The Combustion Institute
5001 Baum Boulevard, Suite 644
Pittsburgh, PA 15213-1851
1.412.687.1366
office@combustioninstitute.org

Calendar of Events

September 2, 2025 - September 5, 2025

CYPHER COST Training School on the analysis, uncertainty quantification, validation, optimiz

A multi-day training school
Tamas Turanyi,
turanyi@chem.elte.hu
Registration is now open on the website of the training school: https://chemkinlab.elte.hu/COST_Training_School_2025/

The training school is part of CYPHER COST Action and organized by the Chemical Kinetics Laboratory of ELTE Eötvös Loránd University, Budapest. Participation in the training school may be financially supported for members of the CYPHER COST Action, but the event is open to anyone interested in attending. The school is hosted by the Hungarian Section of The Combustion Institute.

The trainers include highly renowned specialists in the field (Alison Tomlin, Leeds University, United Kingdom; Dimitris Goussis, Khalifa University, Abu Dhabi; Alessandro Stagni, POLIMI, Italy; Timoteo Dinelli, POLIMI, Italy; Tibor Nagy, HUN-REN RCNS, Hungary) and members of the ELTE Chemical Kinetics Laboratory (Tamás Turányi, Máté Papp, Éva Valkó, and András Gy. Szanthoffer).

The lectures will cover the following topics:

Reaction kinetics basics
Local sensitivity analysis
Uncertainty of combustion measurements, rate coefficients, Arrhenius parameters and thermodynamic data
Sources of combustion kinetics data
Conventional and automatic mechanism generation (AMG), use of machine learning in AMG and rate constant estimation
Validation of detailed combustion mechanisms
Global uncertainty analysis methods (screening methods; Monte Carlo methods and structured sampling approaches using Latin hypercube and low discrepancy sampling sampling; variance based sensitivity indices, HDMR, polynomial chaos methods)
Optimization of detailed combustion mechanisms, curve matching, surface matching optimization, skeletal reduction of reaction mechanisms; time scale analysis; methods based on time-scale separation (CSP, ILDM, ISAT, REDIM), fitted models, in-situ tabulation and species lumping.

During the practical sessions, the participants will use their laptops. The practical session will deal with computer codes GUI-HDMR (High Dimensional Model Representation); OpenSMOKE++; OptiSMOKE++; Optima++ (mechanism validation and optimization); and skeletal mechanism reduction methods DRG, DRGEP, PFA, GPS and SEM. The use of websites https://ReSpecTh.hu, https://combustiondata.elte.hu/, and https://k-evaluation.elte.hu/ will also be discussed. The participants are kindly requested to install these free codes on their laptops and to register for these websites before the training school.

Trainees are encouraged to present a poster, but it is not mandatory. The posters will be on display throughout the entire training school, and a dedicated poster session will take place on Tuesday afternoon.

Important Dates

Deadline for the application of COST CYPHER grant - 20 July

(An earlier application is better, because the number of grants is limited.)

Deadline for early bird registration - 31 July

September 28, 2025 - October 2, 2025

4th Symposium on Ammonia Energy (SoAE)
McNamara Alumni Center
200 Oak St. SE
Minneapolis, MN
A multi-day symposium.
4thSoAE@gmail.com,
4thSoAE@gmail.com
The University of Minnesota will host the 4th SoAE in Minneapolis, MN. This conference will bring researchers from around the world together to discuss pertinent issues to the production, transport, storage, and use of green ammonia for energy applications. Particular attention will be paid to using ammonia as a fuel for stationary power and off-highway transportation applications like agriculture and mining, key global sectors with particular presence in Minnesota and surrounding U.S. states.

Important Dates

Abstract Submission Deadline - 27 June 2025
Early Registration Deadline - 29 August 2025

October 14, 2025 - October 17, 2025

International Conference on Numerical Combustion (ICNC2025)

Roma Eventi - Fontana di Trevi
Piazza della Pilotta, 4
Rome,

This is a multi-day event focused on numerical combustion.

