

Conference Schedule

Friday, 23 rd October 2026		
14:00-20:00	Registration (Lobby, Building 1, Zhongguan Xinyuan Global Village, PKU)	
18:00-20:00	Dinner (Heyuan Restaurant, Building 5, 1 st floor)	
Saturday Morning, 24 th October 2026		
Plenary Session (Room Qunying, Building 1, B1 floor, Zhongguan Xinyuan Global Village, PKU)		
Chaired by Professor Marc F. Benedetti and William P. Johnson		
9:00-9:20	Welcome Speech by Prof. Marc F. Benedetti	
9:20-9:50	Jinren Ni	Peking University, China
	All Material Fluxes in River Ecosystems: Exploring the Interconnection of Earth's Substances	
9:50-10:20	Gary Parker	University of Illinois Urbana-Champaign, USA
	The Roles of Abrasion and Selective Sorting in Downstream Decrease of Bed-material Grain Size in River	
10:20-10:50	Photo & Tea Break	
10:50-11:20	Norbert Hertkorn	Helmholtz Zentrum München, Germany
	Molecular Structures of Freshwater Dissolved Organic Matter are Largely Distinct from Known Biogeomolecules	
11:20-11:50	Marc F. Benedetti	Université Paris Cité France
	Tracking Natural and Engineered Nanoparticles in Complex Environmental Systems	
12:00-13:30	Lunch (Heyuan Restaurant, Building 5, 1 st floor)	
Saturday Afternoon, 24 th October 2026		
Session Reports (Building 1, Zhongguan Xinyuan Global Village, PKU)		
13:30-18:00	Session 1: Water-sediment fluxes and river health (Room Kebao, 2 nd floor)	
	Session 2: Basin materials interactions and energy cycling (Room Guanhu A, 2 nd floor)	
	Session 3: CN cycling and greenhouse gases in aquatic systems (Room Conference one, 2 nd floor)	
	Session 4: Point source pollution control and emerging contaminants monitoring in rivers (Room Guanhu B, 2 nd floor)	
	Session 5: AI-driven modeling and quantitative assessment (Room Conference two, 2 nd floor)	
	Poster Presentation (corridor of 2 nd floor)	
18:30-20:30	Gala Dinner (Room Qunying, Building 1, B1 floor)	

Sunday Morning, 25 th October 2026		
Session Reports (Building 1, Zhongguan Xinyuan Global Village, PKU)		
8:30-12:00	Session 1: Water-sediment fluxes and river health (Room Kebao, 2 nd floor)	
	Session 2: Basin materials interactions and energy cycling (Room Guanhu A, 2 nd floor)	
	Session 3: CN cycling and greenhouse gases in aquatic systems (Room Conference one, 2 nd floor)	
	Session 4: Point source pollution control and emerging contaminants monitoring in rivers (Room Guanhu B, 2 nd floor)	
	Session 5: AI-driven modeling and quantitative assessment (Room Conference two, 2 nd floor)	
	Poster Presentation (corridor of 2 nd floor)	
12:00-13:30	Lunch (Shi Guang Western Restaurant, Building 1, 2 nd floor)	
Sunday Afternoon, 25 th October 2026		
Plenary Session (Room Kebao, Building 1, 2 nd floor, Zhongguan Xinyuan Global Village, PKU)		
Chaired by Professor Alistair Borthwick and Meiping Tong		
13:30-14:00	Paola Passalacqua	ETH Zurich, Switzerland
	Predicting Flux Partitioning in River Deltas: From a Field Case to Global Applications	
14:00-14:30	William P. Johnson	University of Utah, USA
	Beyond Straining and Detachment Coefficients: Interception History-Based Prediction of Colloid Transport in Groundwater	
14:30-15:00	Stephanie Olen	Nature Sustainability, Associate Editor, Germany
	Research for Sustainable Rivers 2030 and Beyond	
15:00-15:30	Tea Break	
15:30-16:00	Bing Chen	Memorial University of Newfoundland, Canada
	Persistent and Emerging Pollution and Mitigation from Glaciers to Oceans in Cold and Arctic Regions	
16:00-16:30	Sergey Chalov	Lomonosov Moscow State University, Russia
	Most Novel Assessment of Chemical Flux into Arctic Ocean by Large Siberian Rivers Based on Unprecedented Monitoring Effort	
16:30-17:00	Marina Andrijevic	The International Institute for Applied Systems Analysis, Austria
	Incorporating Socio-economic Capacities in Responses to Climate Change	
17:00-17:15	Close Speech by Prof. Alistair Borthwick	
17:30-19:30	Dinner (Shi Guang Western Restaurant, Building 1, 2 nd floor)	

