INTERNATIONAL INSTITUTE FOR CARBON-NEUTRAL ENERGY RESEARCH

- CENTER FOR ENERGY SYSTEMS DESIGN -

WORKSHOP

DATE: JANUARY 28TH, 2026, WEDNESDAY
TIME: 9:30AM –5:00PM (JST)
VENUE: I²CNER HALL AB, ITO CAMPUS, KYUSHU UNIVERSITY

Time	Speaker	Affiliation	Title
9:30 a.m.	Hiroshige Matsumoto	I²CNER, Kyushu University	Opening Remarks
9:40 a.m.	Yoichi Yamada	RIKEN	Functional Heterogeneous Catalyses for Molecular Transformation
10:05 a.m.	Ken-ichi Shimizu	Hokkaido University	Periodic Unsteady-State Surface Reactions for GHG Conversion and Catalytic Mechanism Studies
10:30 a.m.	Nobutaka Maeda	I²CNER, Kyushu University	Advanced Spectroscopy Platform at the Material Conversion Team
10:55 a.m.	Julian Andres Ortiz Corrales	Institute of Science Tokyo	Controlling Transport Properties in Proton-Conducting Oxides for Improved Performance of Electrochemical Cells
11:20 a.m.	Leonard Kwati	I²CNER, Kyushu University	Breaking the 1600°C Barrier: Sr-Activated Sintering of Proton-Conducting Perovskites
11:45 a.m.	***Lunch Meeting***		
1:10 p.m.	Adroit T. N. Fajar	I²CNER, Kyushu University	Autonomous Molecular Discovery with Language Models
1:35 p.m.	Guillaume Lambard	National Institute for Materials Science (NIMS)	SMILES-X: A Tailored and Effective Molecular Property Inference and Generation Pipeline
2:00 p.m.	Zhanglin Guo	I²CNER, Kyushu University	Small Molecule Design and Discovery for Efficient Halide Perovskite Solar Cells
2:25 p.m.	Bashir Ahmmad Arima	Yamagata University	Synthesis and Evaluation of Visible-Light-Active Photocatalysts for Z-Scheme-Type Water-Splitting Systems
2:50 p.m.	***Coffee Break***		
3:10 p.m.	Islam Md Amirul	I²CNER, Kyushu University	Isotherm and Kinetic Modeling of Adsorbent–Adsorbate Pairs for Sustainable Heat Pump and Decarbonization Systems

3:35 p.m.	Yuan Gao	I^2CNER, Kyushu University	The Application of Large Language Models in Renewable Energy Systems
4:00 p.m.	Saeid Akrami	I^2CNER, Kyushu University	Engineering High-Entropy Fluorite Oxides for Enhanced Photocatalytic Hydrogen Production
4:25 p.m.	Shang Juan	I^2CNER, Kyushu University	Pressure- and Concentration-Dependent Effects of CO_2 on Hydrogen-Assisted Fatigue in Steels: Experimental and First-Principles Insights
4:50 p.m.	Yoichi Yamada	RIKEN	Closing Remarks