

Agenda of 2024 IWA Micropol

Day2 (Tuesday, June 18, 2024)

	Shih-Liang Chien Lecture Hall	301 Lecture Room	302 Lecture Room
09:00-09:40	<p>Keynote Lecture Chair: Prof. Jiang-Yong Hu, <i>National University of Singapore</i></p> <p>K03 Trends and Challenges in Micropollutant Management in the Water Environment in Japan Prof. Hiroaki Furumai, <i>Chuo University</i></p>		
	<p>Control of Micropollutants in Water Environment Chair: Dr. Florian Breider, <i>EPFL</i></p>	<p>PPCPs in Water Environment Chair: Prof. Gen-Shuh Wang, <i>National Taiwan University</i></p>	<p>Occurrence, Source, and Fate of Micropollutants in Water Environment Chair: Pei-Hsin Chou, <i>National Cheng Kung University</i></p>
09:50-10:10	<p>A13 Enhanced Peroxymonosulfate Activation by Edge-Defect-Induced FeIV=O Species in Single-Atom Fe–N–C Catalysts Donghyun Lee, <i>Seoul National University</i></p>	<p>B09 Graph-Theory-Based Modelling and Evaluation of Mitigation Measures Against Wastewater-Derived Pharmaceuticals Across River Networks Geovanni Teran-Velasquez, <i>Technische Universität Dresden</i></p>	<p>C13 Occurrence of COVID-19 Related Pharmaceuticals in Wastewaters and Their Endocrine Disrupting Potentials Pei-Hsin Chou, <i>National Cheng Kung University</i></p>
10:10-10:30	<p>A14 Evolution of Reactive Species During Pesticide Degradation by the Photoelectrochemical Device in Vegetable-Washing-Water Media: Transformation and Detoxification Jheng-Sian Yang, <i>National Taiwan University</i></p>	<p>B10 Kinetic Modelling of Water Color During the Sulphamethoxazole Oxidation by Photo-Fenton Jose Maria Lomas, <i>Universidad del Pais Vasco</i></p>	<p>C14 Monitoring and Transformation of PFAS at Municipal Wastewater Treatment Plants Mengyan Li, <i>New Jersey Institute of Technology</i></p>
10:30-10:50	<p>A15 Activation and Quenching of Hydrogen Peroxide and Free Available Chlorine at Non-Ferrous/Non-Cuprous Metal (Loid) Oxide Surfaces Sin-Yi Liou, <i>University of Washington</i></p>	<p>B11 Pharmaceuticals and Personal Care Products Investigation on Samples from Hospital Wastewater, Sewage and Surrounding Rivers Pao-Wen Grace Liu, <i>Chung Hwa University of Medical Technology</i></p>	<p>C15 Speciation of Selenite and Selenate in a High Salt Containing Waste Water from the Steel Industry Claudia Hledik, <i>University of Natural Resources and Life Sciences Vienna</i></p>

