



Conference

on Modelling Fluid Flow (CMFF'25)

Radisson Blu Béke Hotel August 26 – August 29, 2025 Budapest / Hungary

The 19th International Conference on Fluid Flow Technologies

The next event in the series
 of International Conferences on Fluid Machinery
 held in Budapest

August 26 – August 29, 2025 Radisson Blu Béke Hotel Budapest, Hungary

First Announcement and Call for Papers

INVITATION

It is our privilege to invite you to attend the 19th International Conference on Fluid Flow Technologies, entitled **Conference on Modelling Fluid Flow (CMFF'25)**, the next event in the series of International Conferences on Fluid Machinery held in Budapest since 1959. The aim of the Conference is to respond to challenges in the rapidly developing fields of fluid mechanics: numerical simulation of flows and physical modelling of flow processes using advanced measurement methods. The Conference aims at defining the state of the art in CFD and advanced measurement methods, inspiring both research and practical applications by promoting interaction between scientists and practitioners. At CMFF'25, emphasis will be placed on recently emerging computational and measurement techniques, as well as the practical application of CFD and physical flow modelling in a wide range of engineering fields.

The last event, CMFF'22, in 2022, incorporated approximately 90 selected presentations with authors from nearly 20 countries. The high standard of the papers presented at the previous CMFF conferences has enabled us to organize special issues in prestigious international journals. Preliminary steps are being taken to provide a similar opportunity for selected papers from CMFF'25.

The success of the previous CMFF events encourages the conference organisers to foresee a fruitful CMFF'25. We look forward to welcoming you to Budapest in 2025.



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Professor J. Vad

Chairman of Local Organising Committee (LOC)

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Organising Institution

Department of Fluid Mechanics,

Faculty of Mechanical Engineering, Budapest University of Technology and Economics

Co-operating Organisations

European Research Community on Flow, Turbulence and Combustion (ERCOFTAC)

The Japan Society of Mechanical Engineers (JSME)

The Visualization Society of Japan (VSJ)

Department of Hydrodynamic Systems,

Faculty of Mechanical Engineering, Budapest University of Technology and Economics

Department of Fluid and Heat Engineering,

Faculty of Mechanical Engineering and Informatics, University of Miskolc

Scientific Society of Mechanical Engineers (Flow Technology Section)

Committee of Fluid Mechanics and Thermodynamics

of the Hungarian Academy of Sciences

Conference Secretariat

Secretariat of Conference on Modelling Fluid Flow (Dr. E. Balla) **Department of Fluid Mechanics**

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e-mail cmff@gpk.bme.hu web site https://www.cmff.hu

CONFERENCE TOPICS

The scope of the Conference includes the theoretical aspects of numerical simulation and physical modelling of flows as well as their practical use in research, product development, solving problems, and optimisation.

The main thematic areas of the Conference are:

- Atmospheric Flows
- Biomedical Flows
- Chemical and Process Engineering
- Combustion and Heat Transfer
- Environmental Protection
- External Aerodynamics
- Flow Induced Noise

- Fluid Power: Hydraulics and Pneumatics
- Fluid-Solid Interaction
- Heating, Ventilation and Air Conditioning
- Internal Flows
- Power Engineering
- Turbomachinery
- Vehicles

Each thematic area covers research, development, design, new applications and equipment, case studies and future trends with particular emphasis on the use of CFD and advanced measurement methods.

WORKSHOPS AND EXHIBITION

A specialty of CMFF conferences is the organisation of workshops. A workshop is a session, where questions about challenges, recent trends and solutions related to fluids engineering are raised by the Workshop Leader and are discussed by internationally acknowledged experts, with active contribution of the audience. The Workshop Leader has the opportunity to invite presenting authors, to illustrate certain workshop topics, but it must be kept in mind that the workshop is principally different from a "traditional" lecture sessions.

We welcome proposals for workshops from the members of the International Scientific and Programme Committee as well as from senior scientists.

The participation of technical exhibitors is also encouraged, upon demand.

CONFERENCE FRAMES (tentative)

Tuesday, August 26

Registration, welcome reception (afternoon, evening)

Wednesday, August 27 to Friday, August 29

Parallel sessions with presentation of papers, workshops, the Gala Dinner, and a Closing plenary.

Plenary session: Opening, 4 keynote speeches:

- "Data-Driven Nonlinear Modeling of Fluids Flows" by Prof. G. Haller; (CH) Institute for Mechanical Systems, ETH Zürich, Zurich, Switzerland
- "A look back on 30 years of turbomachinery research in Europe" by Prof. G. Bois; (FR)
 University of Lille, CNRS, ONERA, Arts et Metiers Institute of Technology, Lille, France
- "Macroscopic and Microscopic blood flows" by Prof. F. Nicoud; (FR) Université de Montpellier, Montpellier, France
- "Optical thermometry coupled to the measurement of other quantities (velocity, pressure)" by Prof. B. Fond; (FR)

ONERA The French Aerospace Lab, Department of Aerodynamics, Aeroelasticity and Acoustics (DAAA), Paris-Saclay University, Meudon, France

OFFICIAL LANGUAGE

The language of the conference is English.

CALL FOR PAPERS

Abstracts of papers (between 200 and 300 words in English) are to be submitted for review and selection via EasyChair by following the instructions on the Conference website www.cmff.hu before November 20, 2024. Authors whose abstracts are accepted will be notified by December 10, 2024, and are requested to submit the full-length papers by February 20, 2025, to be reviewed by April 20, 2025. The revised final papers must be submitted no later than June 20, 2025. The correspondence related to the aforementioned publication process is to be carried out exclusively via the Conference's EasyChair account.

PUBLICATIONS

Authors are expected to submit 8-page papers in English. The Proceedings of the Conference will be published online, on the conference website (www.cmff.hu). It will include the papers reviewed and accepted by the International Scientific and Programme Committee.

The authors of the contributions of highest quality are encouraged to extend appropriately their papers for individual submission to prestigious international journals. CMFF'22 special issue was organized for selected papers in the international journal Tech. Mech. (ISSN 0232-3869) and in International Journal of Turbomachinery, Propulsion and Power (ISSN 2504-186X). Both journals are open-access journals with DOI referenced by Scopus and other reference databases.

CALENDAR

The Calendar of the Conference is as follows:

November 20, 2024 Deadline for submission of abstracts
 December 10, 2024 Notification of abstract acceptance

• **February 20, 2025** Deadline for papers

• April 20, 2025 End of paper review, communication

• June 20, 2025 Deadline for submission of camera-ready papers

• **Aug. 26-29, 2025** Conference in Budapest

For further details on the program, please visit the conference website

https://www.cmff.hu

BUDAPEST

Budapest, "the pearl of the Danube" is one of the truly historic European capitals with its past stretching back over one thousand years. The picturesque bridges spanning the river Danube, Castle Hill, the churches and architecture, the sculptures, the wooded hills, the Hungarian cuisine and wine, and the warm hospitality of Hungarian people all ensure that no guest can leave here without longing to return. Walking down streets hosting several open-air programs, those who attend the Conference will have the opportunity to enjoy the refreshing breeze and gentle sunlight of our late summer.

The venue of the conference is the Radisson Blue Béke Hotel – a noble hotel situated in the downtown area of Budapest. The Hotel is an ideal scene for both professional and social events, in the city's cultural heartland, close to the theatres and concert halls, in a hotel that's elegant, stylish and easily accessible.

The conference programme includes a Welcome Reception and Gala Dinner. While the organisation of a wide variety of social programmes and tourist events is offered by the Hotel.

