



(사)한국독성학회 Korean Society of Toxicology
한국환경성돌연변이발암원학회 Korean Environmental Mutagen Society



The 42nd Annual Meeting App

2026 제42차 정기학술대회

The 42nd Annual Meeting of KSOT/KEMS

신약개발 전주기 안전성 평가와 규제독성

From Drug Discovery to Approval: Safety Assessment and Regulatory Toxicology

November 2 (Mon) ~ 4 (Wed), 2026

Venue : Convention Hall, BEXCO, Busan, Korea

Plenary Lectures



Simple Solutions for Complex Problems:
Mixtures and Cumulative Risk

Cynthia V. Rider

President of SOT, National Institute of Environmental
Health Sciences, USA



Pathomimetic Human Gut-on-a-Chip for
Next-Generation Toxicology: Advancing New
Approach Methodologies (NAMs) from Disease
Modeling to Precision Safety Assessment

Hyun Jung Kim

Cleveland Clinic, USA

Special Lectures



NAMs and Read-Across in Food Safety
Assessment: Current Applications and
Challenges in Japan

Akihiko Hirose

President of JSOT, Chemicals Evaluation and Research
Institute, Japan



Principles and Practice of First-in-Human Dose
Selection

Jangik Lee

Seoul National University, Korea

Scientific Sessions

Session 1: Joint Session with KSNS - Industry
Perspectives on Nonclinical Safety
Assessment Across Diverse Pharmaceuticals

Session 2: Development of Integrated Omics-Based
Biomarkers for Efficacy and Safety
Prediction

Session 3: International Standardization Achievements
and Plans for NAMs Developed by MFDS

Session 4: Leveraging Disease Models for Regulatory
Science, Mechanistic Safety Assessment,
and AI-Driven Toxicity Prediction

Session 5: Mechanistic Insights and Quantitative
Approaches for Drug Development and
Safety Assessment

Session 6: AOP-Based Read-Across Technology for
Nanomaterial Hazard Assessment

Session 7: Trends in NAMs-Based Drug Discovery

Session 8: Young Scientist Forum

Session 9: KSOT Poster of Distinction

주최 (사)한국독성학회/한국환경성돌연변이발암원학회

식품의약품안전처 · 식품의약품안전평가원

KMPC 국가모델동물연구소
Korea Model animal Priority Center

중앙대학교-미얀마약학연구소
CAU-Myanmar Pharmaceutical Research Center, Chung-Ang University

후원 KIT 국가독성과학연구소
Korea Institute of Toxicology

부산관광공사
BUSAN TOURISM ORGANIZATION

산업재해예방
안전보건공단

KITECH
한국생산기술연구원

Award Lecture

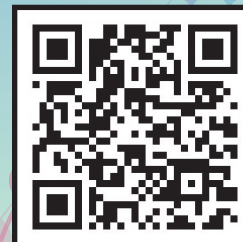
KSOT Unbong Academic Research Award Presentation

KSOT/KEMS Secretariat

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From Drug Discovery to Approval: Safety Assessment and Regulatory Toxicology

November 2 (Mon) ~ 4 (Wed), 2026 Venue : Convention Hall, BEXCO, Busan, Korea

November 2, 2026 (Monday)

12:00	Registration	
12:00-13:00	Council Meeting	Summit Hall
13:00-13:20	Welcome Remarks	
Grand Hall	Keon Wook Kang (President of KSOT, Seoul National University) Seogyoun Kang (Director General, National Institute of Food and Drug Safety Evaluation) Jeong-Doo Heo (President, Korea Institute of Toxicology)	
13:20-14:00	Plenary Lecture I	Eng
Grand Hall	Chairperson: Sang Geon Kim (Seoul National University) Simple Solutions for Complex Problems: Mixtures and Cumulative Risk Cynthia V. Rider (President of SOT, National Institute of Environmental Health Sciences, USA)	
14:00-14:10	Coffee Break	
14:10-15:40	Session 1: Joint Session with KSNS - Industry Perspectives on Nonclinical Safety Assessment Across Diverse Pharmaceuticals	Grand Hall
	Chairperson:Byungcheol Han (Korea Ginseng Corporation)	
14:10-14:40	Evaluation of Toxicity in Drug Development	
	DaeHoon Kim (Hyundai Pharmaceuticals)	
14:40-15:10	Nonclinical Evaluation of Long Acting Injectable	
	Jooyoung Cha (Inventage Lab)	
15:10-15:40	Juvenile Toxicity Assessment of Natural Product Based on ICH S11 and OECD Test Guidelines: Industrial Regulatory Applications and Case studies	
	Eunji Kim (Korea Ginseng Corporation)	
15:40-16:00	Coffee Break Poster Session	
16:00-17:30	Session 3: International Standardization Achievements and Plans for NAMs Developed by MFDS (Sponsored by NIFDS)	Grand Hall
	Chairperson: TBA (National Institute of Food and Drug Safety Evaluation)	
16:00-16:30	MFDS's NAMs Development and Global Standardization Strategy	
	Tae Sung Kim (MFDS/NIFDS)	
16:30-17:00	Achievements of KoCVAM in OECD TG Adoption: Focus on Phototoxicity Assay	
	Nam Hee Kang (MFDS/NIFDS)	
17:00-17:30	Evaluation of the Applicability of NAMs for Immunotoxicity Assessment of Monoclonal Antibody Therapeutics	
	Min Seong Jang (Korea Institute of Toxicology)	
17:30-18:00	General Assembly	Grand Hall
18:00	Banquet	Summit Hall

