: From Enzyme Production to Engineered Microbial Consortia	Yun Liu, Dandan Yao, Lingyu Wu, Ding Tan, Hui Wang State Key Laboratory of Soil & Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences", "University of Chinese Academy of Sciences
305001	208	31609	Geochemical Fractions of Pb and Ni in Orchard Soils and Ecological Risk Assessment Using Pollution Indices	Enise Sukuşu Department of Soil Science and Plant Nutrition, Faculty of Agriculture, Siirt University
305001	209	31908	Bioremediation Mechanism of Polycyclic Aromatic Hydrocarbon Contaminated Soil Based on Signal Molecular Regulation Strategy under Low Temperature Stress	Ning Hou Northeast Agricultural University

*Subject to change

Poster Sessions

305001	210	32688	Enzyme Activity and Biological Quality Scores in Tropical Soils Exposed to Cadmium and Chromium	Rayana Da Rocha Sarmento University of São Paulo
305001	211	32771	Microbial Degradation of Soil Microplastics (MPs) Related to Greenhouse Gas Emissions	Yuhan Yin Nanjing University of Information Science & Technology
305001	212	32930	The SIMULATE Project: evaluating climate-warming impacts on metalliferous mine tailings to guide restoration strategies in semiarid landscapes	María Nazaret González-Alcaraz Universidad Politécnica de Cartagena
305001	213	33252	Colonization and Microecological Impact of Escherichia coli O157:H7 in the Water Spinach Rhizosphere	Di Zhu Ningbo University
305001	214	33474	Risk Assessment of Agricultural Plastic Film and Microplastics in Soil-Water Systems: Fate, Transport, and Ecological Implications	Yan He Zhejiang University
305001	215	33743	Quantifying Soil Health in Cd-Contaminated Soil Remediation: Methodology Optimization and the potential role of Soil Viruses	Zhongyi Cheng Institute of Agricultural Resources and Environment, Jiangsu Academy of Agricultural Sciences", "Zhejiang Provincial Key Laboratory of Agricultural Resources and Environment, Institute of Soil and Water Resources and Environmental Science, College of Environmental and Resource Sciences, Zhejiang University
305001	216	33970	Literature Data-Driven Prediction of Soil and Groundwater Pollutant Distribution at Regional Scales	Yikang Cheng Nanjing TAG-HUB Innovation Technology Co., Ltd.
305001	217	34632	Aluminum and microplastic release from reflective agricultural films disrupt microbial communities and functions in soil	Rui Jiang Soochow University
305001	218	34714	Occurrence, Cross-Media Distribution, and Risk Assessment of Pesticides in Soils and Surface Waters of a Representative Black Soil Region	Chongjun Zhang Northeast normal university
305001	219	34822	Microbial community assembly and metabolic pathways drive the enrichment of stable DOM under long-term conservation tillage practices in sloping farmlands	Taihui Zheng Jiangxi Agricultural University

*Subject to change

Poster Sessions

305001	220	34832	Soil metabolic processes influenced by rice roots co-regulates the environmental evolution of antibiotic resistome	Bingjun Han and Jianjun Yang Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences
305001	221	36423	Research on Soil Reconstruction Technology Based on Sand-Clay Compound Ratio in Grassland Open-Pit Mining Areas	Qiao Yang Land Consolidation and Rehabilitation Center, Ministry of Natural Resources", "Technology Innovation Center for Land Engineering, Ministry of Natural Resources", "China University of Geosciences, Beijing
305001	222	319B65	Green Surfactant Remediation of Petroleum Hydrocarbon-Contaminated Soil and Bacterial Community Response	Changhao Wu Technical Center, Center Environmental Protection Technology Co., Ltd.
305003	223	31181	The Fundamentals of Disturbed Land Reclamation	Vladimir Androkhov Institute of Soil Science and Agrochemistry of Siberian Branch of Russian Academy of Sciences
305003	224	32064	Exogenous Chemicals Used to Alleviate or Salvage Plants under Flooding/Waterlogging Stress: Their Biochemical Effects and Perspectives	Lingyue Wang Chinese Academy of Agricultural Sciences
305003	225	32794	Upcycling Rare Earth Hyperaccumulator Biomass into Functional CaS:Ce Phosphors: A Coupled Remediation – Utilization Strategy for Degraded Rare Earth Mine Soils	Candie Xie Sun Yat-sen University
305003	226	33783	Biochar-loaded AM fungi coupled with Arundo donax enable targeted red mud remediation via valency-specific metal detoxification and soil function recovery	Xiaohui Wang Guangxi Institute of Botany, Guangxi Zhuang Autonomous Region and Chinese Academy of Sciences
305003	227	33930	Formation and Migration Patterns of Polycyclic Aromatic Hydrocarbons in Underground Coal Fires: A Case Study of a Typical Coal Fire Zone	Pengcheng Zhang China University of Mining and Technology
305003	228	34767	The removal mechanism of Pb ²⁺ from wastewater by phosphorus-modified biochar	Guanjie Jiang Jiangxi Agricultural University

*Subject to change

Poster Sessions

305003	229	35130	Unraveling the Synergious Succession of Plant and Soil Microbial Communities in Heavy Metal Mining Wastelands	Chenyang Zhang Yunnan University
305003	230	36080	Ecological package-driven early reclamation of open-pit mines in arid and semiarid regions: Insights from soil bacterial communities, functional genes and physicochemical properties	Lana Du Tianjin Normal University
305012	231	33061	Effects of Calcination Temperature on the Chemical Properties of Natural and Commercial Diatomites	Wanpen Buamuang Department of Soil Science, Faculty of Agriculture, Kasetsart University
305012	232	33612	Performance of ethanol transformable microemulsions and remediation of salinized oil - contaminated soils	Xiaoning Feng Southwest Forestry University
305012	233	34430	Impact of PFAS on microbiome biodiversity and antimicrobial resistance spread in sludge-fertilized soil	Magdalena Urbaniak University of Lodz, Faculty of Biology and Environmental Protection, UNESCO Chair on Ecohydrology and Applied Ecology, Banacha 12/16, 90-237 Lodz, Poland
305012	234	35097	Transport of Chlorinated Phenols through Highly Permeable Danube Alluvial Sediments under Riverbank Filtration Conditions	Marijana Kragulj Isakovski University of Novi Sad Faculty of Sciences, Novi Sad Republic of Serbia
305012	235	35456	Cell-level Toxicological and Biodegradation Responses of Pure Bacterial Cultures to Per- and Polyfluoroalkyl Substances (PFAS)	Gayeon Jang Yonsei University
305012	236	35599	Selenium Dynamics in Seleniferous Soils of Punjab: Role of Organic and Inorganic Amendments in Mitigating Selenium Toxicity	Savreen kaur Department of Soil Science, Punjab Agricultural University, Ludhiana, India
305012	237	35769	The potential role of groundwater microplastics on arsenic cycling in alluvial aquifers: insights from links of DOM characteristics and microbial community	Shengfeng Liu China University of Geosciences
305012	238	36255	Removal Performance and Mechanism of MOF-Based Iron-Carbon Composite Materials for PFOA and PFOS Electron Transfer Mediated by Iron Sites	Aonan Nie Institute of Soil Science, Chinese Academy of Sciences", "China University of Geosciences (Wuhan)

