

**International Symposium on Thermal Effects in  
Gas flows In Microscale  
ISTEGIM 2019 - a MIGRATE event**

**CALL FOR EXTENDED ABSTRACTS**

**Ettlingen near Karlsruhe, Germany**

**October 24 - 25, 2019**

MIGRATE ([www.migrate2015.eu](http://www.migrate2015.eu)) is a H2020 Marie Skłodowska-Curie European Training Network, intended to address some of the current challenges to innovation that faces European industry with regard to **heat and mass transfer in gas-based micro-scale processes**. This network of 10 participants and 6 associated partners coming from all over the European Community covers different aspects of enhanced heat transfer and thermal effects in gases: from modelling of heat transfer processes and devices, development and characterization of sensors and measurement systems for heat transfer in gas flows as well as thermally driven micro gas separators, to micro-scale devices for enhanced and efficient heat recovery in environmental, transport, telecommunications and energy generation.

The MIGRATE project of the European Community presents its **International Symposium on Thermal Effects in Gas flows In Microscale (ISTEGIM 2019 - <http://www.istegim.eu/index.php>)**, taking place in Ettlingen near Karlsruhe, Germany on **October 24-25, 2019**. During this 2-day symposium, the members of the MIGRATE network will showcase the main achievements of the project. The program will include keynote lectures, invited lectures and contributed papers on the following topics.

### Topics

The conference topics include, but are not limited to:

- Multiphase Heat Transfer in Microstructures
- Gas-liquid contacting
- Modelling and simulation of flows and heat transfer in microstructures
- Gas Surface Interaction
- Gas Sensors and Sensor integration
- Non-invasive measurement techniques
- Lab-on-device systems
- Microsystems for bio- and environmental applications
- Thermally driven microflows
- Heat recovery and energy harvesting microsystems
- Flow and heat transfer through micro-nano porous media

## Contributed papers

Contributed papers for the workshop will be accepted as oral or poster presentations. Participants who wish to present a paper are requested to submit an extended abstract in PDF format (4 A4 pages) for peer review. The authors of accepted abstract will have the possibility to propose a full paper for publication. Full papers or extended abstracts, following the choice of the authors, will be published within the Conference proceedings. A selection of the best long papers (8 pages and more) will be proposed by the Scientific Committee for publication in a special issue of the open access journal *Micromachines* ([https://www.mdpi.com/journal/micromachines/special\\_issues/ISTEGIM\\_19](https://www.mdpi.com/journal/micromachines/special_issues/ISTEGIM_19)).

All extended abstracts will have to be submitted before **June 30<sup>th</sup>, 2019** using the paper submission site: <https://istegim2019.sciencesconf.org/>

## Important Dates

<b>May 01, 2019:</b>	Extended abstract submission opening
<b>June 30, 2019:</b>	New deadline for submission of extended abstract
<b>July 21, 2019:</b>	Notification of acceptance
<b>August 25, 2019:</b>	Deadline for submission of final manuscripts
<b>September 15, 2019:</b>	Deadline for Early Bird Registration

## Scientific Committee

### Conference Chairs

Lucien Baldas (University of Toulouse, France) - [lucien.baldas@insa-toulouse.fr](mailto:lucien.baldas@insa-toulouse.fr)

Juergen J. Brandner (Karlsruhe Institute of Technology, Germany) - [juergen.brandner@kit.edu](mailto:juergen.brandner@kit.edu)

### Scientific Committee Members

R. Abiev (St. Petersburg State University, Russia)

A. Alexeenko (Purdue University, USA)

S. Colin (University of Toulouse, France)

Y. Deng (Changchun Institute of Optics, China)

M. Delanaye (MITIS SA, Seraing, Belgium)

A. Frezzotti (Politecnico Milano, Italy)

I. Graur (Aix-Marseille University, France)

K. Haas-Santo (Karlsruhe Institute of Technology, Germany)

G.L. Morini (University of Bologna, Italy)

D. Newport (University of Limerick, Ireland)

S. Stefanov (Institute of Mechanics, Bulgarian Academy of Sciences)

Y. Takata (University of Kyushu, Fukuoka, Japan)

D. Valougeorgis (Panepistimio Thessalias – University of Thessaly, Greece)

## Local Organizing Committee

J. Brandner, A. Deuchler, M. Knapp, V. Tomczyk (Karlsruhe Institute of Technology)

## Information

For more information about ISTEGIM 2019, please go at <http://www.istegim.eu/index.php> or contact the event organizers by [istegim2019@sciencesconf.org](mailto:istegim2019@sciencesconf.org)