INTERNATIONAL INSTITUTE FOR CARBON-NEUTRAL ENERGY RESEARCH

I²CNER THRUST WORKSHOP: I²CNER AECS THRUST WORKSHOP

ADVANCED ENERGY CONVERSION SYSTEMS THRUST (AECS)

DATE: JANUARY 27TH, 2026, TUESDAY
TIME: 9:00 AM – 4:00 PM (JST)
VENUE: I²CNER HALL AB, ITO CAMPUS, KYUSHU UNIVERSITY *ONSITE ONLY

Time	Speaker	Affiliation	Title
9:00 a.m.	Tatsumi Ishihara	I²CNER, Kyushu University	Opening Remarks
9:05 a.m.	Yutaka Osaki	I²CNER, Kyushu University	Energy Conversion System Combining Inorganic Photocatalyst and Whole-Cell Biocatalyst
9:30 a.m.	Xiao Feng Shen	I²CNER, Kyushu University	Highly Efficient D-π-A Type Sensitized Photocatalyst for Near-Infrared-Driven Hydrogen Evolution
9:55 a.m.	Moritz Lukas Weber	NEXT-FC, Kyushu University/ Massachusetts Institute of Technology (MIT)	Defects in Metal Exsolution Catalysts: Decisive for Nanoparticle Morphology and Functional Properties
10:20 a.m.	***Coffee Break***		
10:35 a.m.	Nguyen Thanh Tam	I²CNER, Kyushu University	High-Entropy Oxides for Broad Photocatalytic and Photoreforming Applications
11:00 a.m.	Jun Tae Song	I²CNER, Kyushu University	Modulated CO_2 Microenvironment with Bi-Zr Electrocatalyst for Enhanced CO_2 Reduction
11:25 a.m.	Aleksandar Staykov	WPI-I²CNER, Kyushu University	Electron Transport Through Nanoscale Multilayer Graphene and Hexagonal Boron Nitride Junctions
11:50 a.m.	***Lunch Break***		
1:40 p.m.	Motonori Watanabe	I²CNER, Kyushu University	Molecular Insight of Visible Light Driven Photocatalytic Hydrogen Peroxide Synthesis Using Heptazine-Imide Structure
2:05 p.m.	Toshinori Matsushima	I²CNER, Kyushu University	High-Performance Perovskite-Based Photovoltaic Conversion Enabled by Advanced Organic Materials
2:30 p.m.	***Coffee Break***		

2:45 p.m.	Edalati Kaveh	I^2CNER, Kyushu University	High-Entropy Hydrides for Room Temperature Hydrogen Storage
3:10 p.m.	Kei Saito	School of Chemistry, Institute of Science Tokyo	Discovery of Novel High Proton Conductors Based on Intrinsic Oxygen Vacancies
3:35 p.m.	Junji Hyodo	I^2CNER, Kyushu University	Ni-Exsolution-Induced Hydration that Boosts Proton Conduction and Catalytic Activity
4:00 p.m.	Hiroshige Matsumoto	I^2CNER, Kyushu University	Closing Remarks