*Subject to change

Poster Sessions

305012	239	36257	Remediation of oxytetracycline-contaminated calcareous soil by a novel Zinc oxide/Schwertmannite composite: interface behavior and plant synergy	Yingxuan Fan Shanxi Agricultural University
309002	240	31898	Phosphorus Limitation and Adaptation Strategies for Productivity Formation of Pinus massoniana Plantations in China	Lixiong Zeng Ecology and Nature Conservation Institute, Chinese Academy of Forestry
309002	241	34109	Influence of species diversity and soil cementing substances on the stability of agglomerates in three forest types of Zhangguangcailing Mountains	Fengjiao Yang Northeast Forestry University
309002	242	35387	Soil bacterial communities demonstrate stronger resilience in biomass and network structure than fungi in high-altitude pine forests five years post-fire, southwest China	Zhan Chen Institute of Forest Ecology, Environment and Protection, Chinese Academy of Forestry
309002	243	35391	Carbon stock assessment using machine learning based modeling in Pinus massoniana plantations	Mengmeng Gou Ecology and Nature Conservation Institute, Chinese Academy of Forestry
309002	244	35397	Developmental plasticity drives convergent shifts in phosphorus acquisition strategies toward root phosphatase activity in Moso bamboo under nitrogen addition	Quan Li Zhejiang A&F University
309002	245	35398	Effects of different vegetation restoration measures on soil erosion resistance capacity on the typical watershed in the Three Gorges Reservoir Area	Ruyuan Hu Chinese Academy of Forestry
309002	246	35515	The construction of core microbiota for phosphate-solubilizing and its regulation on phosphorus bioavailability in Moso bamboo rhizosphere	Tingting Cao Zhejiang A & F University
309002	247	35644	Plantation conversion of Eucalyptus promotes soil microbial necromass C accumulation	Min Wang Zhongkai University of Agriculture and Engineering
309002	248	35681	Afforestation improves soil multifunctionality through microbial activity and SOC molecular diversification	Yue Li South China Botanical Garden, Chinese Academy of Sciences
309005	249	32904	Soil carbon and nitrogen storage in response to wildfire in recently burned Mediterranean forests	Grilli Eleonora University of Campania “Luigi Vanvitelli”

*Subject to change

Poster Sessions

309005	250	32925	Forest Carbon Dynamics and Soil Chemical Properties Variability along Altitudinal Gradient in the Northwestern Himalayas: Evidence from Quercus semecarpifolia Forests under Changing Climate	Rishav Sharma Dr Y S Parmar University of Horticulture and Forestry
309005	251	33865	Soil-Plant Dynamics Under Warming: European Beech and Norway Spruce Seedlings, Biomass, Chemistry, and 15N Tracing	Dawid Kupka Department of Ecology and Silviculture, Faculty of Forestry, University of Agriculture in Krakow
309005	252	33971	Temperature effects on nutrient biogeochemistry along a climosequence of forest soils in South Korea	Aleksandra W. Bielnicka Gyeongsang National University
309005	253	34220	Soil physical health and carbon sequestration under poplar and eucalyptus-based agroforestry systems in relation to tree age	Gurpinder Kaur Punjab Agricultural University, Ludhiana, Punjab, India
309005	254	35193	Organo-mineral complexes and their role in soil carbon stocks in Brazilian Vertisols	Sheila Aparecida Correia Furquim Federal University of São Paulo (UNIFESP)
309005	255	36362	Reduced below-ground carbon allocation triggers contrasting nitrogen dynamics in rhizosphere and bulk soil of alpine coniferous forests on the eastern Tibetan Plateau	Dengjie Zhou Northwestern Polytechnical University
309005	256	319B39	Winter Dynamics of Belowground Biophysical Processes in Two Temperate Forest Soils in Wisconsin, USA	Daniel Igrimbabazi University of Wisconsin-Madison
401001	257	33134	Fungal biodiversity associated to alpine peatlands in northern Italy	Claudio Zaccane University of Verona, Department of Biotechnology
401001	258	33514	Exploring the potential of mid infrared spectroscopy for monitoring peatland condition	Fereshteh Shahriari Applied Chemistry and Environmental Science, School of Science, STEM College, RMIT University, Melbourne, VIC 3000, Australia
401001	259	34712	Alpine peatlands degradation drives soil organic carbon mineralization but improves stability	Shuangchao Wang Sichuan University
401001	260	36083	Soil drying accelerates CO ₂ emissions in global cold and wet ecosystems	Shaobo Sun Tianjin University

*Subject to change

Poster Sessions

401003	261	33293	Fertilization Dictates Nematode-Microbe Trophic Interactions to Shape Plant Health and Soil Functions	Xu Xu Nanjing Agricultural University
401003	262	33766	Regulation of Soil Organic Carbon Fractions by Straw Return Duration via Microbial Community Shifts and Microbial Necromass Carbon	ShiLong He Inner Mongolia Agricultural University
401003	263	34522	Enchytraeid Bioturbation as a Key Driver of Microplastic Redistribution in Soils	Junwei Hu Department of Environment, Ghent University, Ghent, Belgium
401003	264	35209	Earthworm Responses to Veterinary Antibiotic Contamination in Soil and their Role in Mitigating Crop Toxicity	Young-Nam Kim Kyungpook National University
401003	265	35766	Root residue mass loss of <i>Leymus chinensis</i> stimulates soil fauna activity and enhances fauna-mediated carbon accumulation in Songnen grasslands	Xiaoqiang Li School of Geographical Sciences, Changchun Normal University", "Changchun Normal University Science and Technology Innovation Research Institute, Changchun Normal University
402001	266	33137	Interspecific interactions increase soil aggregate stability through altered root traits in long-term legume/maize intercropping	Xiaoyang Duan China Agricultural University
402001	267	33138	Effects of conservation tillage combined with diversified cropping on crop productivity and soil fertility in black soil region	Zhong-Yang Guo China Agricultural University
402001	268	34083	Effects of maize – cover crop intercropping on soil carbon and nitrogen pools and enzyme activities in black soil of Northeast China	Zijun Liao Northeast Forestry University
402001	269	34313	Straw Returning in Cooperation With Legume-Based Cover Crops: A Potential Path to Promote Both Soil Organic Carbon and Total Nitrogen	FengQiang Yan Northeast Forestry University
402001	270	34664	SynCom-Driven Iron Modulation Synergistically Controls Maize Root Rot	Minyu Jing State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences

