

Plenary Program

Sep. 22 Morning

Opening Ceremony & Plenary Talks

Time	Topic	Speaker & Institution
Moderator	Sun, Hongwen	
08:30-09:00	Opening Ceremony	
Moderator	Brooks, Bryan; Zhu, Lizhong	
09:00-09:40	Identification and toxicological understanding of new pollutants: A case study of tetrabromobisphenol A compounds	Jiang, Guibin Research Center for Eco-Environmental Sciences, CAS, China
09:40-10:20	Asia-pacific perspectives on ecological risk assessment and management of chemicals and mixtures	Yamamoto, Hiroshi National Institute for Environmental Studies, Japan
10:20-10:40	Tea Break	
Moderator	Le, X.Chris; Ma, Jun	
10:40-11:20	Learning from environmental chemistry: A mechanism-based approach to toxicology and chemical risk assessment	Escher, Beate Helmholtz Centre for Environmental Research, UFZ, Germany
11:20-12:00	Addressing the triple planetary crisis: Incorporating climate change into environmental risk assessment	Stauber, Jennifer La Trobe University, Australia

Sep. 24 Afternoon

Plenary Talks & Closing Ceremony

Time	Topic	Speaker & Institution
Moderator	Richard, Susan; Tao, Shu	
13:30-14:10	Plastisphere in One Health	Zhu, Yongguan Research Center for Eco-Environmental Sciences, CAS, China
14:10-14:50	Turning tandem mass spectra into metabolite structure information: What is new in SIRIUS 6?	Böcker, Sebastian Friedrich Schiller University Jena, Germany
14:50-15:30	Fate and impacts of antibiotics in agricultural soils	Topp, Edward University of Burgundy, France
15:30-16:10	Occurrence and transformation of PFAS in the environment	Sun, Hongwen Nankai University, China
Moderator	Zhu, Lingyan	
16:10-16:40	Closing Ceremony	



Plenary Speakers



Jiang, Guibin

Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
China

Professor Jiang Guibin is an academican of the Chinese Academy of Sciences, fellow of the Academy of Sciences of the Developing Countries. He graduated from the Department of Chemistry, Shandong University in January 1982, and received his master's and doctoral degrees from the Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences from 1987 to 1991. From 1989 to 1991 and 1994 to 1996, he was a visiting scholar and postdoctoral researcher at the National Research Council of Canada and the University of Antwerp, Belgium, respectively.

Prof. Jiang's research is mainly focused on analytical development, environmental fate, toxicology and health effects of persistent organic pollutants (POPs), organometallic compounds and nano-materials. As the pioneer of the fields of new pollutants, his research conducted the academic direction of discovering new pollutants in real environment and acted as the irreplaceable role for the implementation of the Stockholm Convention on Persistent Organic Pollutants and the Minamata Convention on Mercury in China.

He has contributed more than 1300 papers in peer-reviewed international scientific journals and published 23 monographs. He was honored with the prestigious Chang Jiang Scholars Achievement Award in 2007, National Award of Natural Science of State Council of China in 2003, 2011 and 2018, Outstanding Achievements in Environmental Science & Technology Award (American Chemical Society) in 2020, Agilent Thought Leader Award in 2013, and Outstanding Science and Technology Achievement Prize of Chinese Academy of Sciences in 2013.



Yamamoto, Hiroshi

National Institute for Environmental Studies
Japan

Hiroshi Yamamoto received MS from Graduate School of Global Environmental Engineering of Kyoto University in 1997 and Ph.D. from Environmental and Water Resource Engineering, The University of Texas at Austin in 2002. He served as assistant professor and associate professor at Tokushima University between 2004 and 2016, and moved to National Institute for Environmental Studies (NIES) in April 2016 and became Head of Ecotoxicity Section in Center for Health and Environmental Risk Research. He was promoted to be Deputy Director in 2019 and became Director of Division of Health and Environmental Risk in April 2024. His expertise is in fate and ecological risk of micropollutants such as pharmaceuticals, pesticides, surfactants and other industrial chemicals, and more recently in plastics.

He is a visiting professor at Graduate School of Frontier Science, The University of Tokyo. He has been contributing to international standardization of ecotoxicity testing methods and hazard assessment under Organization for Economic Cooperation and Development (OECD). He has also been involved in environmental risk assessment of chemicals in Japan for more than 20 years mostly under Ministry of the Environment. He has been a board member of SETAC Asia-Pacific for more than three years and became Vice President in 2022. He has also been a Vice President of SETAC Japan since 2022.



Escher, Beate

Helmholtz Centre for Environmental Research, UFZ
Germany

Beate Escher is Head of Department of Cell Toxicology since October 2014. She holds a professorship in Environmental Toxicology at Eberhard Karls University Tübingen. She is lecturer (Privatdozent) at the Swiss Federal Institute of Technology in ETHZ, Switzerland. She holds a professorship at the University of Queensland and an adjunct professorship at Griffith University, Australia. She is member of the German Council of Science and Humanities and of the board of reviewing editors at SCIENCE. Beate Escher's research interests focus on mode-of-action based environmental risk assessment, including methods for initial hazard screening and risk assessment of pharmaceuticals, pesticides, disinfection by-products and persistent organic pollutants with an emphasis on mixtures. A special interest is the effect assessment of transformation products and disinfection by-products. One of Escher's goals is to close the gap between exposure and effect assessment through common approaches linking bioavailability to internal exposure and effects via understanding and modelling of toxicokinetic and toxicodynamic processes. More practically oriented aspects of her work include passive sampling and effect-based methods for water quality assessment. Further she has an interest in improving dosing methods for very hydrophobic and volatile compounds and to develop new in-vitro assays for bioaccumulation and toxicity assessment.



