



INTERNATIONAL INSTITUTE FOR CARBON-NEUTRAL ENERGY RESEARCH

I²CNER THRUST WORKSHOP: TOWARD CARBON NEUTRALITY

ADVANCED ENERGY CONVERSION SYSTEMS THRUST (AECS)

DATE: FEBRUARY 1ST, 2024, THURSDAY

TIME: 10:00 AM – 5:00 PM (JST)

VENUE: I²CNER HALL C/HYBRID, ITO CAMPUS, KYUSHU UNIVERSITY

Time	Speaker	Affiliation	Title
10:00 a.m.	Hiroshige Matsumoto	I ² CNER	Opening Remarks
10:05 a.m.	Andrew Gewirth	UIUC	Controlling Electrolyzer Reactivity Using Electrodeposited Alloy and Polymer-modified Electrodes
10:35 a.m.	Mai Tomisaki	I ² CNER	Separate production of gaseous species in water electrolysis using redox reactions
10:55 a.m.	Motonori Watanabe	I ² CNER	The acceleration of BODIPY dye-sensitized photocatalytic hydrogen production for enhanced visible light-driven photocatalytic hydrogen production
11:15 a.m.	Kaveh Edalati	I ² CNER	New photocatalysts by high-pressure torsion
11:35 a.m.	Koichiro Kato	Faculty of Engineering	Development of functional polymer informatics for electrolyte membrane materials of fuel cells
Lunch			
1:00 p.m.	Thomas Lippert	PSI	Pulsed Laser Deposition: Preparing Model Systems for Studies on Energy Materials
1:30 p.m.	John Kilner	ICL	Pushing the Boundaries; MIECs for Next Generation SOC Devices?
2:00 p.m.	Tatsumi Ishihara	I ² CNER	Oxide cathode for high temperature electrolysis cell
2:20 p.m.	Stephen Skinner	ICL	Proton incorporation and transport in reduced scheelite-type oxides
Break			
3:15 p.m.	Seiichiro Kimura	Renewable Energy Institute	Impact of Energy Efficiency of Water Electrolysis Systems on Carbon Neutrality in Japan
3:45 p.m.	Ryota Kabe	OIST	Stable organic charge carriers accumulated by photoexcitation
4:15 p.m.	Toshinori Matsushima	I ² CNER	Clarifying degradation mechanisms for durable perovskite solar cells

4:35 p.m.	Aleksandar Staykov	I ² CNER	Theoretical simulations of complex oxides for application in SOFCs
4:55 p.m.	Tatsumi Ishihara	Director, I ² CNER	Closing Remarks