

|       | Monday, Oct 26                                    |                        | Tuesday, Oct 27                                                        |                      | Wednesday, Oct 28                                                     |                                |                   |
|-------|---------------------------------------------------|------------------------|------------------------------------------------------------------------|----------------------|-----------------------------------------------------------------------|--------------------------------|-------------------|
| 8:30  | Registration Opens                                |                        | Plenary Session:<br>Closer to Zero:<br>Reducing Toxic Elements in Food |                      | Plenary Speaker:<br>Kate Kennen                                       |                                |                   |
| 8:45  |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 9:00  | Opening & Welcome                                 |                        |                                                                        |                      | Micro & Nanoplastics                                                  | Phyto Feasibility & Acceptance |                   |
| 9:15  | Keynote Speaker:<br>D. Marshall Porterfield       |                        |                                                                        |                      |                                                                       |                                |                   |
| 9:30  |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 9:45  |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 10:00 | Break                                             |                        |                                                                        |                      | Coffee Break                                                          |                                |                   |
| 10:15 | Green Infrastructure & Water                      | Inorganic Contaminants |                                                                        |                      | Plenary Session:<br>Phyto Education<br>Lee Newman<br>David Tsao       |                                |                   |
| 10:30 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 10:45 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 11:00 | Break                                             |                        |                                                                        |                      |                                                                       |                                |                   |
| 11:15 | Nanomaterials                                     | Organic Contaminants   |                                                                        |                      | Closing Plenary<br>Neil Bruce<br>Awards<br>Election results<br>IPC 20 |                                |                   |
| 11:30 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 11:45 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 12:00 | Lunch<br>(onsite, provided)                       |                        | Lunch<br>(onsite, provided)                                            |                      |                                                                       |                                |                   |
| 12:15 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 12:30 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 12:45 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 13:00 | Plenary Session:<br>Career Panel                  |                        | Plenary Session:<br>Science Communication<br>Renee Murphy              |                      | Field Trip<br>To be determined                                        |                                |                   |
| 13:15 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 13:30 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 13:45 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 14:00 | PFAS                                              | Phytomining I          | Rhizospheric Interactions:<br>Organic Compounds                        | Field Trial Advances |                                                                       |                                |                   |
| 14:15 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 14:30 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 14:45 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 15:00 | Coffee Break                                      |                        | Coffee Break                                                           |                      |                                                                       |                                |                   |
| 15:15 | Rhizospheric Interactions:<br>Inorganic Compounds | Phytomining II         | Agriculture & Food Safety                                              |                      |                                                                       |                                | Salinity & Plants |
| 15:30 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 15:45 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 16:00 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 16:15 | Poster & Networking Session                       |                        | IPS Business Meeting<br>Open to all                                    |                      |                                                                       |                                |                   |
| 16:30 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 16:45 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 17:00 |                                                   |                        | IJP Meeting & Dinner (invite only)                                     |                      | IPS Dinner<br>Open to all<br>Location TBD<br>Pay on your own          |                                |                   |
| 17:15 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 17:30 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 17:45 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |
| 18:00 |                                                   |                        |                                                                        |                      |                                                                       |                                |                   |

| Monday, Oct 26 |                                                                                                                                                                                    |                                                                                                                                                            |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8:30           | Registration Opens                                                                                                                                                                 |                                                                                                                                                            |
| 8:45           |                                                                                                                                                                                    |                                                                                                                                                            |
| 9:00           | Opening & Welcome                                                                                                                                                                  |                                                                                                                                                            |
| 9:15           | <b>Keynote Speaker:</b><br>D. Marshall Porterfield                                                                                                                                 |                                                                                                                                                            |