November 4, 2026 (Wednesday)

09:00-11:00	Session 9: KSOT Poster of Distinction	Rm. 208
	Chairperson: Yong Joo Park (Kyungsung University) Beum-Soo An (Pusan National University)	
	Eight awardees oral presentation	

November 3, 2026 (Tuesday)

09:00-09:30	KSOT Unbong Academic Research Award Presentation	
Grand Hall	Chairperson: Mi-Kyoung Kwak (The Catholic University of Korea)	
	To be announced	
09:30-10:10	Plenary Lecture II	Eng
Grand Hall	Chairperson: Ji-Eun Kim (The Catholic University of Korea) Pathomimetic Human Gut-on-a-Chip for Next-Generation Toxicology: Advancing New Approach Methodologies (NAMs) from Disease Modeling to Precision Safety Assessment Hyun Jung Kim (Cleveland Clinic, USA)	
10:10-10:20	Coffee Break	
10:20-12:00	Session 5: Mechanistic Insights and Quantitative Approaches for Drug Development and Safety Assessment	Grand Hall
	Chairperson: Jung-Hyun Kim (Ajou University)	
10:20-10:45	Physiologically-Based in Silico Modeling Approaches for Toxicity Assessment: Application to High-Dose Methotrexate in Children with Blood Cancer	
	Eun Kyong Chung (Kyung Hee University)	
10:45-11:10	Systems-Based Quantitative Modeling for Clinical Safety Assessment: Role and Perspectives of QSP	
	Sungpil Han (The Catholic University of Korea)	
11:10-11:35	From Genetic Discovery to Drug Development: A Translational Journey in URAT1	
	Sung Kweon Cho (Ajou University)	
11:35-12:00	New Insights into Methylmercury Toxicity and Pain	
	Gi-Wook Hwang (Tohoku Medical and Pharmaceutical University, Japan)	
12:00-13:30	Lunch Poster Session	
13:30-14:00	Special Lecture I	Eng Grand Hall
	Chairperson: Kouichi Yoshinari (University of Shizuoka, Japan)	
	NAMs and Read-Across in Food Safety Assessment: Current Applications and Challenges in Japan	
	Akihiko Hirose (President of JSOT, Chemicals Evaluation and Research Institute, Japan)	
14:00-15:30	Session 7: Trends in NAMs-Based Drug Discovery	Grand Hall
	Chairperson: Ha Ryong Kim (Korea University)	
14:00-14:30	Mature Human Gut MPS for Understanding Drug Responses	
	Tae-Eun Park (UNIST)	
14:30-15:00	Non-Destructive Electrochemical Monitoring of Cellular Metabolism for Drug Toxicity Assessment in Kidney Organoids	
	Tae-Hyung Kim (Sungkyunkwan University)	
15:00-15:30	Brain-on-a-Chip Technology for Assessing Environmental Toxicity and Metabolic Disruption	
	Hong Nam Kim (Korea Institute of Science and Technology)	
15:30-16:00	Awards Ceremony & Closing Remarks	
		Grand Hall
	Session 6: AOP-Based Read-Across Technology for Nanomaterial Hazard Assessment (Sponsored by Development of Safety Assessment Technologies for the Advanced Nanomaterials Industry)	Medium Hall
	Chairperson: Jin-Sung Ra (Korea Institute of Industrial Technology)	
10:20-10:40	Hazard Assessment Approach Based on TpA(AID-AEP-AOP) Considering Metallic Nanomaterials' Particulate and Ionization Behavior	
	Dahee Han (Korea Institute of Industrial Technology)	
10:40-11:00	TpA (AID-AEP-AOP)-Based Hazard Assessment Approach for Fibrous Nanomaterials	
	Youngtae Choe (Korea Institute of Industrial Technology)	
11:00-11:20	Substance Identification Profile Analysis and Equivalence Assessment Algorithm Design for Nanomaterials	
	Sunmi Kim (Korea Research Institute of Chemical Technology)	
11:20-11:40	Grouping and Read-Across Strategies for Environmental Hazard Assessment of Nanomaterials	
	Eunki Min (Seoul National University of Science and Technology)	
11:40-12:00	Mechanistic Evidence-Based Grouping and Human Health Risk Assessment of Manufactured Nanoparticles	
	Donghyun Kim (Keimyung University)	

주최 (사)한국독성학회/한국환경성돌연변이발암원학회 식품의약품안전처 · 식품의약품안전평가원

KMPC 국가모델동물연구소 중앙대학교-미얀마약학연구소

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