



## SECOND CIRCULAR



# 19<sup>TH</sup> INTERNATIONAL CONFERENCE ON NUMERICAL COMBUSTION (ICNC 2024)

MAY 7 - 10, 2024

KYOTO, JAPAN

The Japan Section of the Combustion Institute is pleased to announce and invite you to participate in the 19th edition of the International Conference on Numerical Combustion in Kyoto (Japan) on May 7-10, 2024. The 19th International Conference on Numerical Combustion in 2024 follows a series of conferences, the latest editions took place in Sorrento, Italy (2002), Sedona, USA (2004), Granaad, Spain (2006), Monterey, USA (2008), Corfu, Greece (2011), San Antonio, USA (2013), Avignon, France (2015), Orlando, USA (2017), Aachen, Germany (2019), San Diego, USA (2022).

The conference will provide a forum for mutual exchange of information in the numerical combustion community involved in both fundamental and application oriented research and development.

### INVITED LECTURES:



**Prof. Hideaki Kobayashi** (Tohoku University, Japan)

Fundamentals and applications of ammonia combustion for carbon neutrality (Tentative)



**Prof. Epaminondas Mastorakos** (University of Cambridge, UK)

Advances in simulations of dual-fuel combustion (Tentative)



**Prof. Terese Lovas** (Norwegian University of Science and Technology, Norway)

Do the thermodynamic properties of new fuels challenge current state of the art modelling (Tentative)



**Prof. Matthias Ihme** (Stanford University, USA)

Machine-learning and data-driven methods for combustion (Tentative)

## THEMES OF CONFERENCE :

The themes of the forthcoming 19th International Conference on Numerical Combustion in 2024 will include, but not be limited to basic combustion physics and technological applications on:

- Laminar flames
- Kinetics, mechanism reduction
- Ignition, quenching
- Turbulent combustion
- Combustion dynamics and instabilities
- Emissions and pollution
- Droplets and sprays
- Real gas effects in combustion
- Heterogeneous combustion
- Detonation, explosions
- Gas turbines, engines and furnaces
- Fires
- Micro-combustion
- New combustion technologies
- Numerical methods for reacting flows
- Code coupling
- High-performance computing for combustion application
- Simulations with AI technologies

## CONTRIBUTIONS :

**Contributed presentations:** Presentations are selected on the basis of an abstract (Max. 200 words).

**Mini-symposia:** 19 Mini-symposia were selected on the basis of a proposal.

## IMPORTANT DATES :

**Submission of Abstract:** December 15, 2023

**Notification of acceptance of Abstract:** January 19, 2024

## KYOTO CITY, and KYOTO TERRSA:

Kyoto City is one of the most historical places in Japan, which was the capital of Japan for more than 1,000 years. Kyoto promises to provide visitors with beautiful landscapes, amazing entertainment and fine food. Kyoto City boasts world-class accessibility, with a quick link to the Kansai International Airport. Kyoto has gained an enviable reputation among foreign visitors as a city which is easy to get around. The conference venue, KYOTO TERRSA is located within 15 min walk from JR Kyoto Station.

## CHILDCARE SERVICE:

Childcare service will be available at the conference venue. The details will be provided in the conference webpage.

## CO-CHAIRS:

- R. Kurose (Kyoto Univ.),
- M. Tanahashi (Tokyo Tech)
- Y. Mizobuchi (JAXA)

## SECRETARY GENERAL:

- H. Watanabe (Kyushu Univ.)

## CONTACT :

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Conference web: <https://www.combustionsociety.jp/nc24/>



**KYOTO TERRSA**