

## MIGRATE 3<sup>rd</sup> International Workshop – Keynote Lecturers

### Dr. James A. Fedchak (National Institute of Standards and Technology, USA)



James Fedchak received his Ph.D. in Experimental Atomic and Molecular Physics from the College of William and Mary in Virginia in 1994. Before joining the National Institute of Standard and Technology (NIST) in 2003, he briefly worked in the photonics industry after holding post-doc positions at Argonne National Laboratory developing spin-polarized deuterium targets for nuclear collision experiments, and at the University of Wisconsin, studying ion spectroscopy related to laboratory astrophysics. Since 2007 he has led the vacuum project at NIST, where he has recently launched a program to build a cold-atom vacuum standard, and initiated another program for measuring gas absorption and desorption of novel new materials, such as 3D-printed composites. He is an expert in vacuum science, technology, and metrology.

### Prof. Yogesh B. Gianchandani (University of Michigan, Ann Arbor, USA)



Yogesh B. Gianchandani is a Professor at the University of Michigan, Ann Arbor, with a primary appointment in the Electrical Engineering and Computer Science Department and a courtesy appointment in the Mechanical Engineering Department. He also serves as the Director for the Center for Wireless Integrated MicroSensing and Systems (WIMS2).

Dr. Gianchandani's research interests (<http://www.eecs.umich.edu/~yogesh/>) include all aspects of design, fabrication, and packaging of micromachined sensors and actuators. He has graduated over 35 Ph.D. students, and contributed to over 45 US patents and over 300 papers in journals and conferences. He was a Chief Co-Editor of Comprehensive Microsystems: Fundamentals, Technology, and Applications, published in 2008, and he serves on the editorial boards and program committees of a number of journals and conferences. From 2007 to 2009 he also served at the National Science Foundation, as the program director for Micro and Nano Systems within the Electrical, Communication, and Cyber Systems Division (ECCS). Dr. Gianchandani is a Fellow of IEEE.

### Prof. Luc G. Fréchet (Université de Sherbrooke, Canada)



Dr. Luc G. Fréchet is professor of mechanical engineering at the Université de Sherbrooke. He received his Ph.D. at the Massachusetts Institute of Technology (MIT) in 2000 for the design and fabrication of MEMS-based energy conversion microsystems. After 4 years on the faculty at Columbia University, Dr. Fréchet moved his research activities to the Université de Sherbrooke (Canada) to hold the Canada Research Chair in Microfluidics and Power MEMS (2004-2014). He specializes in the development of microelectromechanical systems (MEMS) with an emphasis on thermal, fluidic and piezoelectric devices for micro power generation and thermal management. His research activities include micro heat engines, micro fuel cells, vibration energy harvesting, microfluidics, as well as MEMS sensors and actuators for cooling and harsh environments. Dr. Fréchet contributed over 150 journal and conference publications in these fields and is a member of ASME and IEEE. He also contributes to the MEMS community through the organization of international conferences, including PowerMEMS (since 2006) and Transducers.