10:50-11:20	Coffee Break		
	Control of Micropollutants in Wastewater II Chair: Prof. Kyung-Duk Zoh , <i>Seoul National University</i>	Oxidation of Micropollutants in Water Chair: Prof. Vítor Jorge Pais Vilar , <i>University of Porto</i>	Occurrence and Control of Micropollutants in Water Environment Chair: Dr. Luhua You , <i>National University of Singapore</i>
11:20-11:40	A16 Investigating the Removal of Trace Organic Chemicals in Small-Scale Wastewater Treatment Plants: A Case Study of Vertical Flow Constructed Wetlands with Integrated Activated Carbon Anna-Sonia Kau , <i>Technical University of Munich</i>	B12 Emerging Organic Contaminants Associated with Plastic Debris in Mangroves and Coastal Environments Luhua You , <i>National University of Singapore</i>	C16 Distribution of Tire-Associated Chemicals in Alpine and Perialpine Lakes and Their Potential Bioavailability for Aquatic Organisms Florian Breider , <i>EPFL</i>
11:40-12:00	A17 Effect of Nanofiltration Concentrate on Nitrification and Pharmaceutical Removal from Wastewater C Rodriguez-Gonzalez , <i>Wageningen University & Research</i>	B13 Enhanced Sequential Reduction-Oxidation of Nitrobenzene Using Silica-Coated Nanosized Zero-Valent Iron and Persulfate Quoc Bien Nguyen , <i>Pusan National University</i>	C17 Sorption and Biotransformation of Organic Micropollutants in Aerobic Granular Sludge Systems with Different-Sized Sludge Zhaolu Feng , <i>Wageningen University & Research</i>
12:00-12:20	A18 An Interpretable Machine Learning Model for Predicting the Rejection of Micropollutants by Nanofiltration Adel Tayara , <i>The Hong Kong University of Science and Technology</i>	B14 Assessment of Emerging Contaminants in Guatemala's Water Systems Mynor Estrada , <i>National Taiwan University</i>	C18 Removal of Residual Antibiotics from Aquaculture Effluents in Denitrifying Woodchip Bioreactors Kai Tang , <i>Technical University of Denmark</i>
12:20-13:30	Lunch and Poster Session		
	Workshop II: Advances in Monitoring and Control of Micropollutants in Urban Water Cycle-Occurrence and Novel Monitoring Approaches Chair : Prof. Yunho Lee , <i>Gwangju Institute of Science and Technology</i>	Workshop III: Strategic Solutions for Environmental Blindspots in the Interest of Society (SEBIS) – Mission and Progress of Multidisciplinary Collaborations Chair: Prof. Eun Hea Jho , <i>Chonnam National University</i>	Disinfection and disinfection byproducts Chair: Dr. Tianqi Zhang , <i>EPFL</i>
13:30-14:00			

14:00-15:20	<p>13:30-13:35 Introduction of Session and Speakers Yunho Lee, <i>Gwangju Institute of Science and Technology</i></p> <p>13:35-14:10 Monitoring of Emerging Pollutants in Rivers: from Non-Target Screening to Target Analysis Thomas Ternes (Keynote), <i>German Federal Institute of Hydrology</i></p>	<p>13:30-13:55 WS-05 Brief Introduction to SEBIS Center & Technologies to Call Out the Hidden Dangers of Endocrine-Disrupting Chemicals in Our Daily Lives Ahjeong Son, <i>Ewha Womans University</i></p> <p>13:55-14:20 WS-06 Removal of Micropollutants and Natural Organic Matter by Graphene Oxide and Mxene Coated Membranes Yeomin Yoon, <i>Ewha Womans University</i></p>	<p>C19 New Aspects of Disinfection: The Chlorination of Quorum Sensing Molecules – A Study about Kinetics and Transformation Pathways Nils Keltsch, <i>Federal Institute of Hydrology</i></p>
14:20-14:40	<p>14:10-14:30 Assessment of Environmental Forensic Indicator for Anthropogenic Groundwater Contamination via Target/Suspect/Nontarget Analysis Using HRMS Techniques Jeongeun Oh, <i>Busan National University</i></p>	<p>14:20-14:45 WS-07 How Are Microplastics Represented in the Korean Media? An Analysis Based on Reporting Periods, Political Inclinations, and Uncertainty Yungwook Kim, <i>Ewha Womans University</i></p>	<p>C20 Microbial Communities and Pathogens Are Resistant to Disinfectants in Biofilms Sink Drains of a University Campus Krassimira Hristova, <i>Marquette University</i></p>
14:40-15:00	<p>14:30-14:50 WS-01 Priority Substances Occurring in Korean River Watersheds Junho Jeon, <i>Changwon University</i></p> <p>14:50-15:10 WS-02 Development of “Selective” Sensor-Based Monitoring and Catalytic Treatment Technologies for Emerging Contaminants in Water Jong Kwon Choe, <i>Seoul National University</i></p>	<p>14:45-15:10 WS-08 Indoor Volatile Organic Compounds: Toxicity, Sources and Concentrations Sookyung Kang, <i>Ewha Womans University</i></p> <p>15:10-15:35 WS-09 Development of A Methodology for Measuring Volatile Organic Compounds Effectively in the Indoor Atmospheric Environment: Focus on BTEX Ji Yi Lee, <i>Ewha Womans University</i></p>	<p>C21 Evaluating the Dechlorinating Performance by Adding a High-Efficiency Microbiome into a Low-Efficiency Microbiome Shu-Chi Chang, <i>National Chung Hsing University</i></p>
15:00-15:20	<p>15:10-15:20 Discussions (Q&A) Yunho Lee, <i>Gwangju Institute of Science and Technology</i></p>		<p>C22 The Fate of Organic and Inorganic Disinfection Byproducts During Shock Chlorination in a Pilot Reverse Osmosis Seawater Desalination System Thi Xuan Hoa Le, <i>The Hong Kong University of Science and Technology</i></p>
15:20-15:35	Coffee Break		Coffee Break
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	<p>Workshop II: Advances in Monitoring and Control of Micropollutants in Urban Water Cycle-Management and Advanced Treatment Technologies Chair: Prof. Kyung-Duk Zoh, <i>Seoul National University</i></p>	<p>Workshop III: Strategic Solutions for Environmental Blindspots in the Interest of Society (SEBIS) – Mission and Progress of Multidisciplinary Collaborations Chair: Prof. Yungwook Kim, <i>Ewha Womans University</i></p>	<p style="text-align: center;">Identification, Detection and Control of Micropollutants in Water Environment Chair: Prof. Angela Yu-Chen Lin, <i>National Taiwan University</i></p>