| 9:30           |                                                                                                                                                                                    |                                                                                                                                                            |
| 9:45           |                                                                                                                                                                                    |                                                                                                                                                            |
| 10:00          | Break                                                                                                                                                                              |                                                                                                                                                            |
| 10:15          | <b>Green Infrastructure &amp; Water -- Room TBD</b>                                                                                                                                | <b>Inorganic Contaminants -- Room TBD</b>                                                                                                                  |
| 10:15          | Karah Conklin: Let the Marsh Work: Natural Remediation in Tidal Wetland Systems                                                                                                    | Longhua Wu: Paclobutrazol Enhances Phytoremediation Efficiency of <i>Sedum plumbizincicola</i> by Biomass Promotion and Flowering Inhibition               |
| 10:30          | Laura Passatore: La Goccia Urban Woodland - from a Polluted Spontaneous Ecosystem to a Public Green Area                                                                           | Mercedes Alvarez Olivares: Accumulation and Translocation Rates in <i>Phragmites australis</i> using Cadmium as an Indicator Metal                         |
| 10:45          | Lou Licht: Water Dynamics on a Landfill Phyto Cover Irrigated with Leachate                                                                                                        | Hayat Kashif: Citric acid-driven Cadmium Uptake and Growth Promotion Mechanisms in <i>Brassica napus</i>                                                   |
| 11:00          | Break                                                                                                                                                                              |                                                                                                                                                            |
| 11:15          | <b>Nanomaterials -- Room TBD</b>                                                                                                                                                   | <b>Organic Contaminants -- Room TBD</b>                                                                                                                    |
| 11:15          | Azam Noori: Root-to-Fruit Partitioning of Silver Nanoparticles and Plant Elemental Homeostasis                                                                                     | Gregory Cohen: Soil Dieldrin Removal by Phytoextraction: a Promising Approach for Agricultural OCP-contaminated Soil Management and Remediation            |
| 11:30          | Sudhir Sharma: Assessing the Efficacy of Cellulose Nanofibers Soil Amendment in Reducing Heavy Metal Bioavailability and Accumulation in Lettuce                                   | Maria J Rodrigues: Early Uptake Dynamics and Stress Responses of <i>Plantago coronopus</i> during Exposure to Key Pharmaceutical Micropollutants           |
| 11:45          | Nicolas Kalogerakis: Phytoremediation of Sb-contaminated soils enhanced by the addition of organic acids and irrigation supplemented with oxygen-nanobubbles                       | Varuni Abhayaratne: Phytoforensic Analysis of 1,4-dioxane to Assess Plant Uptake and Bio-augmented Rhizodegradation                                        |
| 12:00          | <b>Lunch</b><br>(onsite, provided)                                                                                                                                                 |                                                                                                                                                            |
| 12:15          |                                                                                                                                                                                    |                                                                                                                                                            |
| 12:30          |                                                                                                                                                                                    |                                                                                                                                                            |
| 12:45          |                                                                                                                                                                                    |                                                                                                                                                            |
| 13:00          | <b>Plenary Session:</b><br>Career Panel                                                                                                                                            |                                                                                                                                                            |
| 13:15          |                                                                                                                                                                                    |                                                                                                                                                            |
| 13:30          |                                                                                                                                                                                    |                                                                                                                                                            |
| 13:45          |                                                                                                                                                                                    |                                                                                                                                                            |
| 14:00          | <b>PFAS -- Room TBD</b>                                                                                                                                                            | <b>Phytomining I -- Room TBD</b>                                                                                                                           |
| 14:00          | Benoit Van Aken: Bioaccumulation and Seasonal Cycling of PFAS in Native Chesapeake Bay Aquatic Vegetation                                                                          | Adrian Paul: Developing a National Open-Access Database of Metal-Accumulating Plants for Phytomining, with Implications for Phytoremediation               |
| 14:15          | Nubia Zuverza: Immobilization and Phytoextraction: Strategies to limit PFAS food contamination or improve soil remediation                                                         | Olivia Laurine: A Multiscale Platform for Imaging and Chemical Characterization of Rare Earth Elements in Plants                                           |
| 14:30          | Tong Zhou: Uptake, Translocation, and Thermal Degradation of Perfluoroalkyl Substances in Plants: Implications for Food Security and Phytoremediation                              | Colleen Doherty: Exploring Rare Earth Element Uptake and Localization in Hyperaccumulating Plants                                                          |
| 14:45          | Kirby Gimson: Phytoremediation of PFAS: Critical Evaluation of Mechanisms, Performance, and Sustainable Field Applicability                                                        | Mariam Al-Lami: Environmental Impact Assessment of Critical Mineral Extraction from Legacy Mine Tailings                                                   |
