



2nd International Symposium on Plastic Pollution

November 3-4, 2022

Jeju Pacific Hotel, Korea

Organized by

Graduate Program Specialized in Plastic-free Society, University of Seoul, South Korea

Supported by

Ministry of Environment & KEITI, South Korea



The 2nd International Symposium on Plastic Pollution

- SYM-1** } Challenges and Possible Solutions of Plastic Pollution
- SYM-2** }
- SYM-3** Toxicity Assessment of Microplastics

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November 3 [Thursday] Jeju Pacific Hotel (1st Ground floor, SHANGRILA)

SYM-1

Challenges and Possible Solutions of Plastic Pollution

Chairs : Prof. Yejoon Yoon, Yonsei University & Prof. Robert Mitchell, UNIST

13:30 - 13:40	[Opening remark] Prof. Hyunook Kim, University of Seoul
13:40 - 14:00 (20분)	[Plenary speaker] Dr. Sun-Kyoung Shin National Institute of Environmental Research : Microplastics research trends in Korea
14:00 - 14:20 (20분)	Dr. Jae-Woo Kim (KOTITI) (S. Korea) : Research of the assessment method for microplastics removal efficiency in washing machine
14:20 - 14:40 (20분)	Prof. Changseok Han Inha University (S. Korea) : Environmental aging of polymer nanocomposites and their characterization
14:40 - 15:00 (20분)	Prof. Young-Min Kim, Daegu University (S. Korea) : Effective Py-GC/MS analysis method for the quantification of microplastics in various kinds of environmental matrix
15:00 - 15:20 (20분)	Dr. Ju-Seok Lee, Korea Institute of Bioscience and Biotechnology (S. Korea) : Evaluation of biodegradability and performance of degradation additive for commercial mulch films in Korea
15:20 - 15:40 (20분)	Prof. Jeong Jae Kim, Hanbat National University (S. Korea) : Development of real-time detection system of microplastic in tap water
15:40 - 16:00 (20분)	Break time
16:00 - 16:20 (20분)	Prof. Robert J. Mitchell (UNIST, S. Korea) : Microplastics as a source of antibiotic resistance and bacterial pathogens
16:20 - 16:40 (20분)	Prof. Anish Kumar Warriar (Manipal Institute of Technology) (India) : Microplastic pollution studies in India - A Review
16:40 - 17:00 (20분)	Prof. Hefa Cheng, Peking University (China) : Microplastic Pollution in Bangladesh: Research and Management Needs
17:00 - 17:20 (20분)	Prof. Sun-Hyung Kim, University of Seoul (S. Korea) : Another Story of MADS-Box Genes - AGL12, AGS14 and AGL19
17:20 - 17:40 (20분)	Prof. Agamuthu Pariatamby, Sunway University (Malaysia) : Challenges and sustainable solutions to plastics pollution in the ecosystem

November 4 [Friday] Jeju Pacific Hotel (1st Ground floor, SHANGRILA)

SYM-2

Challenges and Possible Solutions of Plastic Pollution (Con't)

Chair: Prof. Changseok Han, Inha University

09:00 – 09:20 (20분)	Prof. Woo-Taeg Kwon, Eulji University (S. Korea): Airborne microplastics: Occurrence and detection methods of microplastics
09:20 – 09:40 (20분)	Prof. Yeojoon Yoon, Yonsei University (S. Korea) : Development of microplastic sampling and pretreatment device by μ -Raman spectroscopy and distribution characteristics of microplastics in fresh water
09:40 – 10:00 (20분)	[Invited speaker] Prof. Chihhao Fan , National Taiwan University (Taiwan) : Advances in microplastic study: occurrence, fate, assessment, and impacts on the environment
10:00 – 10:20 (20분)	[Invited speaker] Prof. Shu-Yuan Pan , National Taiwan University (Taiwan) : Development of circular economy technologies towards net Zero emission plastics industry
10:20 – 10:40 (20분)	[Invited speaker] Prof. Cheng-Di Dong , National Kaohsiung Marine University (Taiwan) : The contamination of microplastics in marine environment: Occurrence, distribution, effects, and health impacts
10:40 – 11:00 (20분)	Prof. Justin Chun-Te Lin, Feng Chia University (Taiwan) : Investigating types and distributions of adsorbed persistent organic pollutants from terrestrial to marine floating microplastics (MPs)

SYM-3

Toxicity Assessment of Microplastics

Chair: Prof. Sunghee Joo, Plastic-Free Specialized Graduate School, University of Seoul

11:00 – 11:20 (20분)	Prof. Trisia Farrelly, Massey University (New Zealand) : Is there any such thing as a toxic-free circular economy for plastics?
11:20 – 11:40 (20분)	Prof. Shimelis Kebede, Addis Ababa University (Ethiopia) : Emerging concern and current knowledge of microplastic in Ethiopia
11:40 – 12:00 (20분)	Dr. Jui-Yen (Thomas) Lin (/Prof. Chin-Pao Huang), University of Delaware (USA) : Surface acidity of hydrous ultrafine plastics particles in simple electrolyte
12:00 – 12:10	Closing remark

※ The program runs "hybrid (both online and offline)" presentations.