

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 <u>Heng-Kwong Tsao</u> (National Central University, Taiwan)
09:20-09:40	[Invited Speech] Influence of Deashing Processes on the Pore Structure of Rice Husk-Derived Activated Carbon <u>Jun'ichi Hayashi</u> , Haruka Yamamura, Isao Hasegawa (Kansai University, Japan)
09:40-10:00	[Invited Speech] Na⁺-based Near-infrared Electrochromic Modulation from Plasmonic Tungsten Oxide Nanocrystals <u>Sungyeon Heo</u> (Seoul National University of Science and Technology, Korea)
10:00-10:20	[Invited Speech] Defying the D2-Law under Gravity: How Buoyancy and Flame Reshape Droplet Combustion <u>Hsien-Hung Wei</u> (National Cheng Kung University, Taiwan)
10:20-10:30	Coffee Break
TJK-ISCE 2	
10:30-11:00	[Keynote Speech] 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 <u>Ryuki Yasunari</u> , Naoki Deguchi, Kento Kanaya (Kaneka Corporation, Japan)
11:20-11:40	[Invited Speech] All-Polymer Electrochromic Display <u>Inho Song</u> (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 <u>Ngan Thi Tuyet Dang</u> (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 <u>Hideyuki Matsumoto</u> (Institute of Science Tokyo, Japan)
13:40-14:00	[Invited Speech] Digital Chemistry and Engineering of Nanoporous Materials <u>Yongchul G. Chung</u> (Pusan National University, Korea)
14:00-14:20	[Invited Speech] Integrating Information Theory into Process Intensification for Complex Chemical Process Synthesis <u>Naoto Ohmura</u> (Kobe University, Japan), <u>Takafumi Horie</u> , <u>Hayato Masuda</u> (Osaka Metropolitan University, Japan)
14:20-14:40	[Invited Speech] Process Synthesis of Membrane-Adsorption Hybrid CO₂ Separation by using Machine Learning Model <u>Keigo Matsuda</u> , <u>Yota Fujii</u> (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 <u>Tsai-Wei Wu</u> (National Cheng Kung University, Taiwan)
15:00-15:20	Coffee Break
TJK-ISCE 4	
15:20-15:40	[Invited Speech] Multiphase Process Simulations using CFD-DEM <u>Hsiu-Po Kuo</u> (National Taiwan University, Taiwan), <u>An-Ni Huang</u> (National Taiwan University of Science and Technology, Taiwan), <u>Wan-Yi Hsu</u> (Chang Gung University, Taiwan)
15:40-16:00	[Invited Speech] Efforts to Accelerate Commercialization through CAE for Sustainable Manufacturing <u>Akiho Itomi</u> , <u>Tomohide Ina</u> , <u>Shota Suzuki</u> (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 Performance <u>Jeong Woo Han</u> (Seoul National University, Korea)
16:20-16:40	[Invited Speech] The Use of Mixing Technology for Process Improvement Toward Energy Saving <u>Sontaree Intasaard</u> , <u>Takaaki Yajima</u> (Sumitomo Heavy Industries (Thailand) Ltd., Thailand), <u>Katsuhide Takenaka</u> (Sumitomo Heavy Industry, Japan)
16:40-16:50	Closing Ceremony