| 15:00          | Leonard Mankowski: A Phyto-Enhanced In-Situ Retention (PEIR) Barrier to Intercept a Groundwater PFAS Plume -- The First Step in Creating a Circular Economy PFAS Remedial Approach | Elizabeth L. Rylott: Engineering High-Biomass Plant Platforms for Critical Element Recovery                                                                |
| 15:15          | Coffee Break                                                                                                                                                                       |                                                                                                                                                            |
| 15:30          | <b>Rhizospheric Interactions: Inorganic Compounds -- Room TBD</b>                                                                                                                  | <b>Phytomining II -- Room TBD</b>                                                                                                                          |
| 15:30          | Jess Rubin: Phytoextraction: an Effective Practice in Riparian Forested Buffer Restoration for Water Quality Improvement                                                           | Giuliano Sting Pechar: Engineering Plant-mediated Nickel Solubilisation in the Rhizosphere                                                                 |
| 15:45          | Marta Pogrzeba: Arbuscular Mycorrhizal Symbiosis in Miscanthus: Responses to Extreme Soil Metal Contamination                                                                      | Suresh Kumar Gupta: Integrated Transcriptomics and Metabolomics Provide Insights into the Nickel Hyperaccumulation Trait of <i>Odontarrhena chalcidica</i> |
| 16:00          | Danielle Stevenson: Fungi Increase Lead, Arsenic and Hexavalent Chromium Phytoremediation from Contaminated Soils in Los Angeles                                                   | Yogita Singh: Omics-Guided Insights into Nickel Tolerance and Accumulation Mechanisms in <i>Camelina sativa</i> for Sustainable Phytomining                |
| 16:15          | Barry J Harding: E-Flux Clear-Wells: Field Applications for Micro-scale In-Situ Root Imaging                                                                                       | Thomas J Chaires: Integrating Plant Selection and Cultivation Management to Develop Streptanthus polygaloides for Nickel Phytomining                       |
| 16:30          | <b>Poster &amp; Networking Session</b>                                                                                                                                             |                                                                                                                                                            |
| 16:45          |                                                                                                                                                                                    |                                                                                                                                                            |
| 17:00          |                                                                                                                                                                                    |                                                                                                                                                            |
| 17:15          | <b>IJP Meeting &amp; Dinner (invite only)</b>                                                                                                                                      |                                                                                                                                                            |
| 17:30          |                                                                                                                                                                                    |                                                                                                                                                            |
| 17:45          |                                                                                                                                                                                    |                                                                                                                                                            |
| 18:00          |                                                                                                                                                                                    |                                                                                                                                                            |



**19th International  
Phytotechnologies Conference**



| Tuesday, Oct 27 |                                                                                                                                                                                                                      |                                                                                                                                                                                                        |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8:30            | <b>Plenary Session: Closer to Zero: Reducing Toxic Elements in Food</b>                                                                                                                                              |                                                                                                                                                                                                        |
| 8:30            | Opening Remarks: Jason White & Om Parkash Dhankher                                                                                                                                                                   |                                                                                                                                                                                                        |
| 8:40            | Om Parkash Dhankher: Strategies for Mitigating Arsenic Accumulation in Food Crops                                                                                                                                    |                                                                                                                                                                                                        |
| 9:05            | Matt Limmer: Predicting Rice Grain Accumulation of Arsenic                                                                                                                                                           |                                                                                                                                                                                                        |
| 9:30            | Lili He: Rapid and Cost-Effective XRF Measurement of Total and Inorganic Arsenic in High-Risk Foods                                                                                                                  |                                                                                                                                                                                                        |
| 9:55            | Olena Vatamaniuk: From Gene to Grain and Farm-to-Food Continuum: Integrating Plant Metal Biology and Synchrotron Science to Reduce Toxic Elements in Foods                                                           |                                                                                                                                                                                                        |
| 10:20           | Coffee Break                                                                                                                                                                                                         |                                                                                                                                                                                                        |