*Subject to change

Poster Sessions

402001	271	34666	Mechanisms Underlying the Resistance of <i>Rhizoctonia</i> sp. RS86 to Maize Root Rot	Jiaojiao Liang Institute of Soil Science, Chinese Academy of Sciences
402001	272	35007	Soil fertility and mean annual precipitation regulate the influences of tillage regimes on black soil organic C stocks in Northeast China	Jianyu Tao State Key Laboratory of Efficient Utilization of Arable Land in China, Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences, Beijing 100081, China
402001	273	35526	Use of Land Resource Inventory and Hydrology inputs in Watershed Planning	N B Praksh Centre of Excellence on Watershed Management, UAS Bangalore
402001	274	35611	Impact of 27 Years of Long-Term Fertilization on Soil Consistency, Aggregate Stability and Moisture Dynamics in Maize – Wheat Cropping Sequence	Dr. KARTIK SALVI Ph.D. Research Scholar, Department of Soil Science and Agricultural Chemistry, RCA (MPUAT), Udaipur, India
402001	275	36007	Drivers of soil quality and maize yield under long-term tillage and straw incorporation in Mollisols	Chunzhu Liu Northeast Institute of Geography and Agroecology Chinese Academy of Sciences Center for Agricultural Research
402001	276	36008	Application of organic manure as a potential strategy to alleviate the limitation of microbial resources in soybean rhizospheric and bulk soils	Zhimin Wu State Key Laboratory of Black Soils Conservation and Utilization, Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences, Harbin, China
402001	277	319B46	Rice straw return by water-logged press-bury in autumn Enhanced Black Soils Carbon Stability in Northeast China Paddy Fields	Dongju Bai State Key Laboratory of Efficient Utilization of Arable Land in China, Key Laboratory of Non-point Source Pollution Control, Ministry of Agriculture and Rural Affairs, Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural

*Subject to change

Poster Sessions

				Sciences
402004	278	32007	Wetland cultivation impacts soil iron associated organic carbon: the pattern and prediction	Ming Jiang Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
402004	279	32635	Effects of Full Maize Straw returning on Soil Physical Properties and Maize Yield	Han-yu SU Shenyang Agricultural University
402004	280	32781	Assessing the nutrient potential and carbon stock of black soils in the Goma area (Eastern DRC)	Ndzana Georges Martial Department of Soil Sciences, Faculty of Agronomy and Agricultural Sciences, University of Dschang
402004	281	33081	Evaluating the Effectiveness of Conservation Tillage in the Black Soil Region of Northeast China Based on the Apparent Characteristics of Crop-Residue-Soil	Jing Wang institute of geographic sciences and natural resources research
402004	282	34203	Sustainable Management and Restoration of Chernozem (Black Soil) in Vojvodina, the Republic of Serbia	Maja Manojlović University of Novi Sad, Faculty of Agriculture, Novi Sad, Republic of Serbia
402004	283	36015	Unveiling soil organic carbon sequestration potential and driving factors of global black soil: A meta-analysis	Naiwen Zhang Northeast institute of Geography and Agroecology, Chinese Academy of Sciences
402004	284	36188	The impact of conservation agriculture on functional microorganism-driven organic nitrogen mineralization and plant – microbe interactions in black soil regions	Shuangyi Li Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
404002	285	30652	Making Darcy visible: A simple apparatus for teaching Saturated Flow in Soil	Roger McLenaghan Lincoln University
404002	286	31816	Deciphering Soils through the Power of Games	Alma Barajas-Alcalá National Autonomous University of Mexico
404002	287	31888	The Virtual Soil Museum of Northern Paraná: A Space for Soil Education	Jully Gabriela Retzlaf de Oliveira Universidade Estadual do Norte do Paraná

*Subject to change

Poster Sessions

404002	288	35165	Comprehensive Soil Education Package for Achieving SDGs: Good practices in schools and universities	Takashi Kosaki Institute of International Affairs, Aichi University, Nagoya, Japan
404002	289	36171	A Study on the Educational Value and Innovative Mechanism of the "Freshmen' s Cup of Hometown Soil" Practical Teaching Model	Jiandong Sheng College of Resources and Environment, Xinjiang Agricultural University
406003	290	33235	Soil Art in Action: Transdisciplinary Pedagogy and Community Practice in the Healing Garden Project	Lipeng Jin Sichuan Fine Art Institute
406003	291	34507	What would our soils say if they could speak?	Pedro Henrique Ribon Ogera University of Goiás
406003	292	34611	The Fun Soil Profiles: Characters for the YECS Working Group at WCSS 2026	Adriana Ribon State University of Goiás
406003	293	36450	Community-based research and action for sustainable land use in the Ethiopian Rift Valley	Paul Hallett University of Aberdeen
408002	294	32276	Synergistic Mitigation of Crop Rhizosphere Soil Microbial Nitrogen Limitation by Maize-Peanut Intercropping and Straw Return in Black Soil Region: Insights from Extracellular Enzyme Stoichiometry	Fanyun Yao Jilin Agricultural University", "Jilin Academy of Agricultural Sciences (Northeast Agricultural Research Center of China)
408002	295	32316	Assessing rhizosphere and root traits of maize varieties under drought in integrated greenhouse and field experiments	Martin Wiesmeier Bavarian State Research Center for Agriculture
408002	296	32652	Synergistic Water Retention and Growth Promotion Mechanism of Tamarind Seed Polysaccharide-Sodium Alginate-PGPRs Hydrogel in Dry-hot Valley Areas	Xiaoqiong Yang Yunnan University
408002	297	32931	Short-term organic fertilization enhances soil microbial diversity in common bean cultivation	Glacy Jaqueline da Silva Biotechnology Applied to Agriculture Department, Paranaense University
408002	298	33131	Effect of Biogenic Synthesized Nano Sulphur on growth, yield and quality of Soybean	Dr. S. S. Hadole Professor (CAS), Department of Soil Science, PGI, Dr. PDKV
408002	299	33395	Identification of Bioplastic-associated Bacteria with Potential Degradative Activity in an Agricultural Soil System	Zeyu Zhu Department of Food Science and Technology, University of California

