

## MIGRATE Workshop - June 30 – July 1<sup>st</sup>, 2016

### University of Strasbourg

Workshop day 1: June 30, 2016	
09:00 – 09:15	<b>Registration</b>
09:15 – 09:30	<b>Welcome Address</b>
09:30 – 10:30	<b>Session 1 – Keynote Lecture</b> Prof. Joost Lotters, University of Twente (The Netherlands) Integrated systems for real-time flow and composition measurement
10:30 – 11:00	<b>Coffee</b>
11:00 – 12:20	<b>Session 1A – Sensors and Measurement Techniques</b>
11:00	WS06 – Measurements of the temperature gradient driven flow for various gases. <i>I. Graur</i>
11:20	WS09 – Design and experimental characterization of a thermostress-based MEMS gas sensor. <i>A. Strongrich</i>
11:40	WS08 - A new method for the determination of momentum accommodation coefficients by using axial bulk temperature gradients. <i>G. L. Morini</i>
12:00	WS14 – Impact of rarefied gas flows in low pressure lithography. <i>E. Arlemark</i>
12:20 – 14:00	<b>Lunch</b>
14:00 – 14:50	<b>Session 2 – Keynote Lecture</b> Dr. Janez Setina, Institute of Metals and Technology, Ljubljana (Slovenia) Gas analysis in high and ultrahigh vacuum using quadrupole mass spectrometers
14:50 – 15:40	<b>POSTER Session (WP1 &amp; WP2)</b>
14:50	WS12 – Overview of alternative designs for thermally driven micropumps. <i>G. Lopez Quesada</i>
15:02	WS15 – Design, development and validation of a micro-pirani pressure sensor for micro and macro scale applications. <i>S. Toto</i>
15:15	WS22 – Gas solid surface micro separators - VOCs trapping. <i>A. Sharifi</i>
15:27	WS25 – Thermal transpiration in a complex geometry. <i>I. Graur</i>
15:40 – 16:20	<b>Coffee &amp; Discussions around posters</b>
16:20 – 17:20	<b>Session 2A – Analysis Micro Systems</b>
16:20	WS20 - Real-time monitoring of gaseous formaldehyde using a microfluidic device. <i>C. Trocquet</i>
16:40	WS16 - A micro Photo Ionization Detector for VOC gases <i>D. Newport</i>
17:00	WS21 - Real-time monitoring of airborne VOCs using microdevices <i>I. Lara Ibeas</i>

<b>Workshop day 2: July 1st, 2016</b>	
09:00 – 10:00	<b>Session 3A – Modeling of rarefied gas flows</b>
09:00	WS02 – On the unsteady vortex shedding behind a cylinder. <i>E. Roohi</i>
09:20	WS05 – An insight view of pressure, temperature and boundary driven flows based on DSMC decomposition. <i>G. Tatsios</i>
09:40	WS04 – Rarefied Poiseuille gas flow due to harmonically oscillating pressure gradient. <i>A. Tsimpanos</i>
10:00 – 10:30	<b>Coffee</b>
10:30 – 11:50	<b>Session 1B – Sensors and Measurement Techniques</b>
10:30	WS18 – Gas dynamics in vacuum total pressure sensors. <i>M. Wüest</i>
10:50	WS11 - Acetone luminescence at low pressure for Molecular Tagging Velocimetry in confined rarefied gas flows. <i>D. Fratantonio</i>
11:10	WS17 - Interferometric and Colorimetric Based Sensing for miniaturised VOC detection <i>D. Newport</i>
11:30	WS19 – Microscale gas flows in high heat flux electronics cooling applications. <i>J. Stafford</i>
12:00 – 14:00	<b>Lunch</b>
14:00 – 14:50	<b>Session 3 – Keynote Lecture</b> Dr. Marc Linder, Institute of Engineering Thermodynamics - German Aerospace Center High temperature thermal energy storages and heat recovery
14:50 – 15h40	<b>POSTER Session (WP1 &amp; WP3)</b>
14:50	WS10 – Thermal gas mixing in microscale. <i>S. Meskos</i>
15:02	WS13 - Micro Molecular Tagging Thermometry <i>V. Yeachana</i>
15:15	WS23 - Gas-wall interactions under rarefied conditions <i>A. Frijns</i>
15:26	WS24 - Design & optimization of a compact heat exchanger for a micro gas turbine micro-chp application <i>J. Joseph</i>
15:40 – 16:20	<b>Coffee &amp; Discussions around posters</b>
16:20 – 17:20	<b>Session 3B – Modeling of rarefied gas flows</b>
16:20	WS01 – Evaluation of the SBT collision model for near continuum nano Fourier flows. <i>E. Roohi</i>
16:40	WS07 – Modeling polyatomic gas flows by classical trajectory Direct Simulation Monte Carlo. <i>A. Frezzotti</i>
17:00	WS03 - On DSMC calculations of high speed gas flows on adaptive meshes. <i>K. Shterev</i>
17:20 – 17:30	<b>Closing Address</b>