15:50-16:10	<p>15:50-15:55 Introduction of Session and Speakers Kyung-Duk Zoh, <i>Seoul National University</i></p> <p>15:55-16:30 Update on Swiss Upgrade of Wastewater Treatment Plants to Abate Micropollutants and Alternative of Urine Treatment for Nutrient Recycling Christa McArdell (Keynote), <i>Eawag</i></p>	<p>15:50-16:15 WS-10 Spatial Analysis on the Effectiveness of Green Infrastructure on Flood Response Jinhee Han, <i>Ewha Womans University</i></p> <p>16:15-16:40 WS-11 Status and Development of Living Environment Microplastic Reduction Filters Soyoun Kim, <i>Ewha Womans University</i></p>	<p>C23 Exploring Efficacy of UV/Chlorine Treatment to Control Disinfection Byproduct Compounds by Unknown Screening Analysis: Insights from a Drinking Water Treatment Plant Treating Pristine River Water Xinyue Liu, <i>University of Tokyo</i></p>
16:10-16:30	<p>16:30-16:50 Quaternary Treatment of Secondary Municipal Wastewaters Targeting CECs Removal: Nanofiltration vs Ozonation Vitor J.P. Vilar, <i>University of Porto</i></p>	<p>16:40-17:05 WS-12 Degradation of Plastic Additives in the Environment Eun Hea Jho, <i>Chonnam National University</i></p> <p>17:05-17:30 WS-13 The Effects of ESG Environmental Performance on Consumer Responses Hansol Choi, <i>Ewha Womans University</i></p>	<p>C24 Impact of Anaerobic Biological Treatment on (Di)Methylbenzylamine Degradation and Nitrosamine Formation During Subsequent Chlor(am)ination Wei-Hsiang Chen, <i>National Sun Yat-sen University</i></p>
16:30-16:50	<p>16:50-17:10 WS-03 Micropollutant Abatements During the Breakpoint Chlorination Reaction Yi-Hsueh Chuang, <i>National Yang Ming Chiao Tung University</i></p>		<p>C25 Natural Organic Matter Transformation and DBP Species Variation by Nano-/Micro-Bubbles Yong-An Chen, <i>National Taiwan University</i></p>
16:50-17:10	<p>17:10-17:30 WS-04 Reaction of Chlorine Dioxide with Organic Matter: Intrinsic Formation of Free Chlorine and Effects on Disinfection and Micropollutant Degradation Holger Lutze, <i>Technical University of Darmstadt</i></p>		<p>C26 Formation of Chloro-Organic Byproducts from Dissolved Organic Matter Model Compounds by In-Situ Generated Dichlorine Monoxide in High Chloride-Containing Water Yixiao Duan, <i>The Hong Kong University of Science and Technology</i></p>
17:10-17:40	<p>17:30-17:40 Discussions (Q&A) and Close Kyung-Duk Zoh, <i>Seoul National University</i></p>		
18:30-21:30	Gala Dinner		