THMT'18

Turbulence, Heat and Mass Transfer

Rio de Janeiro, RJ, Brazil July 10-13, 2018

















2nd Announcement and Call for Papers

The 9th triennial symposium, after Lisbon (1994), Delft (1997), Nagoya (2000), Antalya (2003), Dubrovnik (2006), Rome (2009), Palermo (2012) and Sarajevo (2015), will provide an opportunity for scientists and engineers to present and discuss recent advances, current issues and future prospects in heat and mass transfer associated with turbulence. Major topics and trends will be introduced by internationally recognized keynote speakers.

Important dates:

Receipt of Abstracts: January 14, 2018 Notification of acceptance: February 18, 2018 Receipt of the final manuscript: April 15, 2018 Symposium in Rio de Janeiro: July 10th-13th, 2018

Organizing Committee

- **A.P. Silva Freire (Chairman)**, Federal University of Rio de Janeiro, Brazil
- K. Hanjalic (Co-Chairman), Delft University of Technology, NL
- **K. Suga (Co-Chairman)**, Osaka Prefecture University, Japan
- **B. Basara, AVL,** Austria
- **D. Borello,** Sapienza University of Rome, Italy
- **S. Benhamadouche,** EDF, Chatou/Paris, France
- **R.M.** Cotta, Federal University of Rio de Janeiro, Brazil
- C.M. Casciola, Sapienza University of Rome, Italy
- S.S. Girimaji, Texas A&M University, USA
- **S. Jakirlic,** Darmstadt Univ. Techn., Germany
- **B.E. Launder,** University of Manchester, UK
- **D. Markovich,** ITP SB RAS/NSU, Russia
- **I. Marusic,** University of Melbourne, Australia
- L. Moriconi, Federal University of Rio de Janeiro, Brazil
- F. T. Pinho, Oporto University, Portugal
- A. Pollard, Queen's University, Canada
- **B. Rosic,** Oxford University, UK
- A. Silveira Neto, University of Uberlandia, Brazil
- **S. Sarkar,** Univ. of California, San Diego, USA
- M. Tanahashi, Tokyo Inst. of Techn., Japan

- 1. Fundamentals
- 2. Experimental Techniques
- 3. RANS Methods
- 4. DNS and LES Studies
- 5. Combined RANS and LES
- 6. Turbulence and Buoyancy
- 7. Impingement, Separation, Rotation
- 8. Compressibility and High Speed Flows
- 9. Mixing
- 10. Combustion and Reacting Flows
- 11. Electro-conductive Fluids & DHD
- 12. Flow and Heat Transfer Control
- 13. Turbulence in Non-Newtonian Fluid Flow
- 14. Turbulence in Microchannels
- 15. Multiphase Flow
- 16. Environmental and Geophysical Flows
- 17. Energy
- 18. Industrial Applications
- 19. Special Topics

Scientific Advisory Committee

- R. Amano, USA
- **H.I. Andersson,** Norway
- V. Armenio, Italy
- J.R. Barbosa, Brazil
- **D. Bergstrom,** Canada
- **B.J. Boersma,** Netherlands
- **S.C. Kassinos,** Cyprus
- I. Castro, UK
- H. Choi, Korea
- **A. Corsini,** Italy
- D. Cokljat, UK
- T.J. Craft, UK
- D. Dennis, UK
- **L. Davidson,** Sweden
- C. Dopazo, Spain
- S. Drobniak, Poland
- S.E. Elghobashi, USA
- M. Fairweather, UK

- **S. Frolov,** Russia
- **S. Fu,** China
- M. Hadziabdic, Bosnia-Herzegovina
- Y. Hagiwara, Japan
- H. Hattori, Japan
- **E.** Hawkes, Australia
- **R.J.A. Howard,** France
- **J. Janicka,** Germany
- T. Kajishima, Japan
- **S. Kenjeres,** Netherlands
- J. Klewicki, Australia/USA
- S. Komori, Japan
- S. Lardeau, UK
- R. Manceau, France
- E. Mastorakos, UK

B. Niceno, Switzerland

- S. Obi, Japan
- **S-H Peng,** Sweden
- J.C. Pereira, Portugal

- M. Reeks, UK
- M. Van Reeuwijk, UK
- **F. Rispoli,** Italy
- **D.J.E.M. Roekaerts,** Netherlands
- **G.P. Romano**, Italy
- **E. Serre,** France
- J. Sesterhenn, Germany
- **D.Ph. Sikovsky**, Russia
- A. Soldati, Italy
- M. Strelets, Russia
- J. Su, Brazil
- H.J. Sung, Korea
- J. Szmyd, Poland
- A. Tomboulides, Greece
- P. Tucker, UK
- L. Vervisch, France
- S. Wallin, Sweden
- H. Yoshida, Japan
- **Z. Zhang,** China

Keynote Speakers

Renato M. Cotta, Federal University of Rio de Janeiro, Brazil Computational-Analytical Integral Transforms: Benchmarks and Applications in Turbulence, Heat and Mass Transfer

Jader R. Barbosa, Federal University of Santa Catarina, Brazil Fluid Flow and Thermal Phenomena in Emerging Cooling **Technologies**

Branislav Basara, TU Graz & Suad Jakirlic TU Darmstadt, **Austria & Germany**

Flow and Thermal Management in Automotive Engineering: Recent CFD Aided Developments

Ned Djilali, University of Victoria, Canada

Heat and Mass Transfer Issues in Fuel Cells and Hydrogen Systems

Cees Van der Geld, Technische Universiteit Eindhoven, **Netherlands**

Particle Dynamics in Turbulent Pipe Flow

Yasuo Kawaguchi, Tokyo University of Science, Japan Anomalous Heat and Mass Transport Phenomena in Drag Reducing Turbulence by using Surfactant

Epaminondas Mastorakos, Cambridge University, UK Turbulent Combustion Modelling and Experiments – Recent Trends and Developments

Sutanu Sarkar, University of California at San Diego, USA The Impact of Subsurface Turbulent Processes on the Upper Ocean Thermal Structure: LES Studies

Call for papers

Authors are invited to submit electronically an extended abstract of 2-4 pages with supporting illustrations as appropriate, to the website www.thmt-18.org, section Paper Submission.

Proceedings

The printed book of the proceedings, containing the full-length keynote and short papers, together with the CD proceedings containing all the full-length papers will be published by Begell-House Inc. (New York) before the meeting. The proceedings include all invited and accepted contributed papers received in the final form prior to the given deadline. The Organizing Committee, assisted by the members of the Scientific Advisory Committee, will review all papers to assess their suitability for publication in the proceedings. Selected papers will be published in special issues of Flow, Turbulence and Combustion and Int. J. of Heat and Fluid Flow after the symposium.

Registration Fee

Early Registration (before April 30, 2018): R\$ 2000 (Brazilian Real)

Late Registration: R\$ 2200

Onsite: R\$ 2400

Emeritus Professor: R\$ 1350

Student: R\$ 1350

Accompanying persons: R\$ 420

The fees cover the symposium proceedings (printed volume and CD-proceedings), refreshments, lunches and the social programme (welcome reception and gala dinner). The registration fee for accompanying persons covers participation in the social programme.



Casa do Colégio Brasileiro de Altos Estudos (Federal University of Rio de Janeiro) Avenida Rui Barbosa 762 22250-020, Flamengo, Rio de Janeiro Brazil

Home Page

http://www.thmt-18.org/

If you have any question or need further information, please fell free to contact the Organizing Committee at conference e-mail: thmt18symposium@gmail.com.