

International Hydrogen Energy Development Forum & HYDROGENIUS Symposium 2025

< Date> December 17 (Wed) - 18 (Thu) , 2025
< Venue > Shiiki Hall, Ito Campus of Kyushu University
< Language > English

Day1

< December 17, 10:00--18:00 >

Time	Opening Ceremony
10:00-10:30	[Welcome Address] Tatsuro Ishibashi, President, Kyushu University (Video Letter) Shintaro Matsumoto, Executive director, New Energy and Industrial Technology Development Organization (NEDO)
Time	Presentation Title and Speaker
10:30-11:30	[Keynote Speech] Hydrogen and Fuel Cells: Past, Present, and Future Dr. Sunita Satyapal, Hydrogen Leader; Former Director, U.S. DOE Hydrogen and Fuel Cell Technologies Office
11:30-12:00	Natural Hydrogen and its potential in Kyushu Prof. Yasuhiro Yamada, Kyushu University
12:00-12:30	State of the Art and Knowledge Gaps in Hydrogen Pipelines Prof. Jinyang Zheng, Zhejiang University
12:30-14:30	Lunch & Poster
14:30-15:00	Introduction of Research Center for Hydrogen Industrial Use and Storage (HYDROGENIUS) Prof. Hisao Matsunaga, Kyushu University
15:00-15:30	Introduction of International Research Center for Hydrogen Energy & Next-Generation Fuel Cell Research Center (NEXT-FC) Prof. Kazunari Sasaki, Kyushu University
15:30-16:00	Introduction of International Institute for Carbon-Neutral Energy Research (I2CNER) Prof. Tatsumi Ishihara, Kyushu University
16:00-16:15	Coffee Break
16:15-16:45	Enabling safety and reliability in hydrogen systems through reliability and risk analysis: implications for fueling stations, forklifts, electrolyzers and beyond. Prof. Katrina Groth, University of Maryland
16:45-17:15	Hydrogen Refueling Station Data Analysis – How Polymeric Materials Are Actually Exposed to Pressure Cycling Associate Prof. Hiroaki Ono, Kyushu University
17:15-18:00	Poster Session
18:15-20:00	Reception / Jonathan K.S. Choi Cultural Center

Day 2**< December 18, 9:30--17:00 >**

Time	Opening Ceremony
09:30-09:40	[Opening Remarks] Prof. Hisao Matsunaga, Kyushu University Director, Research Center for Hydrogen Industrial Use and Storage

Time	Presentation Title and Speaker
9:40-10:20	[Keynote Speech] Cost of Hydrogen – Introduction of IEA/H2TCP Task 50 – Prof. Michio Hashimoto, The University of Tokyo
10:20-10:30	***Fatigue and Fracture*** HYDROGENIUS in Action: From Mechanisms to Industrial Implementation. Prof. Hisao Matsunaga, Kyushu University
10:30-11:00	Enduring International Partnerships as Catalysts for Innovation: from Fundamental Science to Engineering Materials Solutions for Hydrogen Technologies Prof. Petros Sofronis, University of Illinois Urbana-Champaign
11:00-11:30	Safety and Materials Challenges of High Pressure Hydrogen Pipeline Dr.Nobuyuki Ishikawa, JFE Steel Corporation
11:30-13:00	Lunch
13:00-13:30	***Thermophysical Properties*** Thermal Analysis of Hydrogen Behavior during Refueling of Fuel Cell Vehicles Prof.Naoya Sakoda, Kyushu University
13:30-14:00	Thermodynamic Safety Evaluation of Hydrogen Storage Tank Installation Methods for Heavy-Duty Vehicles Dr.Taichi Kuroki, National Renewable Energy Laboratory
14:00-14:10	***Polymers*** Research Activities on Hydrogen Compatible Polymeric Materials in HYDROGENIUS Prof. Shin Nishimura, Kyushu University
14:10-14:40	High-Pressure Hydrogen Hoses and Plastic Pipes for Hydrogen Prof.Kuriyama, Kyushu University
14:40-15:10	Polymers in Pressurized Hydrogen: Fracture Mechanical and Hollow-Specimen Approaches Dr. Bernd Schrittester, ScioFlex Hydrogen GmbH
15:10-15:30	Coffee Break
15:30-16:00	***Tribology*** Hydrogen Tribology Researches in HYDROGENIUS Prof. Yoshinori Sawae, Kyushu University
16:00-16:30	Tribological Performance of PTFE-free Thermoplastics in Hydrogen Dr. Geraldine Theiler, Federal Institute for Materials Research and Testing (BAM)
16:30-17:00	Hydrogen Effects on Friction and Wear in Dry and Boundary-Lubricated Contacts Prof. Ardian Morina, University of Leeds

Host

Research Center for Hydrogen Industrial Use and Storage, HYDROGENIUS

Co Host

JAST Technical Committee on hydrogen tribology

Supported by

New Energy and Industrial Technology Development Organization, NEDO

Hydrogen Energy Systems Society of Japan, HESS

Fuel Cell Development Information Center, FCDIC

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The Association of Hydrogen Supply and Utilization Technology, HySUT

Hydrogen Energy Test and Research Center, HyTReC

Organization for Promotion Academic City by Kyushu University, OPACK

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