

## Hiroshi Sagara, Chair

Laboratory for Zero-Carbon Energy Institute of Integrated Research, Institute of Science Tokyo

## International Symposium on Green Transformation Initiative and Innovative Zero-Carbon Energy Systems, GXI-ZES



- GXI-ZES held on 14 16 January, 2025 at Science Tokyo aims at discussing the latest research activities relevant to the development of green transformation technology and innovative zero-carbon energy systems, which shall be the technologies to supply energy for a carbon-neutral society, including zero-carbon energy, energy carrier, climate change mitigation, carbon neutral and innovative nuclear energy technologies within a broad perspective.
- The goal is to visualize and share a new stage of the green transformation technologies and zero-carbon energy system technologies for a carbon-neutral society.
- The special collaboration sessions with MIT, EPRI and DLR was organized.

#### **Participants**

#### ● Total: 205

Plenary Lecturers/Guests: 18
Regular: 61
GXI Member: 26
Student Presenter: 64

36

#### Countries/Regions

Student Observer:

Japan:
USA:
ROK:
Indonesia:
Germany:
Taiwan:
Poland:
Philippines
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## **Opening Speech, Plenary Lectures**



#### ● 14th January

- Opening Speech
  - Prof. Yukitaka Kato, Science Tokyo
  - Prof. Naoto Ohtake, Science Tokyo
  - Mr. Takatsugu Ryuzaki, METI
  - Mr. Koji Yanagisawa, MEXT
- MIT Session on Decarbonization
  - Prof. William H. Green, MIT
  - Prof. Jacopo Buongiorno, MIT
  - Dr. Masami Takenaka, Asahi Kasei Corporation
  - Dr. Koichi Izumiya, Kanadevia Corporation

## **Plenary Lectures**

#### SCIENCE TOKYO

#### ● 15th January

- EPRI Session on Energy Carrier
  - Mr. Jeffery Preece, EPRI
  - Mr. Neil Kern, EPRI
  - Prof. Hiroshi Asano, CRIEPI
  - Prof. Takeo Yamaguchi, Science Tokyo

## **Plenary Lectures**

#### SCIENCE TOKYO

#### ● 16th January

- DLR Session on Energy Storage
  - Dr. Thomas Bauer, DLR
  - Dr. Inga Bürger, DLR
  - Prof. Takahiro Nomura, Hokkaido Univ.
  - Prof. Hajime Arai, Science Tokyo
- GXI VISION 2050 Session
  - Prof. Yukitaka Kato, Science Tokyo
  - Dr. Keigo Akimoto, RITE
  - Prof. Takao Nakagaki, Waseda Univ.
  - Prof. Kenji Takeshita, Science Tokyo

#### **Presentations**



- Total: 111
  - Plenary: 16, Oral: 46, Poster: 49
- **Topics** (in oral/poster presentations)
  - 1. Green Transformation and Zero-Carbon Energy System Technologies: 24
  - 2. Innovative nuclear energy technologies: 18
  - 3. Energy storage and transformation technologies: 19
  - 4. Energy carriers: 3
  - 5. Material recycling technologies for energy systems: 9
  - 6. Innovative nuclear applications: 16
  - 7. Energy Policy and Economics: 6

#### **Poster Session**



- Short presentations and the session on 15th Jan.
- Presentation Awards to the selected presenters

## **Proceedings of Abstracts**



 Proceedings of abstracts of GXI-ZES is available by online for all participants

https://gxi-zes.org/exabst/index.html

Access ID and password are sent by Email to all participants

## Summary



- We had excellent lectures, presentations, and a lot of discussions about the latest research activities relevant to the development of green transformation technology and innovative zero-carbon energy systems that enabled visualization and sharing of a new stage of the green transformation technologies and zero-carbon energy system technologies for a carbon-neutral society
- It fostered networking between industry, academia and government
- The chair believes the aim of the symposium was achieved successfully

## **Special Thanks**



- The chair deeply appreciate
  - Organizing Committee
    - ZC, Science Tokyo
    - Science Tokyo GXI
  - Steering Committee
  - Technical Program Committee
  - Plenary Lecturers, MIT, EPRI, DLR and all
  - All Presenters in Oral and Poster sessions
  - Supporters, 20 Domestic/International Organizations
  - All Staff Members including Faculties, Staffs and Students



# Thank you! See you next time!

