



INTERNATIONAL INSTITUTE FOR CARBON-NEUTRAL ENERGY RESEARCH

2025 I²CNER ANNUAL SYMPOSIUM
“BUILDING A SUSTAINABLE FUTURE:
INNOVATION AND PRACTICE FOR A CARBON-NEUTRAL SOCIETY”
I²CNER HALL/ HYBRID
ITO CAMPUS, KYUSHU UNIVERSITY

WEDNESDAY, JANUARY 29TH, 2025

10:00 a.m. Opening Remarks
Tatsuro Ishibashi, *President, Kyushu University*
Rob Force, *Political Economic Officer, U.S. Consulate Fukuoka*
Tatsumi Ishihara, *Director, I²CNER, Kyushu University*

10:15 a.m. Introduction
Hiroshige Matsumoto, *I²CNER, Kyushu University*

Session 1: Innovation in material and electrical conversion for sustainability

10:20 a.m. Invited Lecture A
“CO₂ conversion for sustainable production of valuable chemicals”
Ken-ichi Shimizu, *Professor, Hokkaido University*

10:55 a.m. I²CNER Presentation A
“Development of Fast Proton-Conducting Ceramics at 300 °C”
Junji Hyodo, *Associate Professor, I²CNER, Kyushu University*

11:30 a.m. ***Lunch Break***

Session 2: Carbon-neutral technologies towards practical applications

1:10 p.m. Invited Lecture B
“Development of two-dimensional nanomaterials for energy applications”
Shintaro Ida, *Professor, Kumamoto University*

1:45 p.m. Invited Lecture C
“Towards commercialization of halide perovskite PV”
Takurou Murakami, *Organic-inorganic Hybrid PV Team Leader, Global Zero Emission Research Center, AIST*

2:20 p.m. I²CNER Presentation B
“Compositional engineering of halide perovskite for multiple application scenarios”
Zhanglin Guo, Assistant Professor, I²CNER, Kyushu University

2:55 p.m. ***Photo session***

3:00 p.m. ***Coffee Break (Poster Session)***

Session 3: Building a carbon-neutral future with intelligence

4:30 p.m. Invited Lecture D
“Computation, modeling, and simulation for understanding atomic and electronic scale processes in materials”
Elif Ertekin, Associate Professor, University of Illinois at Urbana-Champaign

5:05 p.m. Invited Lecture E
“AI for Catalysis and DigCat 3.0 – An Intelligent Digital Platform Powered by Ultra-Large-Scale Exp + Comput”
Hao Li, Associate Professor, Tohoku University

5:40 p.m. I²CNER Presentation C
“Mathematical modeling and simulation for materials discovery and understanding”
Nguyen Thi Hoai Linh, Assistant Professor, I²CNER, Kyushu University

6:15 p.m. Closing Remark
Shigenori Fujikawa, I²CNER, Kyushu University

Dinner at Big Orange (within ITO campus) *invitees only