Taiwan-Japan-Korea (TJK) International Symposium on Chemical Engineering

Venue: 1F, Berlin Hall (柏林講堂, 93152)

Date: November 30, 2025 (Sunday)

Time	Speaker and Speech Title	
TJK-ISCE 1		
08:30-08:50	Opening Ceremony & Group Photo	
08:50-09:20	[Keynote Speech]	
	Equilibrium and Nonequilibrium Phenomena in Highly Concentrated Emulsions	
	Heng-Kwong Tsao (National Central University, Taiwan)	
09:20-09:40	[Invited Speech]	
	Influence of Deashing Processes on the Pore Structure of Rice Husk-Derived Activated Carbon	
	Jun'ichi Hayashi, Haruka Yamamura, Isao Hasegawa (Kansai University, Japan)	
09:40-10:00	[Invited Speech]	
	Na ⁺ -based Near-infrared Electrochromic Modulation from Plasmonic Tungsten Oxide Nanocrystals	
	Sungyeon Heo (Seoul National University of Science and Technology, Korea)	
	[Invited Speech]	
10:00-10:20	Defying the D2-Law under Gravity: How Buoyancy and Flame Reshape Droplet Combustion	
	Hsien-Hung Wei (National Cheng Kung University, Taiwan)	
10:20-10:30	Coffee Break	
TJK-ISCE 2		
	[Keynote Speech]	
10:30-11:00	Ion Conducting Membranes via Graft Copolymer Self-Assembly	
	Hyuk Jin Roh, Jin Hyuk Kim, So Youn Lee, <u>Jong Hak Kim</u> (Yonsei University, Korea)	
11:00-11:20	[Invited Speech]	
	Introduction of Case Studies of Process Development for Efficiency and Energy Savings in the Production of Thermoplastic Resins	
	Ryuki Yasunari, Naoki Deguchi, Kento Kanaya (Kaneka Corporation, Japan)	
11:20-11:40	[Invited Speech]	
	All-Polymer Electrochromic Display	
	Inho Song (Chung-Ang University, Korea), Jianguo Mei (Purdue University, USA)	
11:40-12:00	[Invited Speech]	
	Separation of Trivalent Metal Ions via Supported Liquid Membrane with Strip	
	Dispersion: Roles of Ion Hydration	
	Ngan Thi Tuyet Dang (Hanoi University of Science and Technology, Vietnam), Hao-Po Tsai, Feng- Ting Weng, Da-Ming Wang (National Taiwan University, Taiwan)	
12:00-13:00	Lunch & Research Collaboration / Industry-Academia Cooperation	
	Kevin Wu (National Taiwan University, Taiwan) & Company	
13:00-13:10	Break	

Time	Speaker and Speech Title
TJK-ISCE 3	
13:10-13:40	[Keynote Speech]
	Digitalization and AI for Dynamic Process Intensification
	Hideyuki Matsumoto (Institute of Science Tokyo, Japan)
13:40-14:00	[Invited Speech]
	Digital Chemistry and Engineering of Nanoporous Materials
	Yongchul G. Chung (Pusan National University, Korea)
14:00-14:20	[Invited Speech]
	Integrating Information Theory into Process Intensification for Complex Chemical
	Process Synthesis
	Naoto Ohmura (Kobe University, Japan), Takafumi Horie, Hayato Masuda (Osaka Metropolitan
	University, Japan)
14:20-14:40	[Invited Speech]
	Process Synthesis of Membrane-Adsorption Hybrid CO ₂ Separation by using Machine
	Learning Model
	Keigo Matsuda, Yota Fujii (Nagoya University, Japan)
14:40-15:00	[Invited Speech]
	Optimizing Inter-regional CO₂ Capture, Transport, and Storage Networks in Taiwan: Cost, Leakage Risk, and Life Cycle Assessment Perspectives
	Tsai-Wei Wu (National Cheng Kung University, Taiwan)
15:00-15:20	Coffee Break
TJK-ISCE 4	Conce Break
13K-13CE 4	[Invited Speech]
15:20-15:40	Multiphase Process Simulations using CFD-DEM
	Hsiu-Po Kuo (National Taiwan University, Taiwan), An-Ni Huang (National Taiwan University of
	Science and Technology, Taiwan), Wan-Yi Hsu (Chang Gung University, Taiwan)
	[Invited Speech]
15:40-16:00	Efforts to Accelerate Commercialization through CAE for Sustainable Manufacturing
	Akiho Itomi, Tomohide Ina, Shota Suzuki (Daicel Corporation, Japan)
16:00-16:20	[Invited Speech]
	Theory-Driven Engineering of Metal–Nitrogen–Carbon Architectures Featuring Single
	and Dual Atom Sites for Enhanced Electrocatalytic
	Jeong Woo Han (Seoul National University, Korea)
16:20-16:40	[Invited Speech]
	The Use of Mixing Technology for Process Improvement Toward Energy Saving
	Soontaree Intasaard, Takaaki Yajima (Sumitomo Heavy Industries (Thailand) Ltd., Thailand),
	Katsuhide Takenaka (Sumitomo Heavy Industry, Japan)
16:40-16:50	Closing Ceremony