*Subject to change

Poster Sessions

408002	300	33491	Linking Biological Activity to Carbon Organic Matter Formation in Tropical Soils	V.S. Souza Department of Soil Science, “Luiz de Queiroz” College of Agriculture - University of São Paulo (ESALQVUSP), Piracicaba – São Paulo, Brazil
408002	301	33492	Linking crop diversity, nutrient availability and soil health to higher yields in Brazilian farming systems	Bruna Emanuele Schiebelbein “Luiz de Queiroz” College of AgricultureV University of São Paulo", "Center for Carbon Research in Tropical Agriculture
408002	302	33506	Soil health responses to nature-positive management regulate soil water infiltration in semi-arid agroecosystems	Prakriti Bista New Mexico State University, Department of Plant and Environmental Sciences, Las Cruces, NM 88003, USA", "New Mexico State University, Agricultural Science Center, Clovis, NM 88101, USA
408002	303	33535	Field evaluation of biochar on soil and crops in Northern Ireland (NI)	Christina van Midden Agri-Food and Biosciences Institute
408002	304	34177	Comparison study on soil layer disturbance between vertical rotary tillage and horizontal rotary tillage	Zhao Hongbo College of Mechanical and Electronic Engineering, Northwest A&F University
408002	305	34436	Ecosystem service value of conservation tillage with cover crop-maize intercropping in the northeast black land of Chin	Xiaobo Ba Institute of Applied Ecology, Chinese Academy of Sciences
408002	306	34438	Effects of Intercropping Grasses on Zinc Storage Forms in Rhizosphere/Non-Rhizosphere Soil of Xinjiang Ximei Orchard	Yi Zhang Xinjiang Agricultural University
408002	307	34602	Enhancement of soil physical properties through the use of cover crops: A systematic review for the Argentinean Pampas	Walter D. Carciochi Facultad de Ciencias Agrarias (Universidad Nacional de Mar del Plata)", "Instituto de Innovación para la Producción Agropecuaria y el Desarrollo Sostenible
408002	308	34994	Structured Mini-Dunes (SMDs): Engineered Soil Structures for Moisture Retention and Salinity Control in Arid Sabkha Soils	Afrah Al-Shukaili Sultan Qaboos University

*Subject to change

Poster Sessions

408002	309	35119	Optimization simulation study on agricultural management practices for stable and high grain yield and whole-profile soil carbon sequestration and emission reduction	Yanxi Zhao Zhejiang University
408002	310	35306	Microbial activity and biomass in a cultivated and bioinoculated soil under water and nutritional deficit conditions	Erika Lorena Blanco Universidad Nacional Experimental del Táchira UNET, Venezuela
408002	311	319B44	Nature-based Solutions for Transforming Smallholder Agriculture in Highland Areas of Northern Thailand	Nattaporn Prakongkep Land Development Department
408003	312	32754	Dose-Dependent Effects of Biochar on Physiological Metabolism and Fruit Quality in Tomatoes	Jie Zhang College of Agricultural Science and Engineering
408003	313	32803	Mechanisms of nitrate accumulation in solar greenhouse with long-term high nitrogen inputs in the Loess Plateau of China	Mingxia Yang Northwest A&F University
408003	314	32805	Dynamics of soil salinization and its combined effect with nutrients on the microbial community in solar greenhouses	Xiaofang Deng Northwest A&F University
408003	315	33465	The RING-finger E3 ubiquitin ligase SIMIEL1 interacts with SINAC35 to regulate JA biosynthesis and mediate saline-alkali stress responses in tomato	Xiaohui Hu Northwest A&F University
408003	316	33546	Organic fertilizer improves soil carbon sequestration via macroaggregate formation in intensively vegetable cultivation system	Lijun Ren College of Land and Environment, Shenyang Agricultural University, Shenyang 110866, People's Republic of China", "2 Institute of Bio- and Geosciences (IBG), Forschungszentrum Jülich, Jülich 52428, Germany
408003	317	35070	Low nocturnal temperature changed protected tomato soil bacterial community composition and metabolite characteristics	Qingwen Shi College of Horticulture, Shenyang Agricultural University, Shenyang 110866, China College of Resources and Environmental Sciences, China Agricultural University, Beijing 100193, China

*Subject to change

Poster Sessions

408003	318	35758	Biochar-based microbial fertilizer enhances cucumber growth and yield by improving soil quality in protected agriculture	Dongliang Fan Xi'an University of Technology
408004	319	32430	Cadmium Uptake by Maize Grown with Microplastics and Their Effect on Water Content and Grain Quality	M.B. Kirkham Kansas State University
408004	320	33574	Oral Exposure of Arsenic-Contaminated Soils Triggers Hepatic Ferroptosis via Iron Dysregulation and Glutathione Metabolism Disruption: From Bioavailability to Mechanisms	Cheng-Cheng Wang Southwest Forestry University
408004	321	33621	The enhancement mechanism of phytoextraction mediated by modified nanoscale zero-valent iron and its application in farmland soil remediation	Jianhua Qu Northeast Agricultural University
408004	322	34232	Arsenic-hyperaccumulator <i>Pteris vittata</i> effectively uses sparingly-soluble phosphate rock: Rhizosphere solubilization, nutrient improvement, and arsenic accumulation	Songge Deng Zhejiang University
408004	323	34554	Soil health mediates diversification effects on crop resilience in tropical agroecosystems	Viviana Meneghini Department of Soil Science, Luiz de Queiroz College of Agriculture, University of São Paulo (ESALQ/USP), Piracicaba, Brazil", "Center for Carbon Research in Tropical Agriculture, University of São Paulo (CCARBON/USP), Piracicaba, Brazil Piracicaba, Brazil
408004	324	34572	Release and Ecological Risks of Heavy Metals During Coal Combustion in Coal-Fired Power Plants	Rui Ma North University of China
408004	325	34899	Sustainability of mountainous olive orchards: evaluation of soil microbial diversity and functionality of organic, integrated and conventional agroecosystems.	Victoria Ochoa Esteban University Institute of Research in Olive and Olive Oils, University of Jaén, Spain
408004	326	35122	Daily Temperature Fluctuations Intensify the Toxicokinetics and Toxicodynamics of Phenanthrene in <i>Enchytraeus albidus</i> (Oligochaeta), Increasing Overall Toxicity Risk	Wencai Dai Southwest University