Session Program

Session 1: Water-sediment fluxes and river health (Room Kebao, 2 nd floor)		
Saturday Afternoon, 24 th October 2026		
Session chaired by Prof. Weiling Sun, Yuefei Huang, and Huapeng Qin		
13:30-13:50	James Kirchner	ETH Zurich, Switzerland
	(Keynote) Transport of Water and Solutes in Rivers and Their Catchments: A Journey across Scales in Time and Space	
13:50-14:10	Qiuwen Chen	Yangtze Institute for Conservation and Green Development, Nanjing Hydraulic Research Institute, China
	(Keynote) River Dam Impacts on Biogeochemical Cycling and Fish Habitat	
14:10-14:30	Fan Zhang	Institute of Tibetan Plateau Research, Chinese Academy of Sciences, China
	(Keynote) Variations of Glacier Runoff Suspended Sediment and Its Source Tracing in the Qongqionggangri Catchment	
14:30-14:50	Vladislav Isaev	Shenzhen MSU-BIT University, China
	(Keynote) The Main Approaches and Results of Coastal Erosion Processes Research in Arctic as a Framework of 10th Years Field Observations of Baydara Bay West Coast	
14:50-15:05	Niannian Fan	Sichuan University, China
	Repeated Glacial Lake Outburst Floods and Their Effects on Landscape Evolution Along the Mekong River	
15:05-15:20	Guangyao Gao	Research Center for Eco-Environmental Sciences , Chinese Academy of Sciences, China
	Changes of Water-Sediment Fluxes across Multiple Scales in the Yellow River Basin	
15:20-15:35	Yuan Yuan	Changjiang River Scientific Research Institute of Changjiang Water Resources Commission, China
	Evolution of Inflow Water and Sediment from Four Rivers into Dongting Lake Affected by Cascade Reservoirs	
15:35-15:50	Tea Break	
Session chaired by Prof. Qiuwen Chen, Fan Zhang, and Guojian He		
15:50-16:10	Xixi Lu	National University of Singapore, Singapore
	(Keynote) From a Hanging to a Normal River: Rethinking Channel Adjustment and Management of the Lower Yellow River	
16:10-16:30	Pei Xin	Hohai University, China
	(Keynote) Subterranean Estuaries: Another Important Pathway for Terrestrial Materials to Enter the Sea	
16:30-16:50	Xiaotao Shi	China Three Gorges University, China
	(Keynote) River Nutrient Supply from Upstream Migratory Fish: Barrier Impacts of	

	Dams and Restoration Effects of Fishways	
16:50-17:05	Wei Li	Changjiang River Scientific Research Institute of Changjiang Water Resources Commission, China
	Extreme Water Temperature Adaptation of Native Fish Spawning; Fertilized Egg Development and Climate Response in the Yangtze Headwaters	
17:05-17:20	Jia Jia	Yellow River Conservancy Commission, Yellow River Institute of Hydraulic Research, China
	Water-Sediment Regulation and Its Ecological Effects in the Yellow River Basin under Climate Change	
17:20-17:35	Xi Shi	Wuhan University, China
	Succession Dynamics of Floodplain Vegetation Along the Middle Yangtze River in Response to the Operation of the Three Gorges Project	
17:35-17:50	Ziqin Gui/Chao Liu	Sichuan University, China
	Nonuniform Sediment Deposition in Flows with Floating Vegetation Canopy	
17:50-18:05	Xinxin Yang	East China Normal University, China
	Long-Term Changes of River Discharge in the Yangtze Delta	
18:30-20:30	Dinner (Room Qunying, Building 1, B1 floor)	
Sunday Morning, 25 th October 2026		
Session chaired by Prof. Nan Xu, Huacheng Xu, and Dongfeng Li		
8:30-8:50	Simone Bizzi	University of Padova, Italy
	(Keynote) Morphological Memory of River Fluxes	
8:50-9:10	Xudong Fu	Tsinghua University, China
	(Keynote) Earthquake-altered Sediment Yield-Transport Relationships and Resulting Engineering Impacts	
9:10-9:30	Junqiang Xia	Wuhan University, China
	(Keynote) Yellow River Water–Sediment Simulator	
9:30-9:45	Shuolin Li	Wuhan University, China
	Turbulence and Sediment Transport in Vegetated Channels	
9:45-10:00	Xianfu Zhao	Institute of Hydroecology, Ministry of Water Resources & Chinese Academy of Sciences, China
	Linking Hydrological Connectivity and Ecological Fluxes through Heterogeneous Dispersal Networks: Evidence from Benthic Macroinvertebrates in the Chishui River	
10:00-10:15	Tea Break	
Session chaired by Prof. Xudong Fu, Pei Xin, and Zhonghua Yang		
10:15-10:35	Shanghong Zhang	North China Electric Power University, China

