

Conference announcement

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Microfluidics: From Laboratory Tools to Process Development (Rueil-Malmaison, France, November 4–5, 2015)

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IFP Energies Nouvelles (IFPEN) is organizing the international scientific conference “Microfluidics: From Laboratory Tools to Process Development”, in collaboration with the Pierre-Gilles de Gennes Institute.

Microfluidics refers to the sciences and technologies that allow the handling of fluids from the micron scale to the sub-millimetric scale. Laboratories are increasingly exploiting this field, reflecting its potential role in leading the emergence of radically improved industrial processes.

“Microfluidics 2015” will be an opportunity to bring together academic and industrial researchers to discuss recent developments in microfluidics and its impact in a wide range of fields, such as product and object synthesis, microchemistry, labs on a chip, management of complex fluid flows in confined geometries and high-throughput screening.

Conference topics and call for abstracts

The conference program will include four main sessions:

- Basic science with microfluidics: complex fluids, bubble and droplet microfluidics, biphasic flow, multiphase flow, hydrodynamics, electro-osmotic flow, electro-hydrodynamics, mass transport, heat transfer, chemistry, biology, interfacial phenomenon, chemical kinetics, etc.
- Analysis and micro-measurement: detection, sensors, pre-treatment, image analysis, micro-extractions, etc.

- New development for microfluidic devices: 3D printing, micro-fabrication, new materials, connectics, actuators, dedicated chemistry, surface treatment, high pressure, high temperature;
- Toward industrial applications: integration, process development, lab on a chip, upscaling/downscaling, high throughput screening.

The proposed sessions are expected to put in perspective academic, engineering and finally industrial approaches.

In an energy transition context, it will give the opportunity to debate the capacities of microfluidics to intensify experimentation. It will provide innovative solutions and new ideas, with a view to overcoming current energy and climate related challenges.

Submit your abstracts on the above topics by mail to microfluidics2015@ifpen.fr before 30 March 2015.

Keynotes lectures

Keynotes lectures will be delivered by the following experts:

- Claude de Bellefon, CNRS Research Director, Scientific Director of CPE Lyon, the school for chemistry and chemical engineering of the University of Lyon, France
- Klavs Jensen, Department Head, Warren K. Lewis Professor of Chemical Engineering, and Professor of Materials Science and Engineering, MIT, USA
- Takehiko Kitamori, Professor, University of Tokyo, Bioengineering Department, Japan
- Eugenia Kumacheva, Professor, University of Toronto, Canada.

Venue

Located just 8 km from Paris, Rueil-Malmaison, an imperial town, with an exceptional heritage, marked by the

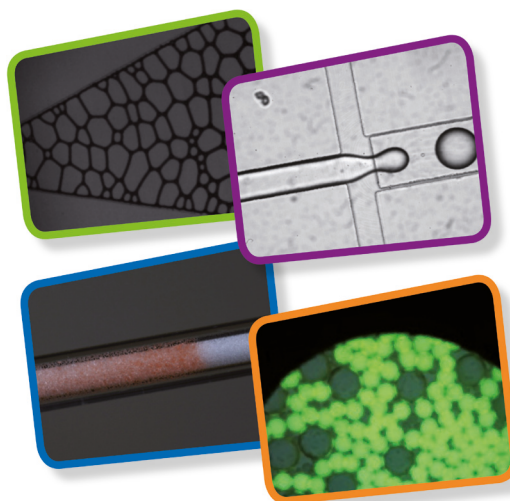
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presence of Napoleon Bonaparte and his wife Josephine. It slopes gently from the heights of Mont Valérien and the Buzenval hills to the banks of the Seine. Once a country village, known for its market gardens and famous for the purity of its waters, Rueil-Malmaison has developed into a busy modern town, the headquarters of a number of major companies and agencies.



transport and the environment. From research to industry, technological innovation is central to all its activities.

To contribute and join us at this event, please visit www.rs-microfluidics2015.com or contact us: microfluidics2015@ifpen.fr for any question you may have.



General information

IFPEN is a public research and training player. It has an international scope, covering the fields of energy,