| 10:45           | Devin Rose: Reducing Cadmium Toxicity to the Human Gut Microbiota                                                                                                                                                    |                                                                                                                                                                                                        |
| 11:10           | Eileen Abt: FDA's Role in Managing Toxic Elements in Foods and in Advancing International Harmonization of Standards                                                                                                 |                                                                                                                                                                                                        |
| 11:35           | <b>Panel Discussion</b>                                                                                                                                                                                              |                                                                                                                                                                                                        |
| 12:15           | <b>Lunch</b><br>(onsite, provided)                                                                                                                                                                                   |                                                                                                                                                                                                        |
| 12:30           |                                                                                                                                                                                                                      |                                                                                                                                                                                                        |
| 12:45           |                                                                                                                                                                                                                      |                                                                                                                                                                                                        |
| 13:00           |                                                                                                                                                                                                                      |                                                                                                                                                                                                        |
| 13:15           | <b>Plenary Session:</b><br>Science Communication<br>Renee Murphy                                                                                                                                                     |                                                                                                                                                                                                        |
| 13:30           |                                                                                                                                                                                                                      |                                                                                                                                                                                                        |
| 13:45           |                                                                                                                                                                                                                      |                                                                                                                                                                                                        |
| 14:00           |                                                                                                                                                                                                                      |                                                                                                                                                                                                        |
| 14:15           | <b>Rhizospheric Interactions: Organic Compounds -- Room TBD</b>                                                                                                                                                      | <b>Field Trial Advances -- Room TBD</b>                                                                                                                                                                |
| 14:15           | Harrison I. Atagana: Isolation and Characterization of Endophytic Bacteria and Fungi Capable of Enhancing Phytoremediation of Hydrocarbon Polluted Soil from the Medicinal Plant, <i>Vernonia amygdalina</i> Delile. | Wilson Waanab Zoogah: Effects of Soil Amendments on Carbon-Based Indicators of Ecosystem Recovery in Revegetated Mine Soils: Integrating Labile Carbon, Total Organic Carbon, and CO <sub>2</sub> Flux |
| 14:30           | G. Annie Mailloux: Going Deeper: Insights for Phytoremediation from Recent Plant Rooting Depth Research                                                                                                              | Matthew Poltorak: Comprehensive Monitoring of an Endophyte-Assisted-Phytoremediation System Using Advanced Methods                                                                                     |
| 14:45           | Wenjia Ren: Dynamic Characteristics of Fomesafen Dissipation in Soybean Rhizosphere and the Underlying Microbial Mechanisms: A Multi-omics Perspective                                                               | Brad Helland: Long-Term Field Study of VOC Phytoremediation in an Urban Environment                                                                                                                    |
| 15:00           | Ying Teng: Endogenous Biohydrogen from a Rhizobium-legume Association Drives Microbial Biodegradation of Polychlorinated Biphenyl in Contaminated Soil                                                               | Clara Foutch: Integrating Phytotechnology and AI/ML to Assess Post-Remediation Ecosystem Recovery at a Legacy Petroleum Site in Michigan                                                               |
| 15:15           | Maria Isabel Nogues Gonzalez: Remediation of Contaminated Soils Combining Biochar with Bioaugmentation and Phytoremediation Techniques                                                                               | Barry J Harding: Use of Large Language Models (LLM) in the Design and Assessment of Performance Monitoring Data at Phytoremediation Sites                                                              |
| 15:30           | Coffee Break                                                                                                                                                                                                         |                                                                                                                                                                                                        |
| 15:45           | <b>Agriculture &amp; Food Safety -- Room TBD</b>                                                                                                                                                                     | <b>Salinity &amp; Plants -- Room TBD</b>                                                                                                                                                               |
| 15:45           | Jason White: Micro-nanoscale polystyrene and polyvinyl chloride co-exposure impacts the uptake and translocation of toxic elements and pesticides by lettuce and wheat                                               | Cassandra Collins: Integrated Phytoremediation and Rhizosphere Microbial Characterization of Saline Industrial Soils                                                                                   |
