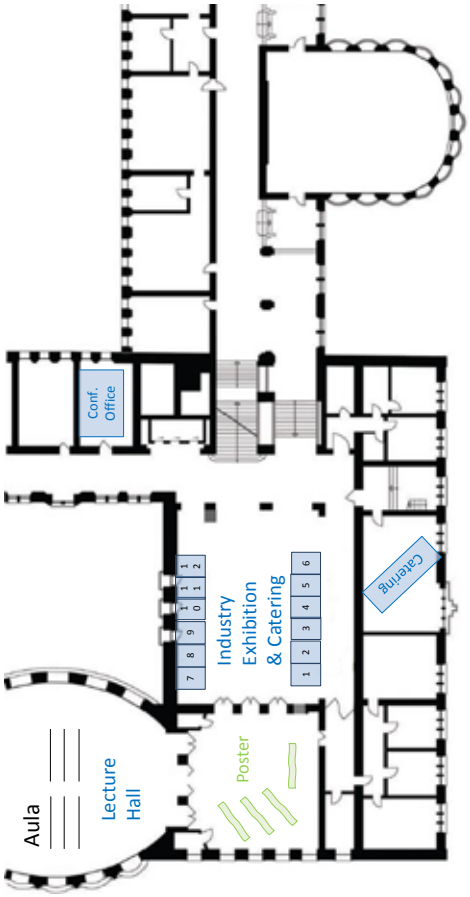
Floor plan



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MicroTEC Südwest

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Conference venue

University of Freiburg
Platz der Universität 3, Aula (1st floor),
79098 Freiburg
Contact organizers: +49 172 8186260

MFHS 2014

2nd International Conference on Microfluidic Handling Systems

8.-10. October 2014

University of Freiburg, Germany

Program

UNI FREIBURG

Faculty of Engineering

Photo: Peter Mesenholl

University of Freiburg, entrance to the conference venue

Photo: Peter Mesenholl

Program

Wednesday, 8th October

17:00 - 18:00	Registration
18:00 - 21:00	Welcome reception

Thursday, 9th October

08:00 - 09:00	Registration
09:00 - 09:15	Welcome & announcements
09:15 - 09:40	Invited talk 1: Dr. J. Spinke, Roche Diagnostics GmbH
09:40 - 11:00	A: OVERVIEW OF THE FIELD
11:00 - 11:30	Coffee break & exhibition
11:30 - 12:50	B: SENSORS
12:50 - 14:00	Lunch
14:00 - 15:20	C: ACTUATORS
15:20 - 15:45	Coffee break & exhibition
15:45 - 16:15	Invited talk 2: Prof. Dr. A. Manz, KIST Europe
16:15 - 18:30	Poster session & exhibition
19:00	Conference dinner & evening lecture, Coucou Bar Restaurant

Friday, 10th October

08:00 - 09:00	Registration
09:00 - 09:15	Welcome, announcements
09:15 - 09:40	Invited talk 3: Dr. A. Timmerman, UMC Utrecht University
09:40 - 11:00	D: FLUIDIC CONTROL SYSTEMS
11:00 - 11:30	Coffee break & exhibition
11:30 - 12:50	E: APPLICATIONS
12:50	Closure of the conference, best paper/poster award
13:15 - 14:00	Lunch
15:00 - 17:00	Lab tour at HSG-IMIT, IMTEK and BioFluidix

Invited talks

9th October, 09:15 - 09:40

Dr. J. Spinke, Roche Diagnostics GmbH: Smart Reagent Dosing – novel cartridge concept for highly precise dispensing of IVD reagents down to the sub-uL range

9th October, 15:45 - 16:15

Prof. Dr. A. Manz, KIST Europe: Lab on Chip for separations

10th October, 09:15 - 09:40

Dr. A. Timmerman, UMC Utrecht University: (Multi-)Infusion: challenges and technical solutions for medication safety

Sessions

Session A: OVERVIEW

9th October, 09:40 - 11:00

Peter Lucas: PRIMARY STANDARD FOR NANOFLOW RATES

Jarno Groenesteijn: A COMPACT MICRO CORIOLIS MASS FLOW SENSOR WITH FLOW BYPASS FOR A MONOPROPELLANT MICRO PROPULSION SYSTEM

Simon Herrlich: PERISTALTIC MICROPUMP WITH INTEGRATED ACTIVE DAMPING

Cor Maria Rops: CONTACTLESS BOILING: A WAY TO IMPROVE THE RELIABILITY OF MICROFLUIDIC PROCESSES?

