

Call for Papers

International Conference on Power Engineering – 2023

May 21st - 26th, 2023 Kyoto International Conference Center, Kyoto, Japan

Organized and sponsored by

The Power and Energy System Division of **The Japan Society of Mechanical Engineers**

Co-Organized by
The Power Division of
The American Society of Mechanical Engineers

Chinese Society of Power Engineering

Objective

The conference aims to provide a platform for promoting collaborations among professional societies and enhancing the technical exchanges in the power engineering community regarding thermal power, distributed energy system including heat and power utilization, energy storage, renewable energy, environmental issues including low-carbon, CCS (Carbon dioxide Capture and Storage), CCUS (Carbon dioxide Capture, Utilization and Storage) and waste to energy, and the other energy-related topics. Hydrogen is expected to be a key fuel for energy storage of variable renewable energy, low-quality coal utilization, and low-carbon energy systems. CCUS is attracting attention as a bridging technology. The conference will be held in Kyoto, a famous ancient city where an innovative CCS is demonstrating.

Scope and Topics

ICOPE will cover both fundamental and applied topics in power engineering, including:

- 1. Centralized Power Generation Systems
 All advanced cycles such as A-USC, MACC, Triple Combined Cycle, IGCC, IGFC, Allam Cycle, Hybrid Cycle
- Distributed Energy Systems
 Combined Heat and Power (Co-generation system), Fuel Cells, Internal/External Combustion Engines, Organic Rankine
 Cycle, Smart Grid, Microgrid, Heat Pump Systems, Waste Heat Recovery
- Renewable Energy
 Geothermal Energy, Wind Turbines, Tidal Power Generation, Solar Power
- 4. Hydrogen Energy Technologies
 Hydrogen Production, Transportation and Utilization System, Fuel Cell for Automobile
- Turbines and Generators
 Gas Turbines, Steam Turbines, Hydraulic Turbines and Generators
- Advanced Combustion Technologies
 All Combustion technologies, Slag Management, Oxy-fuel Combustion
- 7. Thermal Hydraulics, Boiling and Condensation CFD, Experimental Techniques
- 8. Materials Engineering for Energy Systems
 New Metal Alloys for Boilers, Materials for Turbine Blades and Governor Valves
- 9. Operation, Maintenance and Diagnosis Technologies Non-destructive Inspection, Measurement Techniques, Robotics, IoT-AI

10. Power Grid Stabilization Technologies

Energy Storage, Demand Response, Load Following and Leveling

11. Environmental Protection

Carbon Capture, Utilization and Storage (CCUS), Gas and Water Aftertreatment, Waste to Energy

12. Techno-Socio-Economic Aspect of Energy System

Techno-Economic Analysis, Safety and Security, Regulations and Standards

13. Other Topics

Other Topics Related to Power Engineering

Steering Committee

Chair Prof. Takao Nakagaki, Waseda University

Co-Chair Mr. Frank L. Michell, Chair of the ASME Clean Energy Technology

Group

Prof. Jianhua Yan, Zhejiang University

Members Mr. Takayuki Torikai, Chair of General Affairs Committee

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Waseda University

Mr. Kazuo Tanaka, Chair of Planning Committee

Kawasaki Heavy Industries, Ltd.

Secretary General Dr. Yuso Oki, Central Research Institute of Electric Power Industry

Abstract Submission

Authors willing to present their papers should submit **400 words abstracts in English** via the conference website (https://www.icope-2023.org/). Initial screening will be based on the abstracts. Authors should make their pre-registration until March **10**, 2023, and to present their papers in oral sessions individually.

Important Dates for Authors

September 21, 2022 400 words abstract due

October 26, 2022 Notification of abstract acceptance

November 25, 2022 Extended abstract due

February 8, 2023 Notification of extended abstract acceptance

March 10, 2023 Pre-registration, at least one of the authors with registration fee due

March 31, 2023 Final manuscripts due

The dates are subject to change; please check the conference website.

All extended abstracts will be peer reviewed in format along with template. All accepted extended abstracts will be accessible to registered participants on the Online Program web page. Also, the accepted papers will be recommended for publication in the **Mechanical Engineering Journal** or **Waste Disposal & Sustainable Energy** upon reviewers' recommendation.

Conference website

Detailed information about the conference, including location, travel, accommodation, abstract submission, proceedings, venues, registration, etc., can be found at the conference website: https://www.icope-2023.org/

Contact

If you have any questions, please don't hesitate to contact the following address.

All countries except for China: ICOPE-2023 Secretariat

E-mail: icope-2023@jsme.or.jp

China: ICOPE-2023 Secretariat in China (Prof. Xiaoqing Lin, Zhejiang University)

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