	(Keynote) Dynamic Modelling and Ecological Health Evaluation of River-Lake Ecosystems in a Changing Environment	
10:35-10:55	Huacheng Xu	Nanjing Institute of Geography & Limnology Chinese Academy of Sciences, China
	(Keynote) Colloidal Particles in Rivers and Lakes Contribute to the Concentration of Hydroxyl Radicals in Aquatic Systems	
10:55-11:10	Shengjie Li	Shanghai Jiao Tong University, China
	Microbial Colonization of Sinking Aggregates in Coastal Oxygen Minimum Zone Waters and Its Impact on Denitrification	
11:10-11:25	Kunxia Yu	Xi'an University of Technology, China
	Extreme Precipitation Shapes Soil Erosion in the Upper and Middle Yellow River Basin	
11:25-11:40	Kun Zhao	University of Padua, Italy
	Variability in Alluvial River Width Driven by Intermittent Bank Collapse	
11:40-11:55	Chao Guo	Changjiang River Scientific Research Institute of Changjiang Water Resources Commission, China
	Experimental Study on the Coupling Effects of Low-Concentration Electrolytes and Organic Matter on Sediment Flocculation	
11:55-12:10	Enhang Liang	Fuzhou University, China
	A Global Synthesis Reveals the Role of Strategic Hydropower Planning in Mitigating Adverse Impacts of Reservoir Flooding	
12:10-13:30	Lunch (Shi Guang Western Restaurant, Building 1, 2 nd floor)	

Session 2: Basin materials interactions and energy cycling (Room Guanhu A, 2 nd floor)		
Saturday Afternoon, 24 th October 2026		
Session chaired by Prof. Yandi Hu and Chao Jin		
13:30-13:35	Introduction to the Session	
13:35-13:55	Qingjun Guo	Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, China
	(Keynote) Migration of Nitrogen, Phosphorus and Sulfur in the Main Stream of the Yangtze River and Its Impact on the Environment	
13:55-14:15	Xiaojuan Feng	Institute of Botany, Chinese Academy of Sciences, China
	(Keynote) Warming Triggers Aquatic Release of Old Carbon from Peatlands via Iron Reduction	
14:15-14:30	Guangfei Liu	Dalian University of Technology, China
	Altered Cell Viability, Morphology, and Motility under Ciprofloxacin Stress Influence the Transport and Resistance of Bacteria in Saturated Porous Media	
14:30-14:45	Shunan Dong	Hohai University, China
	Pore-Scale Visualized Transport and Retention of Fibrous and Fragmental Microplastics in Porous Media under Various Surfactant Conditions	
14:45-15:00	Fuxin Zhang	South China University of Technology, China
	Hydrodynamic Reconstruction as a Pathway for Environmental Improvement in Downstream River Networks	
15:00-15:15	Tao Xu	South China University of Technology, China
	Variations of Water Quality and Sediment Characteristics in a Tidal-Influenced Urban Landscape River	
15:15-15:30	Rui Cai	Fuzhou University, China
	Dynamics and Drivers of River Discharge and Water Quality in the Lower Yellow River under Water-Sediment Regulation	
15:30-16:00	Tea Break	
Session chaired by Prof. Yandi Hu and Chao Jin		
16:00-16:20	E Bai	Changchun Normal University, China
	(Keynote) Microbial Carbon Use Efficiency and Its Impacts on Soil Organic Carbon	
16:20-16:40	Chao Jin	Sun Yat-sen University, China
	(Keynote) Direct Evidence from Multiscale Measurements Explains the Nonmonotonic Deposition of Microplastics in the Presence of Dissolved Organic Matter: Overlooked Contribution of Molecular Self-Assembly	
16:40-16:55	Dawei Wang	Hohai University, China

