



Tokyo Tech

International Symposium for Zero-Carbon
Energy Systems: IZES
10-12 January, 2023, Tokyo Institute of
Technology

Closing Remarks

Toru Obara
Chair

Laboratory for Zero-Carbon Energy,
Institute of Innovative Research,
Tokyo Institute of Technology

- International Symposium on Zero-Carbon Energy Systems, IZES, took place on 10 – 12 January 2023 at Tokyo Institute of Technology aiming at discussing the latest research activities relevant to the development of innovative Zero-Carbon energy systems, which shall be the technologies to supply energy for carbon neutral society, including renewable energy technologies and innovative nuclear energy technologies within a broad perspective. The goal was to visualize and share a new stage of the Zero-Carbon energy system technologies for a carbon-neutral society.

- Total: 150
 - Regular: 82
 - Student presenter: 46
 - Student observer: 22
- Countries
 - Japan: 128
 - USA: 7
 - Korea: 12
 - Germany: 2
 - China: 1

- 10 January (Tue)
 - Opening speech
 - Prof. Kazuya Masu, President of Tokyo Institute of Technology
 - Plenary Lecture 1
 - Dr. Martin Pei, “Transformation to fossil-free steel with the HYBRIT technology”, Executive Vice President & CTO, SSAB AB.
 - Plenary Lecture 2
 - Prof. Takeo Yamaguchi, “Systematic material design and development for polymer electrolyte fuel cells and anion exchange membrane water electrolysis”, Tokyo Institute of Technology

Opening Speech, Plenary lectures (continued)

- 11 January (Wed)
 - Plenary Lecture 3
 - Prof. Haruko M Wainwright, “Environmental Science for Sustainable Energy”, Massachusetts Institute of Technology (MIT)
 - Plenary Lecture 4
 - Mr. Vincent Besson, “New Dynamics of the Nuclear Energy in France: a Pillar to Reach Carbon Neutrality”, President, Framatome Japan KK.
- 12 January (Thru)
 - Plenary Lecture 5
 - Prof. Keigo Akimoto, “Climate change mitigation measures for the carbon neutrality and the transition”, Research Institute of Innovative Technology for the Earth (RITE) and Tokyo Institute of Technology

- Total: 106
 - Plenary:5, Oral: 65, Poster: 36
- Topics (Oral and Poster)
 - Renewable energy technologies: 1
 - Innovative nuclear energy technologies:57
 - Carbon neutral technologies: 10
 - Energy storage and transformation technologies: 5
 - Material recycling technologies for energy systems: 12
 - Innovative nuclear applications: 16

- Joint poster session by IZES and AESJ
 - Short presentations and the session on 12 January
- Poster presentation awards

- Strict peer review of submitted papers will be carried out, and selected high-quality papers will be published in a special issue of Energy Reports, Elsevier.
- The submission deadline is extended to 31 January 2023.
 - However, if the paper is to be submitted after 16 January, please notify the Editor-in-Chief (izes-paper@zc.iir.titech.ac.jp) by 15 January with the presentation number, paper title, and authors' names.
- Early submission is strongly recommended.
- No extension again!

- We had excellent lectures, presentations, and a lot of discussions about the latest research activities relevant to the development of innovative Zero-Carbon energy systems that enabled visualization and sharing of a new stage of the Zero-Carbon energy system technologies for carbon-neutral society.
- The chair believes the aim of the symposium was achieved successfully.

Special Thanks

- The chair deeply appreciates
 - Organizing Committee members
 - International Scientific Committee members
 - Steering Committee members
 - Technical Program Committee members
 - Speakers in the plenary lectures
 - All participants in the oral sessions and the poster sessions
 - Faculties, staff, and students at Tokyo Institute of Technology, who worked so hard to prepare and organize the symposium



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See you again in the IZES-2

