

# 2023 제39차 정기학술대회

## The 39th Annual Meeting of KSOT/KEMS

# Toxicological Sciences for Sustainable Environment

## 지속가능한 환경을 위한 독성 과학

Oct. 30 (Mon)~ Nov. 1 (Wed), 2023

- Venue : International Convention Center Jeju, Korea

### Invitation

존경하는 (사)한국독성학회/한국환경성독물연변이발암원학회 회원 여러분,

우리 학회에 대한 깊은 관심으로 학회 행사에 적극적으로 참여해주셔서 다시 한 번 감사의 말씀을 드립니다. "Toxicological Sciences for Sustainable Environment (지속가능한 환경을 위한 독성 과학)"의 주제로 금년 10월 30일~11월 1일 기간동안 개최되는 제39차 정기학술대회에 여러분을 아름다운 제주로 초대합니다.

금번 추계 정기학술대회에서는 독성학 분야의 세계적인 석학들을 기초강연자로 초청하였습니다. 미국 Vanderbilt University의 F. Peter Guengerich 교수, Fred Hutchinson Cancer Research Center의 Thomas W. Kensler 박사와 미국 SOT 전회장을 역임한 Albert Einstein College of Medicine의 Michael Aschner 교수께서 수준 높은 강연을 진행하실 예정입니다.

이번 학술대회에서는 총 9개의 세션에서 28명의 국내외 석학들을 모시고 알찬 학술 프로그램을 준비했습니다. 최신 독성학의 방향을 제시하게 될 미래 혁신기술, 대체시험법, 흡입 독성, 오가노이드 응용 연구 및 안전성 평가 국제 기준 관련 세션은 물론, 사회적으로 큰 관심사인 미세플라스틱 독성과 화학물질의 안전성과 독성 세션을 마련하여 지속가능한 환경을 위한 독성과학 연구의 중요성을 함께 고민하는 장을 마련하고자 합니다.

또한 일본독성학회와 연계한 JSOT-KSOT Joint 세션에서는 한·일 양국 학회간의 지속적인 학문적 교류를 통한 독성학 발전을 기대할 수 있을 것입니다. 이와 더불어 Young Scientist Forum을 통하여 신규 독성학자들의 양성과 발전을 지원하며, 운봉학술상 및 우수포스터상 시상, 독성전문가 인증식 등 다채로운 학술행사와 교류의 자리도 마련되어 있습니다.

본 학술대회를 통하여 관련 분야 학계 및 산업계 발전에 많은 도움이 될 것으로 기대하며, 국민 건강 및 복지 향상에도 기여하길 기대합니다. 본 학술대회에 학회 회원 및 각계 과학자들의 많은 관심과 참여를 부탁드립니다 회원 여러분의 가정의 건강과 행운을 기원합니다. 끝으로 이 행사의 준비를 위해 수고해주신 임원진에게 깊은 감사를 전합니다.

2023. 8. 16.

