HSG-IMIT

Lab-on-a-Chip Design & Foundry Service

Assay Automation Based on Centrifugal Microfluidics

analytica 2014

Analytica 2014 | München, GERMANY

Wednesday, April 2nd
14:30 – 17:30 pm

Your attendence is free of charge
We ask for registration

Lab-on-a-Chip technology provides solutions for fully integrated liquid handling, enabling the microfluidic automation, miniaturisation, and massive parallelisation of biochemical assays. It can be used for point-of-care analysis, e.g. whenever quick results of blood testing is eminent because a patient is in need of immediate medication.

HSG-IMIT's expertise ranges from the design, simulation, and prototyping of polymer based Lab-on-a-Chip systems to their microfluidic and biochemical performance testing. However, the development of a Lab-on-a-Chip device, e.g. for automated point-of-care testing, can be an expensive, long-term and high-risk project. With HSG-IMIT's Lab-on-a-Chip Design & Foundry Service this gap can be bridged. It offers to customers a shortcut to Lab-on-a-Chip solutions, reducing development risks and costs.

The Roadshow is arranged in three sessions focussing on two centrifugal microfluic platforms for integration and implementation of diagnostic assays:

The first session will give an overview on available technologies and unit operations on the LabTube platform and the LabDisk platform. In the second session, applications automated by the afore mentioned platforms such as disease detection and quality control of drinking water will be presented and discussed. This part concludes with an introduction to the Lab-on-a-Chip Design & Foundry Service. The last session shows how these applications work.

All speakers are experienced scientists of HSG-IMIT.

Lab-on-a-Chip Design & Foundry Service

- Assay integration
- Rapid Prototyping of polymer lab-on-a-chip systems
- Simulation of microfluidic unit operations
- Consulting

We address

- R&D engineers,
- Decision makers at companies,
- And all others who are interested or active in

Point-of-care diagnostics.

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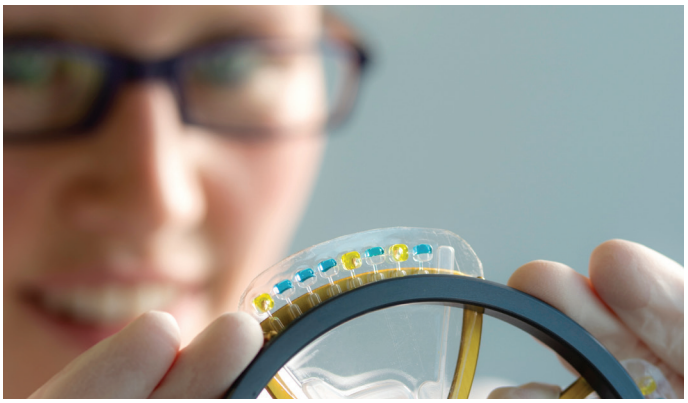

Agenda

Venue: Messe München, Messegelände
81823 München
Hall A3, 1st floor, room A32

14:30 – 15:45 Session I: Technology

- Welcome and general introduction
- LabTube platform: Lab automation on a standard laboratory centrifuge
- LabDisk platform: Assay automation on centrifugal µ-fluidic disks
- Rapid prototyping of LabDisks

15:45 – 16:15 Coffee break

16:15 – 17:00 Session II: Applications

- Enrichment of bacteria from drinking water
- Multiplex nucleic acid detection:
  a) Genotyping of KRAS mutations in tumor DNA
  b) Species identification by high resolution melting curve analysis
- Nucleic acid based sample-to-answer analysis:
  a) Detection of biowarfare pathogens
  b) Detection of neonatal sepsis pathogens
  c) Detection of tropical diseases, e.g. malaria
- Detection of botulinum toxin
- Microfluidic sample prep for protein structure analysis by small angle X-ray scattering
- Lab-on-a-Chip Design & Foundry Service: Customised solutions

17:00 – 17:15 General discussion

17:15 – 17:30 Session III: Exhibition/ Demonstration

HSG-IMIT

HSG-IMIT (Institut für Mikro- und Informationstechnik) is an application-oriented research and development provider for micro-technical components and systems.

Promoting awareness of and facilitating access to this technologies are the main tasks of HSG-IMIT acting as a service centre providing specific consulting, advanced training, technological services, feasibility studies, prototyping, small scale production as well as serial production in cooperation with industrial partners.

We offer complete solutions, ranging from the idea to the final product in a short time-to-market period.
HSG-IMIT offers R&D services for microsystem technology and is certified according to DIN ISO 9001:2008.

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Registration Form

Please fax this to +49 (0)761 203-73299, send a scan of this to lab-on-a-chip@hsg-imit.de or fill in the online registration form: http://www.loac-hsg-imit.de/en/roadshow/

[ ] Yes, I would like to participate
[ ] I agree to receive further information of HSG-IMIT*

My contact data

[ ] Mr [ ] Mrs

Title*:

Surname:

Name:

Company/organisation:

Street:

ZIP:

City (& country):

Phone:

E-mail:

Website address*:

Date, place:

Signature:

*Optional