*Subject to change

Poster Sessions

408004	327	35182	Divergent Responses of Topsoil and Subsoil Microbial Communities to Cadmium Stress in a Wastewater-Irrigated Farmland	Shushen Yang Hebei Agricultural University
408004	328	35490	Dihalogenated Nitrophenols in Drinking Water: Prevalence, Resistance to Household Treatment, and Cardiotoxic Impact on Zebrafish Embryo	Hongjie Sun zhejiang Normal University
408004	329	35554	Recruitment of copiotrophic and autotrophic bacteria by hyperaccumulators enhances nutrient cycling to reclaim degraded soils at abandoned rare earth elements mining sites	Yong-He Han Fujian Normal University
408004	330	35570	Metabolic flexibility of rhizobacteria drives soil nutrient cycling and enhances rare earth elements hyperaccumulation in ferns colonizing degraded mine ecosystems	Ming-Zhu Zou Fujian Normal University
408004	331	35587	Mechanistic Study of Rare Earth Element Bioleaching Mediated by Komagataeibacter xylinus	Junying Zhu Fujian Normal University
408004	332	35594	Effects of different nitrogen fertilizer types on the remediation efficiency of Pteris vittata in arsenic-contaminated soil	Xiao-min Wang Fujian Normal University
408004	333	35598	Multi-Pathway Synergy Drives Rapid Soil Fertility and Crop Yield Improvement in Newly Reclaimed Cropland: The Role of Integrated Soil Improvement	Yanfang Chen ZHEJIANG INSTITUTE OF GEOSCIENCES
408004	334	35617	Soil quality and health: foundations for the agroecological transition in agroecosystems	Maria Cristina Martins Ribeiro de Souza IFCE-SOBRAL
408004	335	35674	Soil quality in a long-term Tifton 85 pasture overseeded with forage radish and annual ryegrass	Maria Cristina Martins Ribeiro de Souza IFCE-SOBRAL
409001	336	32169	Soil Carbon Cycle and Carbon Sequestration Strategies in Saline-Alkali fields	Xiaoning Zhao Shaanxi University of Technology
409001	337	32580	The Water-Energy-Food -Ecosystem Nexus in Conservation Agriculture	Tendai Chibarabada Zimbabwe Sugar Association Experiment Station
409001	338	32630	Impact of bamboo-derived biochar and nutrient sources on soil properties and Pisum sativum yield under Morus-based agroforestry system in the North-Western Himalayas	SAMRIDHI KAPOOR Dr Yashwant Singh Parmar University of Horticulture and Forestry Nauni Solan

*Subject to change

Poster Sessions

409001	339	32660	Short rotation coppice on degraded and fertile soils	Vladimir Ivezic Faculty of Agrobiotechnical Sciences Osijek (FAZOS). University of Josip Juraj Strossmayer in Osijek
409001	340	32831	Effects of combined application of biochar and manure composts on greenhouse gas emissions and forage maize yields	Tsuyoshi Yamane Hokkaido Agricultural Research Center, NARO
409001	341	32941	Determining acid neutralization capacity of crushed basalt during enhanced rock weathering in soil	Lakshmi Chamaparambil Suresh Future Industries Institute, Adelaide University, Mawson Lakes Campus
409001	342	32946	Can Perennials Cut Nitrous Oxide Emissions? Insights from Manitoba Cropping Systems	Xiaopeng Gao University of Manitoba
409001	343	33180	Adopting wheat-legume intercropping enhances crop productivity and soil quality: Evidence from living labs across Pakistan under LEGUMINOSE Project	Muhammad Riaz Department of Environment Sciences, Government College University Faisalabad, Pakistan
409001	344	33218	Towards a low-carbon and climate-resilient Mediterranean agriculture: the integration of Conservation Agriculture and 4R Nutrient Stewardship in herbaceous and woody crops	Jesús Sevillano-Caño Department of Agronomy, University of Córdoba, Córdoba, Spain
409001	345	33697	Influence of soil pH and cover crop residues on the abundance of ammonia oxidizing microorganisms and nitrous oxide emissions in tropical agriculture soils	Lucas P. Canisares University of São Paulo
409001	346	34067	Carbon-negative urban agriculture: The potential of biochar-amended compost in Ethiopia	Dong-Gill Kim Hawassa University, Wondo Genet College of Forestry and Natural Resources
409001	347	34570	Effects of DOM chemodiversity on microbial diversity in forest soils on a continental scale	Jian Wang Institute of Applied Ecology, Chinese Academy of Sciences
409001	348	34647	Enhanced Soil Carbon Sequestration and Microbial Activity by Conservation Tillage in Farmland	Na Li Shenyang Agricultural University
409003	349	31875	Rotational grazing with no-till can efficiently maintain soil carbon stocks in Mediterranean woody pastures but results in lower microbial abundance and fungal diversity than grazing	Jesús Aguilera-Huertas Departamento de Ingeniería Agronómica, Universidad Politécnica de

*Subject to change

Poster Sessions

			abandonment	Cartagena", "Instituto de Biotecnología Vegetal (IBV)
409003	350	32280	Drivers and Consequences of Microbial-Derived Carbon Loss in Degraded Alpine Grasslands on the Qinghai-Xizang Plateau	Zhaolong Zhu College of Soil and Water Conservation Science and Engineering, Northwest A&F University
409003	351	32707	Stability of Soil Organic Carbon and Shifts in Microbial Community Structure along Vegetation Succession in the Shrinking Area of Plateau Inland Lake	Ming Li Nanjing Institute of Environmental Sciences, Ministry of Ecology and Environment
409003	352	33197	Long-term fate of photosynthetic carbon in desert plants: microbial necromass-driven pathways for soil carbon stabilization	Mengfei Cong Xinjiang Institute of Ecology and Geography
409003	353	33759	Stoichiometric steering of microbial necromass – mineral coupling drives Technosol genesis in iron mine tailings	Na Li University of Chinese Academy of Sciences
409003	354	34076	Warming alters fresh-carbon assimilating bacterial community relevant to priming effect in Mollisols	Yan Gao Northeast Institute of Geography and Agroecology Chinese Academy of Sciences
409003	355	34184	Microbial Interactions as a Primary Regulator of Soil Organic Carbon Age	Lidianjia Northeast Institute of Geography
409003	356	34318	Microbially Constructed Carbon – Mineral – Structural Interfaces: Revealing a Novel Perspective on Soil Texture – Mediated Organic Carbon Temperature Sensitivity	Huahui Li Yunnan Agricultural University
409003	357	36417	Deciphering the Dual-Channel Drivers of Soil Carbon Stabilization: Relative Contributions of Autotrophic and Heterotrophic Microbial Pathways to MAOM Formation	Jiaqi Wang Zhejiang University
409004	358	32413	Spatial variation and agronomic impacts of inherent soil productivity on wheat in China	Yinghua Duan Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences
409004	359	32520	Integration of artificial intelligence and remote sensing reflectance spectra for regional SOC	Yiping WU Institute of Global Environmental