	Mechanistic Insights into the Biogeochemical Transformation of Dissolved Organic Matter Mediated by Heterogeneous Water Mixing	
16:55-17:10	Jie Liang	Hunan University, China
	Study on the Linkage between Watershed Processes and Carbon-Nitrogen Transformation in River-Lake Water Environments	
17:10-17:25	Zheng Sun	Nanjing Hydraulic Research Institute, China
	Limitation of Plant Input Weakens Global Wetland Soil Carbon Sink and Climate Mitigation Potential	
18:30-20:30	Dinner (Room Qunying, Building 1, B1 floor)	
Sunday Morning, 25 th October 2026		
Session chaired by Prof. Jianying Shang and Xiaofan Yang		
8:30-8:50	Yoshio Takahashi	The University of Tokyo, Japan
	(Keynote) Molecular Geochemistry: Importance of Element Speciation for Understanding Their Behavior in Natural Systems Using XAFS	
8:50-9:10	Thomas Blattmann	National University of Singapore, Singapore
	(Keynote) From Regional-Decadal-Scale Change in Characteristics of Riverine Organic Carbon Export to Molecular-Millennial-Scale Control of Marine Organic Carbon Sequestration by Minerals	
9:10-9:25	Haoran Zhou	Bureau of Hydrology, Changjiang Water Resources Commission, China
	Estimation of Daily-Scale Pollutant Fluxes and Retention Characteristics in the Danjiangkou Reservoir	
9:25-9:40	Ruixueer Wu	Institute of Atmospheric Physics, Chinese Academy of Sciences, China
	Divergent Controls of Climate and Fertilization on Riverine Nitrogen Export across China	
9:40-9:55	Ziyi Wang	Hohai University, China
	Alternating Storage and Diversion Promote Nitrate Accumulation and Multitrophic Microbial Community Restructuring in Regulated Lakes of a Large Water Diversion Project	
9:55-10:20	Tea Break	
Session chaired by Prof. Jianying Shang and Xiaofan Yang		
10:20-10:40	Jianying Shang	China Agricultural University, China
	(Keynote) Feedstock-Dependent Mobility of Pyrogenic Carbon Colloids under Naphthalene: Dominant Role of Zeta Potential and Adsorption Behavior	
10:40-11:00	Xiaofan Yang	Beijing Normal University, China
	(Keynote) Effects of Fracture-Matrix Flow Interactions on Biofilm Formation in Rough Fractures	

11:00-11:15	Li Cai	Donghua University, China
	Spatially Evolving Retention Mechanisms and Transport Prediction of Textile Microfibers in Porous Media	
11:15-11:30	Lei He	China University of Petroleum, Beijing, China
	Limitation of Carbon and Nitrogen Nutrients Could Induce Contrasting Bacterial Transport Performance in Porous Media	
11:30-13:30	Lunch (Shi Guang Western Restaurant, Building 1, 2 nd floor)	

