

International Symposium on Thermal Effects in Gas flows in Microscale ISTEGIM 2019 - A MIGRATE event

Plenary Lecturers

Prof. Denis Maillet (University of Lorraine, France)



Denis Maillet is Emeritus professor of Heat transfer at the Université de Lorraine (UL). He received a MS in Mechanical Engineering from Stanford University (1975) and a PhD (1982) and a Doctorat d'Etat (1991) from UL. He specialized in inverse techniques and measurements in heat transfer and is involved in the activities of the METTI group, which deals with this class of techniques within the French Heat Transfer Society (SFT). He is an associate editor of International Journal of Thermal Sciences. He has applied inverse techniques to thermal non-destructive testing of materials/structures, boiling heat transfer, thermal dispersion in porous media and to mini and macro heat exchangers.

Prof. Alexandre Tkatchenko (University of Luxembourg)



Alexandre Tkatchenko is a Professor of Theoretical Chemical Physics at the University of Luxembourg and Visiting Professor at the Berlin Big Data Center. He obtained his bachelor degree in Computer Science and a Ph.D. in Physical Chemistry at the Universidad Autonoma Metropolitana in Mexico City. In 2008–2010, he was an Alexander von Humboldt Fellow at the Fritz Haber Institute of the Max Planck Society in Berlin. Between 2011 and 2016, he led an independent research group at the same institute. Tkatchenko has given more than 200 invited talks, seminars and colloquia worldwide, published more than 150 articles in peer-reviewed academic journals (h-index=57), and serves on the editorial boards of Physical Review Letters and Science Advances (an open-access journal in the Science family). He received a number of awards, including the Gerhard Ertl Young Investigator Award of the German Physical Society, and two flagship grants from the European Research Council: a Starting Grant in 2011 and a Consolidator Grant in 2017. His group pushes the boundaries of quantum mechanics, statistical mechanics, and machine learning to develop efficient methods to enable accurate modeling and obtain new insights into complex materials.

Prof. Salvador Montero (CSIC, Spain)



Salvador Montero (Madrid, 25/03/1943), from 1985 to 2013 Research Professor at Instituto de Estructura de la Materia (CSIC), Spain; since 2013 *Ad-Honorem* Professor. **Studies:** Physics (1967) and Ph.D. in Physics (1972) at Universidad Complutense de Madrid. **Postdoctoral:** Experimental Physik Abteilung, LM-Universität München, Germany, (1972-73) by Prof. J. Brandmüller. **Sabatical:** Department of Chemistry, Oregon State University, USA, (1990-91); Max-Planck-Institut für Strömungsforschung, Göttingen, Germany (1997-98). **Publications:** *ca.* 100 articles (J. Chem. Phys., Molec. Physics, J. Fluid Mech., Phys. Rev. A, B, E, Phys. Rev. Lett., J. Phys. Chem., Phys. Chem. Chem. Phys., Astrophys J., Phys. Fluids,... etc). **Supervision:** nine doctoral theses. **Invited speaker:** München, Göttingen, Heidelberg, Würzburg, Perugia, Bologna, Roma, Cambridge, Bradford, Corvallis, Ottawa, Cape Town, Sofia, Budapest, Wrocław, Bordeaux, Marseille, Nijmegen, Leiden, Lisbon, St. Petersburg, ... and many other in Spain. **Research:** Founder and head of the Laboratory of Molecular Fluid Dynamics (1992) at the IEM (CSIC), pioneer in the study of supersonic jet Raman spectroscopy, molecular hydrogen condensation, shock waves, and non-reactive collisions, with emphasis on gasdynamic and astrophysical problems, (60% experimental, 40% theory). **Other activities:** From 1983 to 1997 involved in the organization, management, and science policy of the Spanish System of Science and Technology. **Awards:** National Award of Research in Physics, "Cátedra Miguel A. Catalán", (1996); Lloyd Thomas Memorial Lecture at 26th Symposium on Rarefied Gas Dynamics, Kyoto (2008).

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



Katja Haas-Santo (born in 1969) studied Chemistry at the University of Karlsruhe and obtained her PhD in Technical Chemistry from the University of Stuttgart (Germany) in 1998. Her PhD work was in the field of heterogeneous catalysis and reaction engineering: synthesis and application of zeolites for catalytic cracking. After a short stay with an engineering company, she joined Forschungszentrum Karlsruhe (Now Karlsruhe Institute of Technology) in 1999. Her research at the Institute for Micro Process Engineering included the synthesis of sol-gel-layers in microstructured reactors, design and application of microreactors for various heterogeneous catalysed reactions as well as later for fluid phase reactions. From 2012 she led the research group "separation science" at the Institute of Micro Process engineering. End of 2018 she took over the position as Scientific Coordinator of the Institute IMVT.