*Subject to change

Poster Sessions

			Mapping	Change, Xi' an Jiaotong University", "School of Soil and Water Conservation, Central South University of Forestry and Technology
409004	360	33298	Mechanisms of low carbon sequestration efficiency in the croplands of the eastern Loess Plateau	Xinyue Su State Key Laboratory of Efficient Utilization of Arid and Semi-arid Arable Land in Northern China, Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences, Beijing 100081, China
409004	361	33481	Long-Term Organic Fertilization Enhances Particulate Organic Matter Accumulation through Macroaggregate Formation in the Loess Plateau	Ting Shi Soil Health Laboratory in Shanxi Province, Institute of Eco-environment and Industrial Technology, Shanxi Agricultural University, Taiyuan 030031, China", "College of Resources and Environment, Shanxi Agricultural University, Taigu 030801, China
409004	362	33497	Organic amendments differentially regulate POC and MAOC dynamics in topsoil and subsoil	Shengchao Hu Northwest A&F University
409004	363	33616	A systematic analysis and review of soil organic carbon stocks in urban greenspaces	Yang Guo Research Institute for Urban Planning and Sustainability, Hangzhou City University", "School of Public Affairs, Zhejiang University
409004	364	33648	Optimal Manure Substitution Enhances Soil Carbon Sequestration in Tropical Agriculture: Microbial and Isotopic Evidence from Pineapple Cropping Systems	Lei Shi, Siru Liu, Weiqi Shi, Haiyang Ma Key Laboratory of Tropical Crops Nutrition of Hainan province, South Subtropical Crops Research Institute, Chinese Academy of Tropical Agricultural Sciences

*Subject to change

Poster Sessions

409004	365	33771	Phosphorus as the key driver: Long-term fertilization unlocks nonlinear gains in nitrogen recovery efficiency in Chinese croplands	Lin Liu Changzhi University
409004	366	33952	Simulation of the evolution of cropland soil organic carbon in the Tuojiang River Basin over the past century	Qi Wang Sichuan Agricultural University
409004	367	34207	Evolution of soil organic matter in wheat-maize fields in the north china plain: integrated effects of organic amendments, water management, and microbial drivers under climate change	Dan Liu Hebei Academy of Agricultural and Forestry Sciences Dryland Farming Institute
409004	368	34390	Socioeconomic development and cropland projects reversed soil carbon loss across the whole soil profile in cropland: Evidence from China	Dongheng Yao Hebei Agricultural University
409004	369	34441	Microbial necromass outperforms the chemical stability of SOC in predicting soil multifunctionality under 44-year of organic amendment in red paddy soil	Kun Cheng Jiangxi Institute of Red Soil and Germplasm Resources
409004	370	34582	Straw-decomposing inoculants strengthen the mitigation effect of straw on N ₂ O emissions via synergistically inhibiting the abundance and activity of AOB in a wheat field	Cheng Ji Jiangsu Academy of Agricultural Sciences
409004	371	34591	Nitrogen fertilization enhances straw carbon sequestration in reclaimed mine soils by regulating microbial community stability and function	Huijuan Bo Institute of Ecoenvironment and Industrial Technology Shanxi Agricultural University
409004	372	34593	Patterns and drivers of organic carbon sequestration efficiency within soil aggregates under straw return across the croplands of China	Peidong Xu Shanxi Agricultural University
409004	373	35276	Impact of polyurethane microplastics on CO ₂ emissions and microbial community structure in paddy and dryland soils	Dong Liang Jiangsu Academy of Agricultural Sciences
409004	374	35777	Dual-Dimension Spectral Reconstruction: Spatiotemporal Mapping of Soil Organic Matter under Complex Cropland Surface Conditions	Rongpeng He Aerospace Information Research Institute
409004	375	36390	Hidden carbon pools: extraradical mycelium of arbuscular mycorrhizal fungi as a substantial soil carbon reservoir	Yanlong Li Beijing Academy of Agriculture and Forestry Sciences
409007	376	32852	Rainfall-induced hot moments of N ₂ O emissions in sandy agricultural soils managed with winter cover crops	Sapana Parajuli Department of Plant and Environmental Sciences,

*Subject to change

Poster Sessions

				Clemson University, Clemson, SC 29634, United States, Pee Dee Research and Education Center
409007	377	32916	CO ₂ fixation by soil algae in agricultural lands	Jun Murase Nagoya University
409007	378	33747	Evaluation of Greenhouse Gas Emission Characteristics by the Use of Organic Resources and No-Tillings in Organic Agricultural-Based Corn Plantations	Da-Eun Kim Kangwon National University
409007	379	34710	Global Meta-Analysis Reveals the Potential of No-Tillage to Reduce Winter – Early Spring N ₂ O Emissions	Mengyang Wang Northwest A & F University
409007	380	34737	Effect of biochar application on reducing inorganic nitrogen and N ₂ O emissions in the greenhouse system of Jeju Island, Korea	Won-Pyo Park Plant Resources and Environment Major, College of Applied Life Science, Jeju National University, Jeju, Republic of Korea
409007	381	34810	Root Exudate Chemistry Drives Divergent Carbon Fates in Rice Paddies	Kaiye Ye Institute of Soil Science, Chinese Academy of Sciences
409007	382	35091	Effects of three differently activated biochars on greenhouse gas emissions from a fertile clay loam in boreal conditions	Samuel Amoah Department of Agricultural Sciences, University of Helsinki, Helsinki, Finland
409007	383	35929	Soil carbon quality modulates the responses of soil respiration and its heterotrophic and autotrophic components to fertilization under straw return and extreme rainfall	Shiqi Xu Institute of Geochemistry, Chinese Academy of Sciences", "Institute of Soil Science, Chinese Academy of Sciences
409009	384	31859	Effects of tillage practices on environment, energy, and economy of maize production in Northeast China	Yang Zhang Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
409009	385	32115	Exogenous organic carbon-induced stoichiometric balance stimulates microbial high growth potential yield strategies to promote necromass accumulation in soil carbon pools	Xing Wang College of Agronomy, Northwest A&F University