| 16:00           | Menhas Saiga: Sustainable Production of Selenium-rich and Cadmium-safe Rice by nZVI-melatonin Synergy via Coordinated Plant-microbe Regulation                                                                       | Mary Beth Leigh: Phytoremediation of Diesel-contaminated Soils Using Native Plants in a Rural Alaska Village                                                                                           |
| 16:15           | Shuai Yang: Optimizing Rice Growth and Soil Heavy Metal Removal with Agroforestry Waste Biomass-Derived Composite Washing Agent                                                                                      | Tiziana Centofanti: Biological Humidification: A Nature-Based Strategy for Solar Desalination using Vertical Halophyte Farming                                                                         |
| 16:30           | Hadeel Obeidat: The Effect of Biomaterials Coating on Sensory Properties of Potatoes During Storage                                                                                                                  | Gary Banuelos: Identification of Plant Species for the Utilization of Simulated Saline Effluent Produced from Reverse Osmosis                                                                          |
| 16:45           | <b>IPS Business Meeting</b><br>Open to all                                                                                                                                                                           |                                                                                                                                                                                                        |
| 17:00           |                                                                                                                                                                                                                      |                                                                                                                                                                                                        |
| 17:30           |                                                                                                                                                                                                                      |                                                                                                                                                                                                        |
| 18:00           | <b>IPS Dinner</b><br>Open to all, Location TBD<br>Pay on your own                                                                                                                                                    |                                                                                                                                                                                                        |
| 18:15           |                                                                                                                                                                                                                      |                                                                                                                                                                                                        |
| 18:30           |                                                                                                                                                                                                                      |                                                                                                                                                                                                        |



**19th International  
Phytotechnologies Conference**



|              |                                                                                                         |                                                                                                                                          |
|--------------|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
|              | <b>Wednesday, Oct 28</b>                                                                                |                                                                                                                                          |
| <b>8:30</b>  | <b>Plenary Speaker:</b>                                                                                 |                                                                                                                                          |
| <b>8:45</b>  | Kate Kennen                                                                                             |                                                                                                                                          |
| <b>9:00</b>  | <b>Micro &amp; Nanoplastics -- Room TBD</b>                                                             | <b>Phyto Feasibility &amp; Acceptance -- Room TBD</b>                                                                                    |
| <b>9:00</b>  | Yongming Luo: Tracing and Quantification of Uptake and Distribution of Micro and Nanoplastics in Plants | Kendra Waltermire: Phytoremediation Feasibility and Defensible Evidence for Field Studies                                                |
| <b>9:15</b>  | Chen Tu: Biofilm Formation and the Underlying Mechanisms Involved in Microplastic Biodegradation        | Christopher Cohu: Trees and Microbes as a Sustainable Phytoremediation Solution for Petroleum Hydrocarbon and Mixed Waste Impacted Sites |
| <b>9:30</b>  | Jie Yang: Clay Minerals Limit Nanoplastic Uptake in Wheat Plant                                         | Douglas Burge: Fast-Track Brownfield Remediation and Sustainable Closure Using Phytoremediation                                          |
| <b>9:45</b>  | <b>Coffee Break</b>                                                                                     |                                                                                                                                          |
| <b>10:00</b> | <b>Plenary Session:</b>                                                                                 |                                                                                                                                          |
| <b>10:15</b> | Phyto Education                                                                                         |                                                                                                                                          |
| <b>10:30</b> | Lee Newman & David Tsao                                                                                 |                                                                                                                                          |
| <b>10:45</b> | <b>Closing Plenary</b>                                                                                  |                                                                                                                                          |
| <b>11:00</b> | Closing Plenary Speaker: Neil Bruce                                                                     |                                                                                                                                          |
| <b>11:00</b> | Awards                                                                                                  |                                                                                                                                          |
| <b>11:30</b> | Election results                                                                                        |                                                                                                                                          |
| <b>11:45</b> | IPC 20                                                                                                  |                                                                                                                                          |
