

# IWA ACHSW/EESS/CWR ONLINE WORKSHOP ON EMERGING CONTAMINANTS IN WATER

21<sup>st</sup> & 22<sup>nd</sup> SEPTEMBER 2021 (9:30AM TO 12:00PM)

























Department of Civil & Environmental Engineering Faculty of Engineering

### **Organizing Committee**

#### Chair:

Prof Hu Jiangyong Chair, IWA ACHSW SG Management Committee; President, Environmental Engineering Society of Singapore; Director, Centre for Water Research, CEE, National University of Singapore

#### **Co-Chairs:**

- Dr Rajendra Khanal (Policy Research Institute, Nepal)
- Dr Lim Fang Yee (National University of Singapore); EESS Council Member

#### **Organizing Committee:**

- Maria Furhacker, University of Natural Resources and Life Sciences, Vienna, Management committee member
- Pedro J Alvarez, Rice University, Management committee member
- Yunho Lee, Seoul National University, Management committee member
- Wen-Wei Li, University of Science and Technology of China, Management committee member
- Christa McArdell, Swiss Federal Institute of Aquatic Science and Technology, Management committee member
- Thomas Ternes, Federal Institute of Hydrology, Germany, Management committee member
- Gen-Shuh Wang, National Taiwan University, Management committee member
- Jan Hofman, University of Bath, Management committee member
- · Cai Qinqing, CWR, Research Fellow
- Shan Junhong, EESS Chairman of Water and Wastewater Group
- Goh Jun Wei, EESS Youth Chapter Leader

### Workshop Programme

Day 1 (21/9/2021)

Time	Title	Invited Speakers
9:30 - 9:40am	Welcome Speech	Prof Hu Jiangyong
	EESS President and CWR, NUS Director	
Session I	Occurrence, Monitoring and Toxicity of Micropollutants (Moderated by Dr Rajendra Khanal)	
9:40 - 10:10am	Keynote speech  Ecotoxicogenomic and metabolomic approaches to unravel toxicity mechanisms of emerging contaminants in environmental water	Asst/Prof Bae Sungwoo, (National University of Singapore (Singapore)
10:10 - 10:30 am	Metal-based nanoparticles arriving to wastewater treatment plants: are the concentrations concerning?	Asst/Prof Pabel Cervantes-Avilés, Tecnologico de Monterrey (Mexico)
10:30 - 10:50 am	Monitoring of Contaminants of Emerging Concern (CECs) in Urban Water	Dr Yan Huang, Singapore's National Water Agency, PUB (Singapore)
10:50 - 11:10 am	Environmental Fate and Health Risks of Nanoparticles Released from PPCPs	Asst/Prof. Qumber Abbas, Xi'an Jiaotong University (China)
11:10 - 11:30 am	Analytical and policy aspects for the management of UV filters in marine environment	Dr Rajendra Khanal, Policy Research Institute (Nepal)
11:30 - 11:50am	Panel Discussion 1 (Moderated by Dr Rajendra Khanal)	

## Workshop Programme

Day 2 (22/9/2021)

Time	Title	Invited Speakers
Session 2	Removal of Micropollutants from Water/ Wastewater (Moderated by Dr Lim Fang Yee)	
9:30 - 10:00am	Keynote speech  Efficacy of several treatment processes on microplastic removal from wastewater: seasonal effect	Dr Jenyuk Lohwacharin, Chulalongkorn University (Thailand)
10:00 - 10:20am	Peracetic acid-based advanced oxidation processes for the removal of contaminants	Dr Juhee Kim,  Georgia Institute of Technology (US)
10:20 - 10:40am	Ozonation of microcystins: kinetics and toxicity decrease	Asst/Prof Min Sik Kim, Jeonbuk National University (Korea)
10:40 - 11:00am	Acesulfame Transformation under Advanced Oxidation Processes	Dr Law Cheuk Fung Japhet, Hong Kong Baptist University (Hong Kong)
11:00 - 11:20am	Removal of Bisphenol A from Water via Photocatalytic Membrane and Its Effect on In-Vivo Models	Dr Roziana binti Kamaludin, Universiti Teknologi Malaysia (Malaysia)
11:20 - 11:40am	Panel Discussion 2 (Moderated by Dr Lim Fang Yee)	
11:40 - 11:50am	Summary and Closing	Prof Hu Jiangyong