



CALL FOR ABSTRACTS

The Second Conference on Advances in Microfluidics and Nanofluidics and Asian-Pacific International Symposium on Lab on Chip (AMN-APLOC 2011) 5 - 7 January 2011, Singapore

Invitation to Participate

AMN-APLOC 2011 conference will be a follow-up to the two very successful conferences on Advances in Microfluidics and Nanofluidics in Hong Kong in January 2009 and Asian-Pacific International Symposium on Lab on Chip in Shanghai in October 2009. AMN-APLOC 2011 will provide a highly interactive forum to bring together researchers of different disciplines, from academic & research institutions, industry and public organizations with the aim of collecting, exchanging and promoting the knowledge and new advances on *micro-/nano-fluidics* and *Lab on Chip* science, applications and manufacturing technologies.

Conference Advisory Committee

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Plenary Speakers

Professor Hsueh-Chia Chang, University of Notre Dame, USA
Professor Jonathan Cooper, University of Glasgow, UK
Professor David Erickson, Cornell University, USA
Professor Jongyoon Han, Massachusetts Institute of Technology, USA
Professor Yee Cheong Lam, Nanyang Technological University, Singapore
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Professor Weijia Wen, Hong Kong Univ of Science & Technology, China
Professor Leslie Yeo, Monash University, Australia

Special Issues of Journals

Selected papers presented in the conference will be published after conference as special issues in *Biomicrofluidics*, an American Institute of Physics journal, and *Nanoscience and Nanotechnology Letters*, an American Scientific Publishers journal.

Important Dates

Due date of abstract submission: August 15, 2010
Notification of acceptance: September 30, 2010
Early bird registration: October 31, 2010

Organized by:



Topics

- Micro-/nano-fluidic science
acoustic fluidics; biological flows; convective heat and mass transfer; optofluidics; magnetic fluidics; electrokinetic and electrohydrodynamic flows; multi-scale numerical methods; multiphase flow; micro-particles and cells transport and separation; nano-particle assembly and manipulation;
- Lab-on-Chip applications in chemistry, biology & medicine
biomarker discovery; chemical- and bio-warfare agent detection; clinical and molecular diagnostics; drug discovery; drug metabolism and quality control; point of care testing devices; chemotaxis assays; micro-reactors; micro-fuel cells;
- Microscale sample processing and separation
sample injection and analysis, pretreatment, concentration, extraction, dispensing and separation; concentration gradient generation; capillary electrophoresis; cell and particle separation; DNA sequencing; protein and gene separation;
- Sensing, detection and measurement technologies
bio-sensors; electrochemical and optical detection; flow visualization & measurement; fluidic transport measurement and detection;
- Manufacturing technologies for micro-/nano-fluidics
micro/nano-fabrication processes and materials; silicon-/glass-/polymer based fabrication; softlithography; microfluidic components manufacturing; surface treatment, modification and functioning; microfluidics system design and packaging.

Conference Chairs

Professor Chun Yang, Nanyang Technological University
Dr. Zhiping Wang, Singapore Institute of Manufacturing Technology

Organizing Committee

Professor David Lee Butler, Nanyang Technological University
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