Session 3: CN cycling and greenhouse gases in aquatic systems (Room Conference 1, 2 nd floor)		
Saturday Afternoon, 24 th October 2026		
Session chaired by Prof. Mingquan Yan, Norbert Hertkorn, and Hanqing Fan		
13:30-13:40	Introduction to the Session	
13:40-14:00	Gregory V. Korshin	University of Washington, USA
	(Keynote) Comparison of Mobilization and Cycles of Arsenic and Antimony in Natural and Engineered Systems	
14:00-14:20	Xinghui Xia	Beijing Normal University, China
	(Keynote) Surface Water Greenhouse Gas Emissions Amplified by Human Activities: Implications for Synergistic Water Quality Improvement and Carbon Mitigation	
14:20-14:40	Alex Enrich Prast	Linköping University, Sweden
	(Keynote) Contrasting C and N Cycling in Tropical Riverine Systems	
14:40-14:55	Yao Yue	Wuhan University, China
	Why GHGs Emission Favors Small-ordered Streams of a Hierarchical River System?	
14:55-15:10	Liwei Zhang	East China Normal University, China
	Carbon Cycling in Permafrost Rivers on the Qinghai-Tibet Plateau	
15:10-15:25	Xudong Zhou	Nanjing Hydraulic Research Institute, China
	Integrating Multi-pathway Accounting and Topographic Effects to Reassess the Greenhouse Gas Emission from Hydropower	
15:25-15:40	Tea Break	
15:40-16:00	Sepehr Shakeri Yekta	Linköping University, Sweden
	(Keynote) Structural Mapping of Effluent Organic Matter	
16:00-16:20	Bing Li	Tsinghua University, China
	(Keynote) Hydrodynamics-triggered Piezoelectric Electron Generation for Mineral Phosphorus Mobilization	
16:20-16:40	Peng Zhang	Kunming University of Science and Technology, China
	(Keynote) Photochemical DOM Activation Elevates N ₂ O Emission Factors in Yunnan Rivers via Bioavailable Aromatic Intermediates	
16:40-16:55	Xinnan Pan	Hohai University, China

	Carbon Cycling under Long-distance Inter-basin Water Transfer: Coupled Processes and Flux Dynamics from the Middle Route of the South-to-North Water Diversion Project	
16:55-17:10	Feng Zhou	Peking University Shenzhen Graduate School, China
	Canal-induced Shifts in Phytoplankton Group Occurrence Probabilities Revealed by a Joint Species Distribution Model	
17:10-17:25	Rabia Dars	Hohai University, China
	Evaluating the Effects of Climate Variability and Human Activities on Groundwater Levels Using Machine Learning	
18:30-20:30	Dinner (Room Qunying, Building 1, B1 floor)	
Sunday Morning, 25 th October 2026		
Session chaired by Prof. Sitong Liu, Alex Enrich Prast, and Zishuai Zhang		
8:30-8:35	Introduction to the Session	
8:35-8:55	Irina Perminova	Moscow State University, Russia
	(Keynote) Molecular Signatures of Dissolved Organic Matter in the Great Siberian Rivers and the Arctic Shelf as a Proxy of Evolving Carbon Chemistry	
8:55-9:15	Oliver Lechtenfeld	Helmholtz Centre for Environmental Research—UFZ, Germany
	(Keynote) From Frequencies to Function: Decoding Environmental Organic Matter with Ultrahigh-Resolution Mass Spectrometry	
9:15-9:35	Zhe Li	Chongqing Institute of Green and Intelligent Technology (CIGIT), University of Chinese Academy of Sciences, China
	(Keynote) Cascade Damming Drives the Evolution of Riverine C:N:P Stoichiometric Characteristics with Cumulative Consequences for Reservoir Carbon Cycling	
9:35-9:50	Marine Gelin	Nanyang Technological University, Singapore
	The Fate of Glacial Colloids at the Freshwater-Seawater Interface	
9:50-10:05	Wenrui Yao	Helmholtz Centre for Environmental Research—UFZ, Germany
	Dissolved Organic Matter Dynamic under Climate-Driven Forest Dieback in Headwater Catchment	
10:05-10:20	Xu Han	Peking University Shenzhen Graduate School, China
	Spatial Heterogeneity and Unit-Scale Responses of Benthic Habitats to Hydrodynamic Reconfiguration Under Large-Scale Canal Engineering	
10:20-10:30	Tea Break	

10:30-11:30	Workshop: Natural Organic Matter: From Molecular to Global Discussion with: Mingquan Yan, Marc F. Benedetti, Norbert Hertkorn, Gregory V. Korshin, Xinghui Xia, Alex Enrich Prast, Sepehr Shakeri Yekta, Bing Li, Peng Zhang, Irina Perminova, Oliver Lechtenfeld, and Zhe Li <i>Open to all conference attendees</i>
11:30-13:30	Lunch (Shi Guang Western Restaurant, Building 1, 2 nd floor)

