



INTERNATIONAL INSTITUTE FOR CARBON-NEUTRAL ENERGY RESEARCH

I²CNER THRUST WORKSHOP: TOWARD CARBON NEUTRALITY

ADVANCED ENERGY CONVERSION SYSTEMS THRUST (AECS)

DATE: JANUARY 30TH, 2025, THURSDAY

TIME: 1:00 PM – 5:20 PM (JST)

VENUE: I²CNER HALL AB, ITO CAMPUS, KYUSHU UNIVERSITY *ONSITE ONLY

Time	Speaker	Affiliation	Title
1:00 p.m.	Hiroshige Matsumoto	WPI-I ² CNER, Kyushu University	Opening Remarks
1:05 p.m.	Tsuyohiko Fujigaya	Faculty of Engineering, WPI-I ² CNER, Kyushu University	Challenge to remove ionomer from PEMFC cathode
1:25 p.m.	Aleksandar Staykov	WPI-I ² CNER, Kyushu University	Automatized DFT simulations of complex oxides
1:45 p.m.	Kaveh Edalati	WPI-I ² CNER, Kyushu University	High-entropy photocatalysts
2:05 p.m.	Toshinori Matsushima	WPI-I ² CNER, Kyushu University	Recent progress of perovskite solar cells in I ² CNER
2:25 p.m. ~ 2:40 p.m.	Break		
2:40 p.m.	Motonori Watanabe	WPI-I ² CNER, Kyushu University	Heptazine based photocatalyst for hydrogen peroxide production in water medium
3:00 p.m.	Adrian Yong	WPI-I ² CNER, Kyushu University	DFT insights into the near-zero chemical expansion of praseodymium-oxide perovskites
3:20 p.m.	Shuntaro Tsubaki	Faculty of Agriculture, WPI-I ² CNER, Kyushu University	Sustainable chemical processes using microwaves
3:40 p.m. ~ 3:55 p.m.	Break		
3:55 p.m.	Yuichi Sakuda	Institute of Science Tokyo	High Ion Conductivity and its Mechanism of Hexagonal Perovskite-Related Oxides

4:15 p.m.	Veeramani Vediyappan	WPI-I ² CNER, Kyushu University	Proton-conductor steam electrolysis for energy-efficient hydrogen production
4:35 p.m.	Nuttavut Kosem	WPI-I ² CNER, Kyushu University	Photobiocatalytic Conversion of Solar Energy to NH ₃ and H ₂ on Nitrogenase
4:55 p.m.	Nobutaka Maeda	WPI-I ² CNER, Kyushu University	Application of Modulation Excitation Spectroscopy to X-ray Synchrotron Radiation
5:15 p.m.	Tatsumi Ishihara	WPI-I ² CNER, Kyushu University	Closing Remarks