| <b>12:00</b> |                                                                                                         |                                                                                                                                          |
| <b>13:00</b> |                                                                                                         |                                                                                                                                          |
| <b>13:30</b> |                                                                                                         |                                                                                                                                          |
| <b>14:00</b> |                                                                                                         |                                                                                                                                          |
| <b>14:30</b> | <b>Field Trip</b>                                                                                       |                                                                                                                                          |
| <b>15:00</b> | To be determined                                                                                        |                                                                                                                                          |
| <b>15:30</b> |                                                                                                         |                                                                                                                                          |
| <b>16:00</b> |                                                                                                         |                                                                                                                                          |
| <b>16:30</b> |                                                                                                         |                                                                                                                                          |



## 19th International Phytotechnologies Conference



| Poster # | Poster Presenter                | Poster Title                                                                                                                                                    |
|----------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1        | Mariam Al-Lami                  | Evaluating the Phytotoxicity of Beet Juice-Amended Road Deicers on Roadside Vegetation Compared to Traditional Deicing Salts                                    |
| 2        | Sudhir Sharma                   | Assessing the Efficacy of Cellulose Macrofibers Soil Amendment in Reducing Heavy Metal Bioavailability and Accumulation in Lettuce Grown in Two Different Soils |
| 3        | Owen Collins                    | Assessing the Feasibility of Hybrid Poplars for Sulfate Phytoremediation at a Northern Minnesota Site                                                           |
| 4        | Syed Ovais Aftab                | Characterization of AtLAP1 Gene in Arabidopsis to Unravel its Role in Abiotic Stress Tolerance                                                                  |
| 5        | Manzeal Khanal                  | Dual Cu and Zn Phytoremediation Potential of Atriplex lentiformis under Sequential Metal Exposure-Harvest Cycles                                                |
| 6        | Kento Takenouchi                | Evaluation of Ni Absorption and Accumulation Capacity in the Cd Accumulator Salix matsudana var. tortuosa Towards Ni Phytomining                                |
| 7        | Charles Getter                  | From Brownfield to Phytoremediation Pilot: Willows, Poplars, and Tribal Stewardship on the Yaquina River on the Oregon Coast                                    |
| 8        | Josphat Kinyua Kiunga           | Functional Complementation of ArsC-Deficient Escherichia coli Mutants with Arsenate Reductases from Crambe abyssinica                                           |
| 9        | Gregory Cohen                   | Influence of Fruit Color and Seed Origin on Zucchini Contamination by Dieldrin                                                                                  |
| 10       | Joseph Akor                     | Integrating Onsite Headspace GC-PID Analysis of Tree Cores with Passive Sampler Evaluation for Subsurface Chlorinated Volatile Organic Compounds Monitoring     |
| 11       | Mariam Al-Lami                  | Long-Term Amendment-Assisted Phytoremediation and Geochemical Stabilization of Pb/Zn/Cu Mine Tailings                                                           |
| 12       | Tarun Sai Naregudam             | Low-Cost Computer Vision Pipeline for High-Throughput Monitoring of Plant Stress in Phytoremediation Studies                                                    |
| 13       | Naila Shah                      | Metal-Metal Antagonism and Synergy: Copper and Cadmium Co-Exposure Alters Plant Physiology and Bioaccumulation                                                  |
| 14       | Kazuki Sugawara                 | Nickel Hyperaccumulation in Mosses and Leaching Behavior from Rocks in Japanese Serpentine Regions                                                              |
| 15       | Violina Angelova Rizova         | Phytoremediation Biomass as a Bioenergy Resource: Fuel Properties and Emissions of Perennial Crops on Contaminated Soils                                        |
| 16       | Liz Rylott                      | Phytoremediation Strategies for the Detoxification of Explosive Compounds                                                                                       |
| 17       | Laura Passatore                 | Phytotechnologies for Soils Contaminated with Pyrite Ashes: Preliminary Results from a Case Study in Central Italy                                              |
| 18       | Joel Burken                     | Pilot-Scale Bioaugmented Phytoremediation to Treat 1,4-Dioxane-Contaminated Groundwater                                                                         |
| 19       | Louis Arthur Licht              | Septic Wastewater Treatment Results Using PhAGR at PanelView RV Park, Hermiston OR.                                                                             |
| 20       | Tong Zhou                       | Uptake and Translocation of Per- and Polyfluoroalkyl Substances by Woody and Herbaceous Plants in Field-Relevant Soil to Evaluate Phytoremediation              |
| 21       | Samantha Freeman                | Uptake Mechanisms of PFOA in Genetic Model plant N. tabacum                                                                                                     |
| 22       | Karah Conklin                   | Water In, Water Out: Designing Phytoremediation into the Full Site Water Cycle                                                                                  |
| 23       | Raja Muthuramalingam Thangavelu | Leaf-Waste-Derived Lignin Carbon Dots as Sustainable UV-Protective Foliar Coatings for Climate-Resilient Agriculture                                            |
| 24       | Raees Ahmad                     | Accumulation and Translocation of Emerging Contaminants and Their Transformation Products in Broccoli Microgreens Irrigated with Treated Wastewater             |

|    |                             |                                                                                                                                                             |
|----|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 25 | Joseph Akor                 | Integrating Onsite Headspace GC-PID Analysis of Tree Cores with Passive Sampler Evaluation for Subsurface Chlorinated Volatile Organic Compounds Monitoring |
| 26 | Aneth Castaneda             | Assessing Portable X-Ray Fluorescence for Metal Quantification of Serpentine Soils and <i>Streptanthus polygaloides</i>                                     |
| 27 | Valentina Mazzurco-Miritana | Microbial Dynamics in Petroleum Contaminated Soil remediated with Biochar, Bioactivators, and Plants                                                        |
| 28 | Zeyu Cai                    | Synthesis of EOs-loaded nanocarriers and their antibacterial activity against <i>Erwinia amylovora</i>                                                      |