



Prof. Dr. Andreas Manz
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Master Thesis "Digital Cell Dispenser"

Job description:

A micro cell dispenser injecting a droplet of the precise number of cells has been developed for high throughput screening system. The micro dispenser has several parts: micro cell counter, micro cell collector, injector and nozzle in micron scale. Micro cell counter as a part of digital cell dispenser has micro channels and electrodes for detecting number of cell passing them over in the channel. Micro cell counter has been developed by electric analysis for cell counting and design and fabrication of micro fluidic channel. In present, cell counter is performed by analogue electric circuits, fluidic device in the control of computer interface.

Tasks:

- MEMS fabrication (UV lithography, Soft lithography)
- Fluidic device control (Mini valves, Pump)
- Analogue Electronics (Amplifiers, Filters, Signal process, PCB design)
- PC-interface

Qualification:

- Basic MEMS fabrication skill (or) Mechanical engineering (or) Electrical engineering

Start date:

- As soon as possible

Place of employment: KIST Europe Forschungsgesellschaft mbH, Campus E 7.1, 66123 Saarbrücken

Interested persons, please contact directly:

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Saarbrücken, November 3rd, 2010
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