Session 4: Point source pollution control and emerging contaminants monitoring in rivers (Room Guanhu B, 2 nd floor)		
Saturday Afternoon, 24 th October 2026		
Session chaired by Prof. Wen Liu and Chongchen Wang		
13:30-13:50	Wei Zhang	Michigan State University, USA
	(Keynote) Predicting Crop Uptake of Per- and Polyfluoroalkyl Substances with Machine Learning	
13:50-14:10	Guangxue Wu	University of Galway, Ireland
	(Keynote) Genome Organisation Reveals Discrete Extracellular Electron-Transfer Strategies across Prokaryotic Lineages and Environments	
14:10-14:22	Xiuping Zhu	Fudan University, China
	Graphene Nanoplatelet-Enhanced Hydrogels for Efficient and Durable Desalination	
14:22-14:34	Chongchen Wang	Beijing University of Civil Engineering and Architecture, China
	MOF-Mediated Non-Radical Processes for Organic Pollutant Degradation	
14:34-14:46	Na Zheng	Jilin University, China
	Ecotoxicology and Multi-Scale Risk of Microplastic Exposure in Chinese Estuaries	
14:46-14:58	Zhurui Shen	Nankai University, China
	Selective Catalytic Conversion of Molecular Oxygen to Reactive Oxygen Species for the Degradation of Emerging Contaminants	
14:58-15:10	Xingtao Xu	Zhejiang Ocean University, China
	Capacitive Deionization: Introducing an Emerging Technology for Charged Contaminant Removal from Water	
15:10-15:22	Yelong Chen	National University of Singapore, Singapore
	Sulfate Radicals-assisted Coagulation for <i>Raphidiopsis</i> -Laden Water: Removal of Algal Organic Matter, Cyanotoxins and Formation of Disinfection by-products	
15:22-15:40	Tea Break	
Session chaired by Prof. Jiaqi Zhang and Xiuping Zhu		
15:40-16:00	Meng Zhang	Beijing Normal University, China
	(Keynote) Principles and Methods for Optical Detection of Emerging Contaminants	
16:00-16:12	Zhengyang Huo	Renmin University of China, China
	Self-Powered Disinfection and Detection System for Decentralized Pathogen Control	
16:12-16:24	Yi Jiang	The Hong Kong Polytechnic University, China
	Phase and Defect Engineering of MoS ₂ Electrocatalysts for Rapid, Sustainable Hydrodechlorination of Organochlorine Pollutants	

16:24-16:36	Sheng Liu	Shandong University, China
	The Application of Bio-Compound Disinfectant in River and Lake Ecological Restoration	
16:36-16:48	Fan Li	Beijing Forestry University, China
	Regulation of Reactive Species and Removal of Emerging Contaminants in Heterogeneous Advanced Oxidation Processes	
16:48-17:00	Haodong Ji	Peking University Shenzhen Graduate School, China
	Mechanistic Study of High-Throughput Screening of Photocatalytic Materials for CO ₂ Reduction and Pollutant Degradation	
17:00-17:12	Pengsong Li	Beijing Forestry University, China
	Distribution and Environmental Drivers of Antibiotic Resistance Genes in Beijing's Surface Waters	
17:12-17:24	Ling Zang	National University of Singapore, Singapore
	Integrated Anodic–Cathodic Electrocatalysis Enabled by a Ni/CNTsCOOH/Ti Composite Cathode for Efficient Degradation of Sulfonamide Antibiotics	
17:24-17:36	Pengling You	Changsha University of Science and Technology, China
	Surface and Interior Heavy Metal Content of Plastic Waste in Agricultural Ditches: Distinction and Relation between Exogenously Adsorbed and Endogenously Added	
18:30-20:30	Dinner (Room Qunying, Building 1, B1 floor)	
Sunday Morning, 25 th October 2026		
Session chaired by Prof. Wulin Yang and Chenyuan Dang		
8:40-9:00	Jinxing Ma	Guangdong University of Technology, China
	(Keynote) Electrochemical Analysis and Selective Separation of PFAS	
9:00-9:12	Mingshan Zhu	Jinan University, China
	Lewis Acid-Base Effects in Advanced Oxidation Processes	
9:12-9:24	Hongna Li	Chinese Academy of Agricultural Sciences, China
	Electrochemical Oxidation of Antibiotic Resistant Bacteria and Antibiotic Resistance Genes: Influencing Factors and Mechanisms	
9:24-9:36	He Guo	Nanjing Forestry University, China
	Breaking the Sequential Treatment Paradigm: Plasma-Assisted Electrosorption Enables One-Step Algal Cell Demolition, P Recovery, and N Stripping from Eutrophic Waters	
9:36-9:48	Penghui Du	Chinese University of Hong Kong, China
	Micromolar Experiments, Nanomolar Environments	
9:48-10:00	Ziyi Xiang	Changsha University of Science and Technology, China
	The Characteristics and Influencing Factors of Microplastics in Lotus Pond Wetland: Focus on the Significant Influence of Lotus Leaf	
10:00-10:20	Tea Break	

