



THMT'20

St. Petersburg, Russia
July 7-10, 2020



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3rd Announcement and Call for Papers

Holiday Inn Hotel St. Petersburg

Turbulence, Heat and Mass Transfer

The 10th symposium will again assemble scientists and engineers in the area of turbulence-related heat and mass transfer to discuss recent advances, emerging challenges and future prospects in research and applications. Major topics and new trends will be addressed by invited keynote speakers.

Lisbon (1994), Delft (1997), Nagoya (2000), Antalya (2003), Dubrovnik (2006), Rome (2009), Palermo (2012), Sarajevo (2015), Rio de Janeiro (2018)

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DEADLINES: Abstracts submission: JANUARY 15, 2020

Notification of acceptance: FEBRUARY 15, 2020

Final manuscripts: APRIL 15, 2020

- Experiments, techniques and theories on scalar transport and the role of turbulence in forced, natural and mixed convection
- Numerical simulations/modelling of turbulence and heat and mass transfer: DNS/LES, hybrid RANS/LES, DES, PANS, PDFs, (U)RANS
- Turbulent heat and mass transfer control and augmentation
- Unsteadiness, transients, and effect of body forces in turbulent heat and mass transfer
- Heat and mass transfer in compressible and high-speed flows
- Turbulence in two-phase flows, effects of turbulence in particulate, droplet and film heat and mass transfer
- Turbulence, heat and mass transfer in combustion and other reacting flows; turbulence-radiation interactions
- Environmental and geophysical turbulent flows and transport phenomena
- Turbulence-related utilization of heat and mass transfer in energy, process and environmental technologies
- Turbulence, heat and mass transfer in biological and biomedical flows
- Turbulence, heat and mass transfer in material processing, in MHD, and other special applications

Special session: "50 Years of CFD in Engineering Sciences" Springer Commemorative Volume in Honour of D.B. Spalding

<http://www.thmt-20.org> - Organizing Secretary: Dmitrii Sikovsky, dsikovsky@gmail.com

KEYNOTE SPEAKERS

Andreas Dreizler, Institute of Reactive Flows and Diagnostics, Darmstadt University of Technology, Germany
Wall-bounded combustion

Peter Frick, Institute of Continuous Media Mechanics, Perm, Russia
Cascades and dynamo in fully developed MHD turbulence

Koji Fukagata, Dept. of Mechanical Engineering, Keio University, Japan
Turbulent drag reduction and heat transfer enhancement by streamwise traveling waves

Saša Kenjereš, Faculty of Applied Sciences, Delft University of Technology, The Netherlands
Experimental and computational FHMT for medical diagnostics: towards patient-specific treatment

Detlef Lohse, Department of Physics of Fluids, University of Twente, The Netherlands
(Topic to be announced)

Gotthard Rainer, Advanced Simulation Technologies, AVL List GmbH, Graz, Austria
Diversity of our mobility in the future - Result of research and simulation

Richard D. Sandberg, Dept. of Mechanical Engineering, University of Melbourne, Victoria/Australia
Using data to build CFD-ready turbulence closures

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-20.org section Paper Submission.

IMPORTANT DATES

- Receipt of abstracts: January 15, 2020
- Notification of acceptance: February 15, 2020
- Receipt of camera-ready manuscripts: April 15, 2020
- Symposium in St. Petersburg: July 7-10, 2020

PROCEEDINGS

Printed book of Proceedings, containing short papers and the full-length keynote papers, together with the CD Proceedings containing all full-length papers will be published by Begell House Inc. (New York) before the meeting. The proceedings will 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 the Flow, Turbulence and Combustion journal and in Int. Journal of Heat and Fluid Flow after the Symposium.

REGISTRATION FEE

- Early registration (before April 30, 2020): Euro 500
- Late registration: Euro 550
- On-site registration: Euro 600
- Students: Euro 300
- Accompanying persons: Euro 100

The fee covers the symposium proceedings (printed volume and CD-proceedings), refreshments, lunches and the social programme (receptions and symposium banquet, see website). The registration fee for accompanying persons covers participation in the social programme.

Junior participants from developing countries can apply for ICHMT grant.

SYMPOSIUM VENUE

Holiday Inn Hotel, 'Moskovskye Vorota'. Moskovsky Prospekt 97a, St. Petersburg. Special rates offered to the THMT-20 participants.



Further information on the symposium, templates for short and full-length papers, registration, accommodation and hotel reservation, programme/tours for accompanying persons etc. can be found on the web site:

<http://www.ichmt.org> (under future ICHMT meetings) or <http://www.thmt-20.org>.

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