

Conference on Modelling Fluid Flow (CMFF'09)

The 14th International Conference on Fluid Flow Technologies

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

September 9-12, 2009

**Budapest University of Technology and Economics
Budapest, Hungary**

**First Announcement
and
Call for Papers**

<http://www.cmff.hu>

INVITATION

It is our privilege to invite you to attend the 14th International Conference on Fluid Flow Technologies, entitled "Conference on Modelling Fluid Flow" (CMFF'09), 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 measuring methods, inspiring both research and practical applications by promoting interaction between scientists and practitioners. At CMFF'09, a particular emphasis will be given to industrial aspects of turbulence modelling, supported by advanced measurement techniques.

The last event in 2006, CMFF'06, was extremely successful, incorporating 150 selected presentations with authors from 42 countries. The high standard of papers presented at the previous CMFF conferences enabled us to organize special issues in prestigious international journals as well as to edit fluids engineering handbooks published by Springer.

The success of the previous CMFF events encourages the conference organisers to foresee a fruitful CMFF'09. We look forward to welcoming you to Budapest in 2009.

Univ. Prof. Dr.-Ing. habil.
R. Schilling
Chairman of International Scientific
and Programme Committee

Professor
T. Lajos
Chairman of Local Organising
Committee

CONFERENCE ORGANISATION

International Scientific and Programme Committee (ISPC)

Chairman:

Univ. Prof. Dr.-Ing. habil. R. Schilling, Munich (D)

Co-chairman:

Prof. T. Czibere, Miskolc (H)

Secretary:

Dr. J. Vad, Budapest (H)

Members:

Prof. R. S. Abhari, Zürich (CH)

Dr. L. Baranyi, Miskolc (H)

Prof. B. J. Boersma, Delft (NL)

Prof. A. R. J. Borges, Lisbon (P)

Prof. R. A. Van den Braembussche, Sint-Genesius-Rode (B)

Prof. Dr. Dr. h.c. Franz Durst, Erlangen (D)

Dr. B. P. M. van Esch, Eindhoven (NL)

Dr. Á. Fáy, Miskolc (H)

Prof. L. Fuchs, Lund (S)

Dr. T. Gausz, Budapest (H)

Prof. B.J. Geurts, Twente (NL)

Prof. V. Goriatchev, Tver (RUS)

Prof. R. Grundmann, Dresden (D)

Prof. G. Halász, Budapest (H)
Prof. H. Jaberg, Graz (A)
Dr. L. Kalmár, Miskolc (H)
Dr. J. Kidger, Sheffield (UK)
Prof. G. Kosyna, Braunschweig (D)
Prof. K. Kozel, Prague (CZ)
Dr. G. Kristóf, Budapest (H)
Prof. H. Kuhlmann, Vienna (A)
Prof. J. Kumicak, Kosice (SK)
Prof. M. Leschziner, London (UK)
Prof. I. R. Lewis, Newcastle-upon-Tyne (UK)
Prof. N. C. Markatos, Athens (GR)
Prof. M. Nedeljkovic, Belgrade (YU)
Prof. H. Nørstrud, Trondheim (N)
Prof. A. Okajima, Kanazawa (J)
Dr. Gy. Paál, Budapest (H)
Prof. M. L. Riethmuller, Sint-Genesius-Rode (B)
Dr. F. Rispoli, Rome (I)
Prof. A. Rivas, San Sebastián (E)
Prof. R. Rohatynski, Zielona Góra (PL)
Prof. W. Schneider, Vienna (A)
Prof. M. Shirakashi, Nagaoka (J)
Prof. S. J. Song, Seoul (KR)
Prof. R. Susan-Resiga, Timisoara (RO)
Prof. D. Thevenin, Magdeburg (D)
Prof. T. Weidinger, Budapest (H)

Local Organising Committee

Chairman:

Prof. T. Lajos, Budapest

Secretary:

Ms. T. Lőrinc, Budapest

Members:

Dr. L. Kullmann, Budapest

Prof. Sz. Szabó, Miskolc

Dr. J. Vad, Budapest

Organising Institution

Department of Fluid Mechanics, Budapest University of Technology and Economics

Co-operating Organisations

Department of Hydrodynamic Systems, Budapest University of Technology and Economics

Department of Fluid and Heat Engineering, University of Miskolc

Scientific Society of Mechanical Engineers (Flow Technology Section)