Daniel Filippini: 3D PRINTED UNIBODY LAB-ON-A-CHIP INTEGRATION

Session B: SENSORS

9th October, 11:30 - 12:50

Egbert van der Wouden: REAL-TIME COMPOSITION DETERMINATION OF GAS MIXTURES

Diego Fernando Reyes-Romero: METHOD FOR THE DETERMINATION OF THE THERMAL PROPERTIES OF GASES UNDER FLOW CONDITIONS

Hugo Bissig: MICRO FLOW STANDARD FOR STEADY AND PULSATING FLOW

Christoph J. Hepp: DETECTION OF GAS KIND AND FLOW SPEED USING THERMAL FLOW SENSORS WITH DC EXCITATION IN A FLOWING FLUID

Wouter Sparreboom: CALORIMETRIC FLOW SENSOR CHIP BASED ON SURFACE CHANNEL TECHNOLOGY

Session C: ACTUATORS

9th October, 14:00 - 15:20

Björn Gerdes: STARJET-BASED, PNEUMATICALLY ACTUATED LIQUID METAL DROPLET PRINTING AT UP TO 500 °C

Christoph Werner Jenke: DYNAMIC BEHAVIOUR OF A PIEZOELECTRIC MICROPUMP ACTUATOR

Sabrina Kartmann: A DISPOSABLE, DISPENSING VALVE FOR NON-CONTACT MICROLITER APPLICATIONS IN 96-WELL PLATE FORMAT

Maïwenn Kersaudy-Kerhoas: DECOUPLED MICROFLUIDIC FLUID HANDLING SYSTEM FOR COMBINATORIAL GENOME SEQUENCE ASSEMBLY

Session D: FLUIDIC CONTROL SYSTEMS

10th October, 09:40 - 11:00

Ivo Leibacher: MICROFLUIDIC DROPLET HANDLING BY ACOUSTOPHORESIS ON BULK ACOUSTIC WAVE (BAW) DEVICES

Andreas Ernst: A DISPENSING SYSTEM FOR SEDIMENTING METAL MICROPARTICLE SOLUTIONS BASED ON A CIRCULATION MIXER METHOD

Julian Riba: A PICOLITER DISPENSER WITH DISPOSABLE CARTRIDGES FOR PRECISE AND CONTACT-FREE INJECTION OF DNA INTO OPEN MICROFLUIDIC STRUCTURES

Hector Hugo Pérez Garza: NANO-WORKBENCH: A COMBINED AFM-FEMTOPIPETTE AND ROBOTIC NANOMANIPULATOR

Sebastian Kibler: FEEDBACK CONTROLLED MICRODOSING SYSTEM FOR NANOLITER PER SECOND DOSING RATES USING A CAPACITIVE PHASE BOUNDARY TIME-OF-FLIGHT FLOW SENSOR

Session E: APPLICATIONS

10th October, 11:30 - 12:50

Ludwig Gutzweiler: SEMI-CONTACT WRITING TECHNOLOGY & APPLICATIONS

Hendrik Hubbe: MICROFLUIDIC SAMPLE PREPARATION CHIP FOR RNA-BASED PATHOGEN DETECTION

Amanda Stockton: MICROFLUIDIC SUBCRITICAL WATER EXTRACTION USING FREEZE VALVES AND ULTRASOUND

Dennis Alveringh: TOWARDS SYTEM-LEVEL MODELING AND CHARACTERIZATION OF COMPONENTS FOR INTRAVENOUS THERAPY

Lisa Schott: CELL SIZE DISCRIMINATION BASED ON THE MEASUREMENT OF THE EQUILIBRIUM VELOCITY IN RECTANGULAR MICROCHANNELS FOR POINT OF CARE DIAGNOSTICS