*Subject to change

Poster Sessions

409009	386	33334	Effects of crop rotation and organic amendments on crop productivity, soil chemical properties, and soil organic carbon accumulation in greenhouse vegetable systems	Bomi Kim Industry-University Cooperation Foundation, Hankyong National University, Anseong 17579, Rep. of. Korea.", "Research Institute of International Agriculture, Technology and Information, Hankyong National University, Anseong 17579, Rep. of. Korea.
409009	387	33483	Permafrost ecosystems of Pur-Taz interfluvium (Western Siberia) as a source of methane in the context of climate change	Arina V. Larina Laboratory of Greenhouse Gases, A.M. Obukhov Institute of Atmospheric Physics, RAS, Moscow, Russia
409009	388	33768	Mechanisms and Mitigation Potential for Carbon Sequestration and Greenhouse Gas Emissions in Paddy Soils under Climate Change	Jingrui Yang Institute of Soil Science, Chinese Academy of Sciences
409009	389	33856	Global Distribution Patterns of Phytolith-Occurring Carbon in Terrestrial Ecosystems Based on Meta-Analysis and Machine Learning	Yuyang Zhao Co-Innovation Center for Sustainable Forestry in Southern China, Nanjing Forestry University
409009	390	33989	Divergent but coupled responses of soil organic and inorganic carbon to global warming and aridity	Shou-Wei Han China Agricultural University
409009	391	34208	CO ₂ emission following total vegetation removal: a pilot study	Johann Thorsson Land and Forest, Iceland
409009	392	34327	Decoupling the "Pump" and the "Tomb": Depth-Dependent Soil Organic Carbon Stabilization Mechanisms under Long-Term Conservation Tillage	Hongxuan Duan China Agricultural University
409009	393	34354	A Mechanistic - AI and Remote-Sensing Assimilation Framework to Quantify Straw-Return Impacts on Soil Carbon Fluxes and Soil Health	Jia Cheng China Agricultural University
409009	394	34691	Integrating Soil Properties and Management into Data-Driven Modeling of Soil CO ₂ Efflux in Urban Green Roofs	Cho Junyoung Korea Institute of Civil Engineering and Building Technology, Gyeonggi-do, 10233, Korea

*Subject to change

Poster Sessions

409009	395	34791	Monitoring Soil Carbon Storage and Soil Respiration in Street-Level Green Infrastructure	Hyomin Kim Korea Institute of Civil Engineering and Building Technology
409009	396	34909	Biochar's Influence on Amaranth Growth and CO ₂ Fluxes in Temperate Agroecosystems	Elizaveta Derevenets Lomonosov Moscow State University", "Dokuchaev Soil Science Institute
409009	397	35510	Drivers and Spatial Variability of CO ₂ Efflux in Agrosilvopastoral System and Native Vegetation in the Brazilian Cerrado	Demerson Luiz de Almeida Barbosa Federal University of Jequitinhonha and Mucuri Valleys
409009	398	35557	The permanence of carbon sequestration in agricultural soil – what do we (not) know	Chantal Hendriks Wageningen University & Research
409009	399	35925	Soil Organic Carbon: A Key Player for Fertility, Climate, and Healthy Land	Zhongwu Li Hunan Normal University
409009	400	36397	Impact of Integrated Agricultural Systems on Soil CO ₂ Efflux in the Cerrado Biome	Leidivan Almeida Frazão Federal University of Minas Gerais", "Center for Carbon Research in Tropical Agriculture
409010	401	32405	Synergistic regulation of dissolved organic matter and microbial communities on microbial necromass accumulation under long-term organic material application	Yuanchen Zhu Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
409010	402	32637	Regulation of soil aggregate stability and carbon sequestration by microorganisms under long-term nitrogen and phosphorus application	He Ye Inner Mongolia Agricultural University
409010	403	32870	Effect of pH Gradient on Microbial Respiration using an Artificial Soil Systems	Yuto Yamamoto Laboratory of Soil Science, Graduate School of Agricultural Science, Tohoku University
409010	404	33002	Differential impacts of moisture fluctuation on dissolved organic matter under different water availability by regulating bacterial network and functional structure	Jiayu Liu South China University of Technology
409010	405	33214	Changing from divergence to convergence between soil microbial communities derived from intracellular and extracellular DNAs along a	Ting Li ¹ , Zejin Zhang ¹ , Fang Wang ¹ , Zheng Wang ¹ , Xiaoyong Cui

*Subject to change

Poster Sessions

			hydrothermal gradient on the Tibetan Plateau	University of Chinese Academy of Sciences
409010	406	33272	Time-scale dependent responses of microbial carbon use efficiency to warming in alpine soils on the Qinghai-Tibetan Plateau	Yike Wang Chinese Academy of Sciences Key Laboratory of Ecosystem Network Observation and Modelling
409010	407	34328	Urban soil virus homogenization reshapes microbial organic matter decomposition and carbon sequestration potential	panpan wang Huazhong Agricultural University
409010	408	34661	Response of soil microbes to repeated freeze-thaw cycling in a temperate forest	Maki Miura F-REI
409010	409	35330	Optimizing Soil Carbon Sequestration: Microbial Regulation by Straw Return Quantity and Frequency	Yali Yang Institute of Applied Ecology, Chinese Academy of Sciences
409010	410	35725	Soil arbuscular mycorrhizal fungi mediate the contribution of microbial necromass carbon to soil organic carbon in rocky desertification areas	Qiumei Teng Guangxi Institute of Botany, Guangxi Zhuang Autonomous Region and Chinese Academy of Sciences
409010	411	35793	Nitrogen addition promotes soil microbial-derived carbon storage: A meta - analysis	Junjie Guo Sun Yat-sen University
409012	412	32089	Quantifying Soil Organic Carbon Deficits with Dynamic Baselines and Attainable Scenarios Modeled from Legacy Data	Anil Somenahally Texas A&M AgriLife Research
409012	413	32573	Impact of Straw-Decomposer Inoculants on Labile and Microbial Carbon Fractions and Straw Decomposition Patterns in Black Soil under Straw Incorporation	Chenchen Lou HELMHOLTZ Centre for Environmental Research", "Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences
409012	414	32856	Enrichment of metastable iron minerals in global coastal wetlands	Ma Hua, Aaron Thompson, Steven J. Hall, Jialin Wang, Yanqi Xiao, Cong-Qiang Liu, Chen Chunmei Institute of Geochemistry, Chinese Academy of Sciences (IGC CAS)