(사)한국독성학회/한국환경성독물연변이발암원학회 회장 천 영 진

### October 30, 2023 (Monday)

12:00-13:00	Council Meeting
12:00	Registration
13:20-13:40	Welcome Remarks Young-Jin Chun (President of KSOT, Chung-Ang University) Youn-joo Park (Director General, National Institute of Food and Drug Safety Evaluation) Jang Seong Kim (President of Korea Research Institute of Bioscience and Biotechnology)
13:40-14:20	Plenary Lecture I Chairperson: Tae Cheon Jeong (Yeungnam University)  The Role of Biotransformation in Toxicology: Still an Important Issue F. Peter Guengerich (Vanderbilt University, USA)
14:20-15:50	Session 1: The Toxicity of Microplastics Chairperson: Soon-Mi Shim (Sejong University)  14:20-14:50 The Marine Ecotoxicological Assessment of Microplastics from an Environmentally Relevant Point of View June-Woo Park (Korea Institute of Toxicology)  14:50-15:20 Toxicological Assessment and Biodistribution of Various Orally Exposed Microplastics KilSoo Kim (KMEDI Hub, Kyungpook National University)  15:20-15:50 Towards Sustainable Removal of Microplastics and Nanoplastics from Environmental and Food Matrices Guoqing Wang (Ocean University of China, China)
14:20-15:50	Session 2: miRNA microRNA & Xenobiotic Toxicology Chairperson: Byung-Sun Choi (Chung-Ang University)  14:20-14:45 microRNA as a Regulator of Human Drug Metabolizing Enzyme Masataka Nakano (Kanazawa University, Japan)  14:45-15:10 microRNAs as Biomarkers for Drug-induced Liver Injury Shingo Oda (ONO Pharmaceutical, Co., Ltd., Japan)  15:10-15:30 tRNA-derived Small RNA Regulates mRNA Translation and Can Be a Novel Target for Cancer Treatment Hak Kyun Kim (Chung-Ang University)  15:30-15:50 Prediction of Mucosal Exposome-associated Human Distress Yuseok Moon (Pusan National University)
15:50-16:20	Coffee Break / Poster Session
16:20-17:50	Session 3: Future Innovative Technologies Sponsored by NIFDS Chairperson: BeomSeok Han (Hoseo University)  16:20-16:35 R&D Status and Future Plans of Toxicological Research Division in MFDS Il Ung Oh (National Institute of Food and Drug Safety Evaluation)  16:35-17:00 AI Methods for Evaluating Toxicity at the Chemical and Genetic Levels Sun Kim (Seoul National University / Mogam Institute for Biomedical Research)  17:00-17:25 New Experimental Model to Study Human Drug Response Including DILI Cho-Rok Jung (Korea Research Institute of Bioscience and Biotechnology)  17:25-17:50 Synthetic Biology for Innovation in Biomanufacturing Byung-Kwan Cho (KAIST)
16:20-17:50	Session 4: Safety and Toxicity of Chemical Chairperson: Jeong-Yun Choi (Sungkyunkwan University)  16:20-16:45 Regulatory Considerations for Safety Evaluation of mRNA Vaccines Jun-Won Yun (Seoul National University)  16:45-17:10 A Mechanism of PHMG Hepatotoxicity: ER Stress-mediated Apoptosis Doyoung Kwon (Jeju National University)  17:10-17:35 CMIT/MIT Mixture May Enhance Thrombotic Risk through Increased Platelet Procoagulant Activity Keunyoung Kim (Kangwon National University)  17:35-17:55 Rapid and Accurate Assessment of Mitochondrial Dysfunction Using a Novel Toxicity Index Derived from Oxygen Consumption Rates Yoonseok Kam (Agilent Technologies, USA)
17:50-18:20	General Assembly
18:20	Banquet Ocean View Hall

### Registration

The registration fee includes admission to all scientific sessions, the exhibition, coffee breaks, and an abstract book. Participants are encouraged to register for the 39th Annual Meeting of KSOT/KEMS by October 2, 2023, to take advantage of the reduced fee.

■ Early registration can be made through the internet site of KSOT/KEMS ([www.ksot.or.kr](http://www.ksot.or.kr)).

	Early Registration (~ October 2)	On-site Registration	Banquet
KSOT Member	₩160,000	₩200,000	₩10,000
KSOT Student Member	₩100,000	₩120,000	
Non-Member	₩230,000	₩270,000	* Banquet : October 30
Student Non-member	₩120,000	₩140,000	Ocean View Hall

### Important Dates

Deadline For Early Registration : October 2, 2023  
Deadline for Abstract Submission : October 2, 2023