Session chaired by Prof. Kuichang Zuo and Hongna Li		
10:20-10:32	Yuan Liu	Southwest University, China
	Electrochemical Regulation Mechanism of Low-Carbon Resource Recovery of Source-Separated Wastewater	
10:32-10:44	Zhibin Zhang	Shandong Jianzhu University, China
	Migration and Transformation of Indium Between Sediments and Aquatic Plants	
10:44-10:56	Xuan Xing	Central University for Nationalities, China
	Study on the Performance and Mechanism of Persulfate Activation by Bimetallic Sulfides for Antibiotic Degradation	
10:56-11:08	Chenyuan Dang	Huazhong University of Science and Technology, China
	Phages Encoding Chlorine Resistance Genes Improve Bacterial Adaptation to Chlorine Disinfection	
11:08-11:20	Weiliang Sun	Peking University, China
	Enhanced Photocatalytic Degradation of Emerging Contaminants in Water over Modified Photocatalytic Materials	
11:20-11:32	Yulin Qi	Tianjin University, China
	Spatial Distribution and Mechanism of Emerging Pollutants in Small Water Bodies	
11:32-11:44	Yingxing Liu	Changsha University of Science and Technology, China
	Distribution Characteristics and Migration Rules of Microplastics in Different Types of Agricultural Ditches: A Case Study of Dongting Lake	
11:50-13:30	Lunch (Shi Guang Western Restaurant, Building 1, 2 nd floor)	

Session 5: AI-driven modeling and quantitative assessment (Room Conference 2, 2 nd floor)		
Saturday Afternoon, 24 th October 2026		
Session chaired by Prof. Yong Liu and Yue Qin		
13:30-13:35	Introduction to the Session	
13:35-13:55	Jianshi Zhao	Tsinghua University, China
	(Keynote) Large Model-Empowered Education for Water Conservancy and Hydro-power Engineering	
13:55-14:15	Liangsheng Shi	Wuhan University, China
	(Keynote) Smart Water Saving	
14:15-14:35	Feifei Zheng	Zhejiang University, China
	(Keynote) Research on Theory and Technology of Real-Time Hydrodynamic Re-construction for Urban Flooding Based on Intelligent 3D Vision	
14:35-14:55	Yi Zheng	Southern University of Science and Technology, China
	(Keynote) Foundation Model-Enabled Hydrological Forecasting in Ungauged Basins	
14:55-15:05	Tea Break	
Session chaired by Prof. Yi Zheng and Jianshi Zhao		
15:05-15:25	Tawhidul Islam	United Nations University Institute for Water, Environment and Health, Canada
	(Keynote) The Scale Problem in River Science: Connecting Fluxes Flows and Knowledge for Sustainable River Futures	
15:25-15:45	Chengguang Lai	South China University of Technology, China
	(Keynote) Explainable AI for Rapid Simulation of Compound Flooding in the Greater Bay Area	
15:45-16:00	Yu Zhou	Hohai University, China
	Spatiotemporal Evolution and Driving Mechanisms of Global Riverine Heatwaves under Climate Change	
16:00-16:15	Yujie Zhou	Peking University, China
	One-Third of Global Lake Nitrous Oxide Emissions are Concentrated in the Northern Temperate Zone (40 °N–50 °N)	
16:15-16:30	Yucong He	Wuhan University, China
	LoDiNet: A Topology-Guided River Network Extraction Method Integrating Topographic and Spectral Information	
16:30-16:45	Simo Li	Xi'an University of Technology, China
	Event-Based Sediment Transport Modeling and Prediction Incorporating Flow-Sediment Hysteresis Effects: A Case Study of the Wudinghe River Basin on the Loess Plateau	
16:45-17:00	Jingzhe Hu	Hohai University, China