Committee of Fluid Mechanics and Thermodynamics of the Hungarian Academy of Sciences

The Japan Society of Mechanical Engineers

The Visualization Society of Japan

Conference Secretariat

Secretariat of Conference on Modelling Fluid Flow (Dr. János Vad)

Department of Fluid Mechanics

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web site: <http://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
- Chemical and Process Engineering
- Combustion and Heat Transfer
- Environment Protection Problems
- External Aerodynamics
- Flow Induced Noise
- Fluid Power: Hydraulics and Pneumatics
- Fluid-Solid Interaction
- Heating, Ventilating 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 recent CMFF conferences is the organisation of workshops. A workshop is a 100 minute event. Questions about challenges, recent trends and solutions related to fluids engineering are provoked by the Workshop Leader and are discussed by internationally acknowledged experts involved by the Workshop Leader, with active

contribution of the audience. The Workshop Leader is in the capacity to invite presenting authors for illustration of the workshop topic, but it must be kept in mind that the workshop is principally different from a "traditional" paper session.

At CMFF'06, the following workshops were organised:

- "Modelling of Turbomachinery Aerodynamics" by Prof. F. Rispoli, Rome (I)
- "Coupling CFD with Optimization" by Prof. D. Thevenin, Magdeburg (D)
- "Multi-Objective Optimization of Turbomachines" by Prof. R. A. Van den Braembussche, Sint-Genesius-Rode (B)

The workshops related to optimization formed the basis of a handbook published by Springer, entitled "Optimization and Computational Fluid Dynamics" (editors: D. Thevenin, G. Janiga).

Proposals by the members of the International Scientific and Programme Committee as well as by senior scientists for organisation of workshops are welcome.

The participation of technical exhibitors is also encouraged.

CONFERENCE FRAMES (tentative)

Wednesday, September 9: Registration, welcome party (afternoon, evening)
Thursday, September 10: Plenary session: Opening, 4 keynote speeches in the topics of

- "Trends and Challenges in Modelling Complex Turbulent Flows", by Dr. F. Menter, Otterfing (D)
- The State of the Art in Optical Flow Diagnostics, by M. L. Riethmuller, Sint-Genesius-Rode (B)
- "Large-Scale Simulations for Turbine Engine Core Noise", by D. Van Zante, Cleveland (USA)
- "Osborne Reynolds - the Turbulent Years", by Prof. B. E. Launder, Manchester (GB)

Thursday, September 10 to Saturday noon, September 12:

Parallel sessions with presentation of papers, workshops.
Closing plenary.

OFFICIAL LANGUAGE

The language of the Conference is English.

CALL FOR PAPERS

Abstracts of papers (between 200 and 300 words in English) are required before October 20, 2008 for review and selection. Authors whose abstracts are accepted will be notified by November 20, 2008, and requested to submit the full-length papers by February 20, 2009 for review with a deadline of April 20, 2009. The revised camera-ready papers must be submitted no later than June 20, 2009. The correspondence should be sent to the Conference Secretariat.

PUBLICATIONS

Authors are expected to submit 8-page papers in English. The Proceedings of the Conference will include the papers reviewed and accepted by the International Scientific and Programme Committee. Upon registration, delegates will receive the printed materials which will also be available on CD-ROM.

The International Journal of Heat and Fluid Flow (IJHFF) organized a special issue involving selected CMFF'06 papers. The Journal of Computational and Applied Mechanics also dedicated special issues to the CMFF events.

Opportunities for journal publication will be arranged also for CMFF'09. Discussions are in progress with the editors of leading journals in the fields of the conference, including the IJHFF, with the aim of providing a rapid journal publication route for the very best papers presented.

CALENDAR

The Calendar of the Conference is as follows:

- October 20, 2008 Deadline for submission of abstracts
- November 20, 2008 Notification of abstract acceptance
- February 20, 2009 Deadline for papers
- April 20, 2009 End of paper review, communication
- June 20, 2009 Deadline for submission of camera-ready papers
- September 9-12, 2009 Conference in Budapest

For further details on the program, please visit the conference web site <http://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, the 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.

Budapest University of Technology and Economics, the largest technical university in Hungary with its eight faculties, was established in 1782. The Central Building of the University, the venue for the Conference, is beautifully located on the Danube bank with views across the Hill Gellért and several historical bridges.

The conference programme includes a Welcome Party, Gala Dinner, social programmes and tourist events.