Organizing Secretariat,
icnc2025@jeangilder.it

The Twentieth International Conference on Numerical Combustion (ICNC2025) will be held from 14-17 October 2025 in the City of Rome, Italy. The Conference will continue the tradition as a premier global forum that brings together leading combustion researchers worldwide employing cutting-edge mathematical and computational methods to tackle many challenging problems in conventional and renewable fuel utilization for power and transportation. From the inaugural event in Sophia Antipolis, France, in 1985 to the latest rendition in Kyoto, Japan in May 2024, the ICNC has attracted many researchers in the academia, government laboratories and industry, in venues alternating between Europe, North America, and Asia. The conference program consists of invited talks and parallel sessions of mini-symposia on focused subjects as well as general contributed presentations aligned with the conference topics. The social program will include a welcome reception, a social dinner, and a guided tour of Rome.

Important Dates:
Mini-symposia proposal deadline: 31 January 2025
Abstract submission deadline: 15 April 2025 15 May 2025
Early bird registration deadline: 15 July 2025

October 28, 2025 - October 30, 2025

The 11th Iranian Fuel and Combustion Conference (FCCI 2025)

Amirkabir University of Technology
No. 350, Hafez Ave, Valiasr Square
Tehran, 1591634311

A multi-day conference.

Behrad Karimi, +9899127969685

The 11th Fuel and Combustion Conference of Iran (FCCI 2025) will be held from October 28 to 30, 2025, and will be hosted by Amirkabir University of Technology in Tehran. Organized in collaboration with the Iranian Combustion Institute, this prestigious scientific event provides a national platform for researchers, industry professionals, and students to share the latest advances in fuel and combustion science and technology.

Amirkabir University of Technology, as one of Iran's leading engineering universities, is proud to host this important gathering of scientists and engineers from across academia and industry. The main objective of FCCI 2025 is to address current challenges and explore innovative solutions related to sustainable, efficient, and clean combustion systems.

Important Dates:

Abstract Submission Deadline - 1 August 2025
Paper Acceptance Notification - 22 August 2025
Early Registration Deadline - 1 September 2025
Full Article Submission Deadline - 22 September 2025
Conference Start Date - 28 October 2025
Conference End Date - 30 October 2025

Conference Topics:

Impact of Combustion on Energy Imbalance
Fuel and Combustion Theory
Experimental Methods and Numerical Modeling in Combustion
Propulsion Systems and Internal Combustion Engines
Advanced Combustion Technologies
Standardization and Optimization of Combustion Systems
Industrial Combustion
Combustion of Biofuels and Renewable Fuels
Fuel Cells
Combustion in Turbine Engines
Fuel and Combustion in Commercial and Residential Sectors
Safety, Pollutants, and Environmental Impacts of Combustion
Fire, Causes and Extinguishing Methods
Energy Management and Economic Considerations in Combustion systems
Combustion in Supersonic Flows
Explosion and Reactive Gas Dynamics
Hydrogen Production, Storage, and Combustion

We warmly invite academics, students, engineers, and industry leaders to contribute and participate in FCCI 2025. This event is an exceptional opportunity to engage with cutting-edge research, explore practical applications, and build meaningful collaborations.

For more information and submission details, please visit: https://fcci2025.aut.ac.ir/en

Contact: FCCI2025@aut.ac.ir

November 2, 2025 - November 7, 2025

3rd Asia-Pacific Combustion Institute-Summer School

ValparaÃ-so-ViÃ±a del Mar

The program will be held throughout the week.

The main goal of the 3rd Asia-Pacific Combustion Institute Summer School is to introduce the combustion and fire safety community to fundamental combustion problems, focusing on studies of diffusion flames and their connection to large-scale fires. This year's school will emphasize the link between combustion theory and practical applications in both industrial settings and real fire scenarios, contributing to create and strengthen the links between different academic institutions and research groups focused in the Asia Pacific and South American areas.

Considering the nature of fires and flames, it has been long recognized that there is a gap between fire science and other disciplines within combustion. Particularly, the number of uncontrolled factors associated with fires have rendered many of the well-established techniques in combustion difficult to be applied. Therefore, the scientific direction of the APCISS-3 school aims to discuss and provide means to bridge this gap through the study of diffusion flames.

The Summer School is scheduled for 2-7 November 2025 in the coastal cities of Valparaíso - Viña del Mar. Workshops will be held at Universidad Técnica Federico Santa María.

More information is available in the flyer attached to this listing.