

Agenda of 2024 IWA Micropol

Day1 (Monday, June 17, 2024)

	Shih-Liang Chien Lecture Hall	301 Lecture Room	302 Lecture Room
09:00-09:20	Opening Ceremony		
09:20-10:00	<p>Keynote Lecture Chair: Prof. Yi-Pin Lin, <i>National Taiwan University</i></p> <p>K01 Role of Matrix Components During Oxidative Water Treatment: What Can We Learn from Reactions of Chemical Oxidants with Micropollutants? Prof. Urs von Gunten, <i>Eawag</i></p>		
10:00-10:40	<p>Keynote Lecture Chair: Prof. Yi-Pin Lin, <i>National Taiwan University</i></p> <p>K02 Improving Drinking Water Safety: Addressing New Impacts and Identifying Important Toxicity Drivers Prof. Susan Richardson, <i>University of Southern California</i></p>		
10:40-11:00	Coffee Break		
	<p>Oxidation Processes for Control of Micropollutants Chair: Prof. Viviane Yargeau, <i>McGill University</i></p>	<p>Potential Adverse Effects of Micropollutants in Water Environments Chair: Dr. Hyungjoon Im, <i>Pusan National University</i></p>	<p>Identification and Detection of Micropollutants in Water Environment I Chair: Prof. Jeong Eun Oh, <i>Pusan National University</i></p>

11:00-11:20	<p>A01 Removal of Micropollutants and Ecotoxicity During Combined Biological Activated Carbon and Ozone (BO₃) Treatment</p> <p>Koen Van Gijn, <i>Waterschap Rijn en IJssel / Wageningen University</i></p>	<p>B01 Illicit Drug Consumption Through Wastewater-Based Epidemiology in Taipei Metropolitan Area</p> <p>Jennifer Ia Wen Wen Liu, <i>National Taiwan University</i></p>	<p>C01 Characterization of Iron and Lead Nanoparticles in Tap Water Using A Hyphenated ATM-DMA-splCP-MS System</p> <p>Yi-Pin Lin, <i>National Taiwan University</i></p>
11:20-11:40	<p>A02 Micropollutant Removal by Coupling Photo-Fenton and GAC Filtration at Pilot Plant Scale</p> <p>Paula Nunez-Tafalla, <i>University of Luxembourg</i></p>	<p>B02 Reproductive Effects Induced by Mixtures of Disinfection Byproducts (DBPs)</p> <p>Chia-Chen Wu, <i>National Yang Ming Chiao Tung University</i></p>	<p>C02 Total PFAS Quantification Assays Based on the Ion Pair Formation with Methylene Blue and Defluorination with Sodium Biphenyl</p> <p>Cong-Hau Nguyen, <i>Gwangju Institute of Science and Technology</i></p>
11:40-12:00	<p>A03 ClO₂ Oxidation of DNA Nucleobases and Their Model Aromatic N-Containing Heterocycles</p> <p>Mohammad Sajjad Abdighahroudi, <i>Technical University Darmstadt</i></p>	<p>B03 Effect of Benzotriazole, Cresol and Telmisartan in Freshwater Zooplankton Daphnia Magna in Environmentally Relevant Concentrations.</p> <p>Hyungjoon Im, <i>Pusan National University</i></p>	<p>C03 Environmental Co-Existence of Microplastics and Organic Contaminants in Urban Drainage Water</p> <p>Do Thi Thuy Quyen, <i>National University of Singapore</i></p>
12:00-12:20	<p>A04 Effect of intrinsically Formed Free Available Chlorine on Pollutant Degradation During Oxidative Water Treatment with ClO₂</p> <p>Minyi Yin, <i>Technical University of Darmstadt</i></p>	<p>B04 Effects of Antibiotics and Microplastics on Zebrafish Using Multi-Omics Approach</p> <p>Mingcan Li, <i>National University of Singapore</i></p>	<p>C04 Unknown Dissolved Organic Matters in Phong River, Thailand and Their Removal by Activated Carbon and Biochar</p> <p>Phanwatt Phungsai, <i>Khon Kaen University</i></p>
12:20-14:00	Lunch and Poster Session	Lunch and Poster Session	Lunch and Poster Session
	<p>Management of Emerging Contaminants</p> <p>Chair: Prof. Henrik Andersen, <i>Danmarks Tekniske Universitet</i></p>	<p>Workshop I: PFAS in Water and Wastewater: Regulation, Monitoring and Control Measures</p> <p>Chair: Prof. Jiangyong Hu, <i>National University of Singapore</i></p> <p>Co-Chairs:</p> <p>Prof. Gen-Shuh Wang, <i>National Taiwan</i></p>	<p>Identification and Detection of Micropollutants in Water Environment II</p> <p>Chair: Prof. Hsin-Hsin Tung, <i>National Taiwan University</i></p>

