



# International Conference on Numerical Combustion

Rome, Italy, October 14-17, 2025

[www.icnc2025.com](http://www.icnc2025.com)

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## Organizing Committee

Prof. Hong G. Im, KAUST

Prof. Mauro Valorani, University of Rome La Sapienza

Prof. Joseph M. Powers, University of Notre Dame

*Under the auspices of the Italy and Saudi Arabia sections of the Combustion Institute*



SAPIENZA  
UNIVERSITÀ DI ROMA



### Topics of the conference include, but are not limited to:

- Advanced computational methods for reacting flows
- High-performance computing for accelerated simulations
- Data-based combustion modeling
- Laminar and turbulent flame theory and modeling
- Chemical kinetics, mechanism reduction
- Renewable and low-carbon fuels combustion
- Critical phenomena, ignition, extinction
- Turbulent combustion theory and modeling
- Combustion instabilities
- Pollutant formation and mitigation
- Droplet, spray dynamics, and real gas effects in combustion
- Heterogeneous and multi-phase reactions
- Detonation, explosions, supersonic combustion
- Gas turbines, engines, and propulsion applications
- Energy conversion and storage applications
- Multi-scale, multi-physics modeling and simulation
- Fire prediction and modeling
- Combustion AI and digital twins
- Micro-combustion and new combustion technologies
- Plasma-assisted combustion

### Team Members

Prof. Mani Sarathy  
KAUST

Prof. Francesco Creta  
University of Rome La Sapienza

Prof. Pasquale Eduardo Lapenna  
University of Rome La Sapienza

Prof. Jonathan F. MacArt  
University of Notre Dame

Dr. Silvia Dall'Olio  
University of Notre Dame

### Organizing Secretariat

 Scientific Communication srl  
icnc2025@jeangilder.it

