

International Symposium on
**LOW-CARBON THERMAL ENERGY
SCIENCE AND TECHNOLOGY**

LCET-2024

11–14 December 2024, Istanbul, Türkiye

Sponsored by ICHMT & CEEE/OZU



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CONFERENCE OBJECTIVE

The main goal of the symposium is to address scientific and technological gaps in the field to accelerate the development and deployment of low-carbon thermal energy technologies towards a carbon-neutral economy. The symposium will provide a forum for the exposure and exchange of ideas, methods, and results in all aspects of thermal science and engineering.

CONFERENCE TOPICS

The symposium includes, but not limited to, the following topics:

- Fundamentals of energy transport, conversion, and storage in thermal energy systems, including
 - mass, momentum, energy, and charge transport in single and multiphase systems
 - transport phenomena in reactive flows
 - multi-scale transport phenomena
 - thermodynamics and radiative transport phenomena of non-equilibrium processes
 - thermophysical and thermochemical characterization of renewable energy materials
- Advances in thermal energy science and engineering pertinent to low-carbon thermal energy technologies including
 - low- to high-temperature solar thermal and radiative energy
 - thermophotovoltaics
 - biomass energy
 - geothermal energy
 - ocean thermal energy
 - thermal energy storage
 - thermal management of electrochemical energy systems
 - renewable process heat for fuel and materials processing
 - renewable process heat for environmental separations
 - industrial process heat and efficiency
- System-level analyses, including
 - thermodynamics of energy systems and processes
 - techno-economic assessment of energy systems and processes
 - energy efficiency innovations and policies
 - system integration for complex problems.

SCIENTIFIC COMMITTEE

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Xing Zhang, Tsinghua University, China

ABSTRACT DEADLINES

Letter of intent is due September 1, 2024

2-page Abstract is due October 1, 2024

Select contributions will be invited to submit full papers to a future Special Section in the ASME Journal of Heat and Mass Transfer.