	Multi-scale Variations in River Water Quality and Long-term, Cross-basin Fore-casting in China	
18:30-20:30	Dinner (Room Qunying, Building 1, B1 floor)	
Sunday Morning, 25 th October 2026		
Session chaired by Prof. Zhongyao Liang and Jincheng Li		
09:00-9:20	Emilio Politti	International Institute for Applied Systems Analysis, Austria
	(Keynote) Safe Operating Space for Water, From Global Framework to a Basin Operationalisation	
09:20-09:40	Jiali Li	Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, China
	(Keynote) Physics-AI Modeling Approaches for Complex Environmental Systems	
09:40-09:55	Qingsong Jiang	Peking University, China
	Deep-Reinforcement-Learning-Based Water Diversion Strategy	
09:55-10:10	Yang Liu	Wuhan University, China
	AI-Assisted Short-Term Prediction of River Channel Topographic Evolution and Effects of Data Abundance	
10:10-10:30	Tea Break	
Session chaired by Prof. Jiali Li and Qingsong Jiang		
10:30-10:50	Jincheng Li	Minzu University of China, China
	(Keynote) Revealing the Pattern of Nitrogen Use Efficiency in Chinese Croplands at Prefecture Scale Across the Past Four Decades	
10:50-11:10	Zhongyao Liang	Fujian Provincial Key Laboratory of Sea-Land Interface Eco-Environment, China
	(Keynote) Enhancing Early Warning Accuracy of Harmful Algal Blooms Under Data Imbalanced: A Stacked Ordinal Learning Approach	
11:10-11:25	Zongyu Li	South China University of Technology, China
	A Hybrid Neural Operator for Rapid and Accurate Storm Surge Hydrodynamic Forecasting	
11:25-11:35	Conclusion	
11:35-13:30	Lunch (Shi Guang Western Restaurant, Building 1, 2 nd floor)	



AMFR 2026

Conference Information

Venue

The AMFR 2026 conference will be held in Zhong Guan Xin Yuan (北京大学 中关村新园) at Peking University.

- **Registration**

23rd, 14:00-20:00, Lobby, Building 1, Zhong Guan Xin Yuan

24th, 8:00-9:00, Room Qunying, Building 1, B1 floor, Zhong Guan Xin Yuan

- **Conference Rooms of Plenary Sessions**

Room Qunying (B1 floor) on Oct. 24th and Kebao (2nd floor) on Oct. 25th of Building 1, Zhong Guan Xin Yuan, PKU

- **Conference Rooms of Parallel Sessions**

Room Kebao (2nd floor), Conference one (2nd floor), Conference two (2nd floor), Guanhu A and B (2nd floor) of Building 1, Zhong Guan Xin Yuan, PKU

- **Aspect Ratio for Oral Presentations & Poster Presentations**

Screen Ratio: 16:9

poster size: 80cm*180cm

- **Dining Location**

Dinner, 23 rd Oct.	Heyuan Restaurant, 1 st floor	Building 5
Lunch, 24 th Oct.	Heyuan Restaurant, 1 st floor	Building 5
Dinner, 24 th Oct.	Room Qunying, B1 floor	Building 1
Lunch, 25 th Oct.	Shi Guang Western Restaurant, 2 nd floor	Building 1
Dinner, 25 th Oct.	Shi Guang Western Restaurant, 2 nd floor	Building 1

Transportation

Coming from the airport, we recommend our attendees to take a taxi or airport express (subway) to the Venue or their hotel.

(1) Beijing Capital International Airport

Beijing Airport Express, then take Subway Line 10 and change to Subway Line 4, get off at East gate of PKU, Exit C;

(2) Beijing Daxing International Airport

Beijing Airport Express, then take Subway Line 19 and change to Subway Line 4, get off at East gate of PKU, Exit C.

(3) Coming from the Railway Station, we recommend our attendees to take express (subway) to the Venue or their hotel. Attendees may take the express (subway) from any of these stations and transfer to Subway Line 4 to reach the conference venue, get off at East gate of PKU, Exit C.



Contact Person

Dongfeng Li	13815803169	Kuichang Zuo	18210234737
Feifei Zhang	18210219086	Zishuai Zhang	17710853850
Yi Zhao	13915848132	Zhen Wu	18611001475
Hanqing Fan	18810521619	Wulin Yang	13811632335
Xuelian Wang	15901071073	Email	amfr@pku.edu.cn