### October 31, 2023 (Tuesday)

09:00-09:40	Plenary Lecture II Chairperson: Hyung-Sik Kim (Sungkyunkwan University)  Planting the Seeds for Prevention of Environmental Carcinogenesis: Lessons from Field Studies in China Thomas W. Kensler (Fred Hutchinson Cancer Research Center, USA)
09:40-11:10	Session 5: Regulatory Application of Alternative Test Method Sponsored by NIFDS, KoCVAM Chairperson: Yoonsook Lee (National Institute of Food and Drug Safety Evaluation)  09:40-09:55 KoCVAM and Regulatory Application of Alternative Test Method NamHee Kang (National Institute of Food and Drug Safety Evaluation)  09:55-10:20 Standardization of Organ-on-a-chip for Safety Tests SungHo Ko (CHA University)  10:20-10:45 Development of Respiratory Toxicity Testing Using an In Vitro Microphysiological System Ha Ryong Kim (Korea University)  10:45-11:10 Study to Propose 'Alternative Test Method Using KeraSkin™ for Evaluation of Skin Irritation Potential of Medical Devices' to ISO Joohwan Kim (National Institute of Food and Drug Safety Evaluation)
09:40-11:10	Session 6: The Current and Future of Inhalation Toxicity and GLP Study Sponsored by KOSHA Chairperson: Yong Joo Park (Kyungsung University)  09:40-10:05 Inhalation Toxicity Study and GLP in Korea Jung-Taek Kwon (National Institute of Environmental Research)  10:05-10:25 Inhalation Toxicity Study of Silver Nitrate DoIn Jeon (Korea Environment Corporation)  10:25-10:45 Inhalation Toxicity Study of 2-Methylfuran Yong-Soon Kim (Occupational Safety & Health Research Institute)  10:45-11:10 Development of Inhalation Toxicity Evaluation Technology Using Animal Disease Models Min-Seok Kim (Korea Institute of Toxicology)
11:10-11:30	Coffee Break
11:30-12:10	Plenary lecture III Chairperson: Kyung-Chul Choi (Chungbuk National University)  Manganese-induced Neurotoxicity: From <i>C. elegans</i> to Humans Michael Aschner (President of SOT, Albert Einstein College of Medicine, USA)
12:10-13:30	Luncheon Seminar Sponsored by Eurofins Discovery Poster Session
13:30-14:00	KSOT Academic Research Award Presentation Chairperson: Kyung-Min Lim (Ewha Womans University)  KSOT Academic Research Award Presentation Awardee
14:00-15:30	Session 7: Organoid Platform for In Vitro Toxicology and Drug Evaluation Sponsored by KRIBB Chairperson: Michael Lee (Incheon National University)  14:00-14:30 Kidney Organoids for in Vitro Drug Toxicity Assessment Hyun Mi Kang (Korea Research Institute of Bioscience and Biotechnology)  14:30-15:00 In Vitro Lung Organoids: A Promising Platform for Human Respiratory Toxicity Studies Mi-Ok Lee (Korea Research Institute of Bioscience and Biotechnology)  15:00-15:30 Liver Organoids for Disease Modeling and Safety Assessment Myung Jin Son (Korea Research Institute of Bioscience and Biotechnology)
14:00-15:30	Session 8: Young Scientist Forum Chairperson: Bumseok Kim (Jeonbuk National University)  14:00-14:30 Development of Biosensors for the Detection of Toxicity-specific Markers Jieon Lee (Korea Institute of Toxicology)  14:30-15:00 Evaluation of Safety, Efficacy and Exposure in the Population of Chemicals Based on Quantitative Modeling Seung-Hyun Jeong (Suncheon National University)  15:00-15:30 Standardized Method Development for Preparing Whole Cigarette Smoke Condensate (WCSC) for Toxicity Testing of Cigarette Smoke Yong-Hyun Kim (Jeonbuk National University)
15:30-16:00	Awards Ceremony & Closing Remarks

### November 1, 2023 (Wednesday)

09:00-11:00	Session 9: KSOT Poster of Distinction Chairperson: Doyoung Kwon (Jeju National University)  KSOT Poster of Distinction Eight awardees oral presentation
-------------	---

주최 (사)한국독성학회/한국환경성독물연변이발암원학회

식품의약품안전처 · 식품의약품안전평가원

후원 KOSHA 한국생명공학연구원

KSOT/KEMS Secretariat

Tel : 82-2-888-3248

E-mail : [ksot@ksot.or.kr](mailto:ksot@ksot.or.kr)

Website : [www.ksot.or.kr](http://www.ksot.or.kr)