

# 1<sup>st</sup> MIGRATE Workshop

## Invited Speakers

### Prof. Joost Lotters, University of Twente



Prof. dr. ir. Joost C. Lötters received the M.Sc. degree in electrical engineering from the University of Twente, Enschede, The Netherlands, in 1993 on the subject of a buffer amplifier for a piezoelectric impact sensor. In 1997 he received the Ph.D. degree in electrical engineering at the same university on the subject of a highly symmetrical triaxial capacitive accelerometer. In 1997 he joined Bronkhorst High-Tech BV, Ruurlo, The Netherlands. Since then, his research has concentrated on flow measurement and control in the field of thermal and Coriolis flow sensing, including the ISO17025 accredited calibration laboratory. In 2010 he joined the Transducer Science and

Technology (TST) group of the MESA+ institute for nanotechnology of the University of Twente as part-time associate professor. Since then his research has focused on microfluidic handling systems, i.e. integrated systems for the accurate measurement, control, dosage and analysis of (micro) flows. Highlights include a micromachined thermal flow sensor using thermopiles, a micro Coriolis flow sensor, a micro proportional control valve, a micro Wobbe index meter and a single chip multiparameter flow measurement system comprising both a thermal and a Coriolisflow sensor, e.g. to determine the composition and energy content of gas mixtures. In 2011, he was awarded the best paper award from the Sensor conference in Nuremberg. In 2012, he joined the MEMS Applications group of the IMTEK research institute of the University of Freiburg as part-time visiting professor. In 2013, he was appointed associate editor-in-chief of the MDPI Journal of Micromachines. In 2015, he was appointed part-time professor microfluidic handling systems at the University of Twente in the Micro Sensors and Systems (MSS) group. Joost Lötters is inventor or co-inventor of more than 15 patents and author or co-author of more than 70 journal and conference papers.

**Dr. Janez Setina, Institute of Metals and Technology, Ljubljana**

Janez Setina graduated from the University of Ljubljana, Slovenia, Department for Physics in 1983 and received a Ph.D. in Electrical Engineering from University of Maribor, Slovenia in 2002. He joined the Institute for Electronics and Vacuum Technique in Ljubljana in 1983. In 1998 he moved to the Institute of Metals and Technology (IMT) in Ljubljana. He is currently a head of the Research group for vacuum science and materials for electronics and a technical manager of the Laboratory of pressure metrology at IMT, which holds and maintains Slovenian national pressure and vacuum standards. He has been a guest researcher in the Vacuum standards group at National Institute of Standards and Technology (NIST), Gaithersburg, MD from 1991-1992, where he took part in the research and development of transition range primary standard and metrological properties of capacitance diaphragm gauges and spinning rotor gauges.

Collectively Janez Setina has more than 30 years experience in vacuum science and technology including design and construction of experimental UHV systems, helium leak detection, vacuum measurements, residual gas analysis and vacuum gauge calibrations. His most recent focus is on applications of non-evaporable getters (NEGs) in vacuum metrology.

**Dr. Marc Linder, Institute of Engineering Thermodynamics - German Aerospace Center**

Dr.-Ing. Marc Linder graduated in Energy Engineering at the University of Stuttgart in 2006. During his PhD work at the Institute of Nuclear Technology and Energy Systems (IKE, University of Stuttgart) he was working with closed and open sorption systems based on metal hydrides. In 2010, he joined the Institute of Engineering Thermodynamics at the German Aerospace Center (DLR e.V.) where he is responsible for the research area "Thermochemical Systems" since 2011.

His research focusses on the application of reversible gas-solid reactions for energy related applications. These are technologies for hydrogen storage or thermal management of cars and busses as well as thermochemical energy storage at temperatures up to 1000°C for renewable and conventional power plants.