*Subject to change

Poster Sessions

409012	415	34118	Long-term dynamics and modeling of microbial dormancy-activity transitions during afforestation	Minghui Meng Northwest University
409012	416	34291	Crop diversity enhances soil total carbon via increasing inorganic carbon concentration	Chuanlin Xiao China Agricultural University
409012	417	34603	Development of Non-destructive Soil Bulk Density Measurement Technology for Efficient and Precise Estimation of Soil Carbon Stocks	Yonghui Jung Kyunghee university
409012	418	34610	Parameters Optimization of RothC Model for Simulating Soil Organic Carbon Dynamics: A Case Study of Rice Straw and Soybean Residue Inputs	Chien-Kai Liao National Chung Hsing University
409012	419	34766	Manure addition enhances straw-derived soil organic carbon formation and accrual by regulating microbial metabolism in paddy soils	Xiaobin Guo Institute of Subtropical Agriculture, Chinese Academy of Sciences
409012	420	34826	Effects of tillage methods and straw returning on aggregate composition and carbon sequestration characteristics of black soil	Wei Fan Jilin Academy of Agriculture Science
409012	421	35106	Dynamics and Stabilization Mechanisms of Organic Carbon Fractions in Engineering Waste Soil During Intensive Amendment	Ziye He Zhejiang University
409012	422	35472	Unfolding a hidden mechanism in soil carbon dynamics	Yuan Liu Institute of Farmland Irrigation, Chinese Academy of Agricultural Sciences
409012	423	36235	Conservation tillage and wheat straw managements improve soil organic carbon sequestration via calcium-mediated microbial communities and aggregate stability in Calcaric Cambisols	Xueping Wu; Zixuan Han Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences
409014	424	31480	Evaluating the Applicability of the RothC Model for Soil Organic Carbon Dynamics in Canadian Prairie Grasslands Using Physical Fractionation	Ruitian Chen University of Guelph
409014	425	32940	Assessing Soil Organic Carbon Using Soil Color Captured with Smartphones in the Context of Citizen Science	Fangzhou Zheng Agriculture and Agri-Food Canada (Fredericton)
409014	426	33625	Supporting environmental sustainability by increasing soil carbon sink through biowaste recycling and remote sensing integrated with	Cho-Yin Wu Department of Environmental Science and Engineering,

*Subject to change

Poster Sessions

			machine learning	Tunghai University
409014	427	34121	Short term impact of biochar on soil total carbon, total nitrogen, $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ in two vineyards in Southeast Queensland of subtropical Australia	Kate Kingston School of Environment and Science, Griffith University (Nathan campus, Brisbane, Australia)", "Australian Research Centre for Human Evolution, Griffith University (Nathan campus, Brisbane, Australia)
409014	428	34222	Biochar – microbial interactions as drivers of soil carbon sequestration: from heterotrophic priming to autotrophic CO_2 fixation	Xiaomin Zhu Department of Agroecology, Aarhus University
409014	429	34538	Resolving Organic-Inorganic Carbon Overlap: Comparing Soil Organic Carbon (SOC) Measurement Methods to Improve Accuracy in Calcareous Soils	Nastaran chalabianlou Postdoctoral Fellow
409014	430	34749	Methodological insights in the determination of soil SOC:clay ratio at farm level in Southern Belgium	Gilles Colinet Water soil Plant exchanges department, TERRA, University of Liege, Belgium
409014	431	35420	Land-Use Change and Soil Carbon Dynamics under Climate Change: Implications for Agricultural Sustainability in Iran	Elaheh Ghasemi Karakani Faculty of Geography, University of Tehran
409014	432	35770	Microbiome-Driven Restoration of Coastal Saline Soils: The Role of Combined Organic-Nano Carbon Amendments in Modulating Community Structure and Function	Meng Xiao, Guangming Liu, and Cheng Chen Yellow River Conservancy Technical University, Henan Small Watershed Ecological Water Conservancy Engineering Technology Research Center, Kaifeng 475000 China.) 2 State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences, Nanjing 210018, PR China
409014	433	35842	Key influencing factors and optimization strategies for smartphone-based prediction of soil organic matter content	Jiawei Yang Zhengzhou Tobacco Research Institute of CNTC

*Subject to change



Poster Sessions

502002	434	32912	Engaging Youth with Soil Science through an Original Picture Book	Shunhua Yang State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences
502002	435	33409	Multidimensional Sustainability Assessment of Heavy Metal-Contaminated Farmland Remediation: An Environment-Policy-Economy Synergistic Framework and Long-Term Roadmap (2005 – 2040)	Dasong Lin Agro-Environmental Protection Institute, Ministry of Agriculture and Rural Affairs
502002	436	33831	An Integrated Practice and Model Building Based on the "Bio-Vitality Cultivation Method"	Miaoxian Li Justagrotech
502002	437	34236	Soil and Life in Bayinbuluk	Hongtao Jia Xinjiang Agricultural University
502002	438	34660	Symphony of Biological Vitality	Jiaqiang Wu Guangdong Jieshi Agricultural Technology Co., Ltd.
Panel Discussion 07	439	34607	Opportunities and challenges for Chinese Journal of Soil Science in the AI new era	Tingting An Shenyang Agricultural University
Panel Discussion 07	440	36316	Evolution of Global Soil Science Collaboration Networks and Its Implications for Journal Development	Ping Lu Institute of Soil Science, Chinese Academy of Sciences
Panel Discussion 08	441	321B02	Preliminary assessment of humic substances from chicken-manure hydrochar as drivers of soil microbial activity	Francisco J. Moreno-Racero, F.J. Group of Interactions Between Soils, Plants and Microorganisms, Department of Food Biotechnology, Instituto de la Grasa (CSIC), Building 46, UPO Campus, Ctra. de Utrera km 1, 41013 Seville, Spain
Panel Discussion 08	442	321B03	Multiple environmental stressor networks shape divergent pathways of biodiversity and ecosystem functioning in urban ecosystems	Gonzalez-Quero Mateo Laboratorio de Biodiversidad y Funcionamiento Ecosistémico. Instituto de Recursos Naturales y Agrobiología de Sevilla (IRNAS-CSIC), Sevilla, Spain

*Subject to change



Poster Sessions

Panel Discussion 08	443	321B04	Drivers of soil health of olive groves and their impact on the sustainable production of olive oil in the Mediterranean	Victor Valenzuela Polo Department of Animal Biology, Plant Biology and Ecology, University of Jaén, Jaén, Spain
Panel Discussion 08	444	321B06	Towards the identification of microbial indicators of soil health: a one-year field study in a Mediterranean olive grove	Gismero-Rodríguez, L. Instituto de la Grasa - Consejo Superior de Investigaciones Científicas (IG-CSIC), Seville, Spain
Panel Discussion 08	445	321B07	Study of coumarins trafficking in Arabidopsis thaliana	Alice Rossille IPSiM, Univ Montpellier, CNRS, INRAE, Institut Agro, Montpellier, France
Panel Discussion 08	446	321B09	Microbial community shifts reveal the multifunctional potential of biobased fertilizers in Mediterranean calcareous soils	Sana Boubehziz Department of Agronomy, Universidad de Córdoba (UCO), 14071, Córdoba, Spain
Panel Discussion 08	447	321B11	Linking nematode community dynamics to soil functioning across agronomic practices	Borras, Lucia Research Group Soil Fertility and Nutrient Management, Department of Environment, Ghent University, Belgium