		<p><i>University</i></p> <p>Prof. Jie Han, <i>Xi'an Jiaotong University</i></p> <p>Prof. Yunho Lee, <i>Gwangju Institute of Science and Technology</i></p>	
14:00-14:20	<p>A05 Removal Characteristics of 53 Micropollutants During Ozonation, Chlorination, and UV/H₂O₂ Processes Used in Drinking Water Treatment Plant</p> <p>Kyung-Duk Zoh, <i>Seoul National University</i></p>	<p>13:30-13:35 Opening Speech Prof. Jianguyong Hu, <i>National University of Singapore</i></p> <p>13:35-13:55 PFAS in Biomonitoring Prof. Chia-Yang Chen (invited Speaker), <i>National Taiwan University</i></p>	<p>C05 Suspect Screening of 107 Pharmaceuticals in Treated Wastewaters and Their Receiving Rivers in Japan Using LC-QToF/MS</p> <p>Yuji Suzuki, <i>Gifu University</i></p>
14:20-14:40	<p>A06 Presence and Health Effects of Persistent Organic Pollutants (PAHs and PFAS) in the Ecuadorian Red Mangrove Crab</p> <p>Andrée De Cock, <i>Ghent University</i></p>	<p><i>University</i></p> <p>13:55-14:15 Monitoring of Total and Specific Classes of PFASs in Wastewaters Using Organofluorine and Mass Spectrometry Analyses in Combination with Total Oxidizable Precursor Assay Prof. Yunho Lee (invited speaker), <i>Gwangju Institute of Science and Technology</i></p>	<p>C06 Target and Non-Target Screening to Study the Fate of Micropollutants in Different Biological Treatment Processes in a Domestic Wastewater Treatment Plant</p> <p>Aishwarya Pandey, <i>The University of Tokyo</i></p>
14:40-15:00	<p>A07 Risk Evaluation by Target Screening of the Compounds on the Emerging Contaminants List in Water Environment in Japan</p> <p>Futoshi Kurisu, <i>The University of Tokyo</i></p>	<p>14:15-14:35 Uniqueness of the Adsorption Behavior of PFASs to Activated Carbon Prof. Yongju Choi (invited speaker), <i>Seoul National University</i></p> <p>14:35-14:55 Regulation Attempts in EU Prof. Maria Fürhacker (invited speaker), <i>BOKU-University of Natural Resources and Life Sciences</i></p>	<p>C07 Effect of Bacterial Growth Stage on Degradation Kinetics of Antibiotic Resistance Gene <i>mceA</i> of Methicillin-Resistant <i>Staphylococcus aureus</i> (MRSA) During Chlorination</p> <p>Yegyun Choi, <i>Gwangju Institute of Science and Technology</i></p>
15:00-15:20	<p>A08 Sustainable Polyacrylamide (PAM) Management in the Agricultural Environment</p> <p>Yu-Chi Cheng, <i>National Taiwan University</i></p>	<p>15:15-15:40 Panel Discussion and Wrapping up</p>	<p>C08 Portable and Low Power Lysis Technique Using Electrically Excited Copper Electrodes for Bacterial Monitoring in Water</p> <p>Jeongeun Lee, <i>Ewha Womans University</i></p>

15:20-15:50	Coffee Break		
	Control of Micropollutants in Wastewater I Chair: Dr. Christa S. McArdell , <i>Eawag</i>	Control of PFAS in Water and Wastewater Chair: Prof. Yuhoon Hwang , <i>Seoul National University of Science and Technology</i>	Identification and Detection of Micropollutants in Water Environment III Chair: Prof. Futoshi Kurisu , <i>The University of Tokyo</i>
15:50-16:10	A09 Ozonation to Treat Vinyl Chloride in Leachate from a Pharmaceutical Production Superfund Henrik R. Andersen , <i>Danmarks Tekniske Universitet</i>	B05 Far-UVC-Assisted Degradation of Per- and Polyfluoroalkyl Substances (PFAS) in Water Treatment Ching-Hua Huang , <i>Georgia Institute of Technology</i>	C09 Investigation of Heavy Metals Released from Plumbing Fittings Under Various Temperatures and Residual Chlorine Conditions Po-Hsun Lin , <i>National Central University</i>
16:10-16:30	A10 Iron Phosphate Recovery from the Leachate of Swine Slurry Using Industrial Wastewater as an Iron Source Thi-Hanh Ha , <i>National Chung Hsing University</i>	B06 Kinetic and Isotherm Study for the Adsorption of Per- and Polyfluoroalkyl Substances (PFAS) on Activated Carbon in the Low ng/L Range Marko Pranić , <i>Wageningen University</i>	C10 Development of Analytical Method for Organophorous and Brominated Flame Retardants Simultaneously in Water Shi-Lin Lo , <i>National Taiwan University</i>
16:30-16:50	A11 The Yin and Yang of Membrane Hybrid Processes with Powdered Activated Carbon (PAC) Inline Dosing Prior to Ultrafiltration Membranes for Advanced Wastewater Treatment Max Zimmermann , <i>RWTH Aachen University</i>	B07 Removal of Per- and Poly-Fluoroalkyl Substances Using Melamine Sponge Grafted with Porous Aminated Organic Polymer Joeeun Park , <i>Seoul National University of Science and Technology</i>	C11 Environmental Inhibitors That Influence on qPCR Based Gene Quantification Eunhye Lee , <i>Ewha Womans University</i>
16:50-17:10	A12 Synergies Between Organic Micropollutant Removal and Extensive Phosphorus Removal: Status-Quo in Municipal WWTPs in Baden-Württemberg, Germany Lilia Acosta , <i>University of Stuttgart</i>	B08 Per- and Polyfluoroalkyl Substances (PFAS) Removal from Mixed Liquor – Role of Suspended Solids Angel Chyi En We , <i>The University of Melbourne</i>	C12 Investigating the Molecular Mechanisms of Xenoestrogen-induced Sex Disruption in Medaka Larvae Ching-Hsin Yang , <i>National Taiwan University</i>
18:00-21:00	City Tours / Culture Night (Optional)		