Stauber, Jennifer

GAICD, FTSE, FAA, SETAC Fellow
La Trobe University
Australia

Dr Jenny Stauber is an Adjunct Professor at La Trobe University, Australia. She has recently retired from CSIRO Environment, Sydney, Australia where she was a Chief Research Scientist and formerly Deputy Chief and Acting Chief of CSIRO Land and Water. Jenny is an aquatic ecotoxicologist with expertise in the bioavailability and toxicity of contaminants in marine and freshwater systems, environmental risk assessment, downstream impacts of mining, and the derivation of toxicant water and sediment quality guidelines.

Jenny has chaired and served as expert ecotoxicologist on many World Health Organisation chemical review boards and is currently a member of the Ecotoxicity Technical Advisory Panel for the International Metals Associations. She is a member of a large number of expert advisory panels to the Australian government and industry on areas as diverse as chemical contaminants, Great Barrier Reef water quality, petroleum and mineral resources, chemicals risk assessment and water quality guidelines. She is a graduate of the Australian Institute of Company Directors and a SETAC Fellow. She is a Fellow of both the Australian Academy of Science and the Australian Academy of Technology and Engineering. She was a recipient of Australia's Land and Water Eureka Prize in 2006 and has authored over 400 journal papers, book chapters and reports.



Zhu, Yongguan

Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
China

Professor Yongguan (Yong-Guan) Zhu, Academician of the Chinese Academy of Sciences (CAS), Fellow of TWAS (The World Academy of Sciences), Fellow of International Science Council (ISC), professor of environmental science, is the Director General of the Research Center for Eco-environmental Sciences, CAS. He has been working on environmental health and wellbeing related to pollution, soil biodiversity and microbial ecology. He obtained his PhD from Imperial College, London in 1998. He was a scientific committee member for ISC program on Human Health and Wellbeing in Changing Urban Environment, and is a member of Committee of Science Planning of ISC. He served for nine years as a member of Standing Advisory Group for Nuclear Application, International Atomic Energy Agency (2004-2012). He has received many merit awards, including TWAS Award for Agricultural Science 2013, National Natural Science Award 2009, International Union of Soil Science von Liebig Award 2022. He was selected as a Web of Science Highly Cited Researcher (2016-2023) with citations over 57,000 times and an H-index of 124.



Böcker, Sebastian

Friedrich Schiller University Jena
Germany

Sebastian Böcker holds the Chair for Bioinformatics at the Institute for Computer Science, Friedrich Schiller University Jena, Germany. He studied mathematics and did his PhD in biomathematics at Bielefeld University, focusing on theoretical phylogenetics. He then went to industry for three years, developing computational methods for the interpretation of DNA/RNA mass spectrometry data. He returned to Bielefeld University as an independent research leader, before he took up his current position in Jena. His research interests are mainly method-driven and were originally focused on combinatorics and algorithmics; later, stochastics and machine learning joined the methods of interest. On the application side, his research focuses on the annotation of small molecules from mass spectrometry data: SIRIUS, CSI: FingerID and CANOPUS from his group were named «methods to watch» by Nature Methods. Sebastian Böcker is an Emmy Noether fellow (Computer Science Action Program) of the Deutsche Forschungsgemeinschaft and also a fellow of the Alexander-von-Humboldt Society. In 2022, he and his group won the Thuringian Research prize.



Topp, Edward

University of Burgundy
France

Since July 2023, Ed Topp has held the ANR/INSERM Chair of Excellence, Priority Research Program of France on Antibiotic Resistance, and Director of Research at the UMR Agroecology at the INRAE research center in Dijon. Before his arrival in France, he was a Principal research scientist with Agriculture and Agri-Food Canada (AAFC). He was also the scientific coordinator (2016-23) of the Federal genomics research and development initiative on antimicrobial resistance [GRDI-AMR], a key element of the Canadian federal action plan against antimicrobial resistance. He holds adjunct faculty positions in the Department of Biology at the University of Western Ontario, and at the Ontario Veterinary College at the University of Guelph. He is an environmental microbiologist and chemist and conducts research on animal and crop production practices that are protective of environmental and human health. A particular focus is the mitigation of the development and transmission of antimicrobial resistance. He is a past president of the Canadian Society for Microbiologists (2011). He was elected a member of l'academie d'agriculture de France (2016) and was appointed a Fellow of the Soil Science of America (2022).



Sun, Hongwen

Nankai University
China

Dr. Hongwen Sun is a professor and former dean of College of Environmental Science and Engineering, Nankai University, China. She acquired her Ph D at Nankai University in 1994 and has been working there till now. She worked in Osaka University, Japan as a postdoctoral researcher during 1999-2001 and in Swiss Federal Institute of Water Technology (Eawag), Switzerland as a visiting scholar in 2008. She holds the chair of, 1) Center on Environmental Processes and Risk Assessment of Emerging Contaminants, which is a discipline innovation and international exchange center supported by Ministry of Education, China; 2) Innovative Team on Risk Assessment and Pollution Remediation supported by Ministry of Science and Engineering, China. She commits herself to two research fields: 1) Source, fate, and human exposure of emerging organic contaminants including perfluoroalkyl substances, plasticizers and fire retardants etc; 2) Novel materials and technologies for the remediation of polluted soil. She has published over 600 journal papers and several book chapters and edited one monograph of “Biochar and Environment”. The papers have been cited more than 15,000 times and she was selected as highly cited scholar by Elsevier. She was named with several talent titles by Ministry of Education, Ministry of Science and Technology, and Natural Science Foundation of China. She is currently Advisory Board Member for the journal of Environmental Science & Technology, serves several other internal and international journals as editor board member. She is an executive member of Soil Science Society of China and vice chairmen of Committee of Pollution Control of Emerging Contaminants, and member of several other academic committees.