

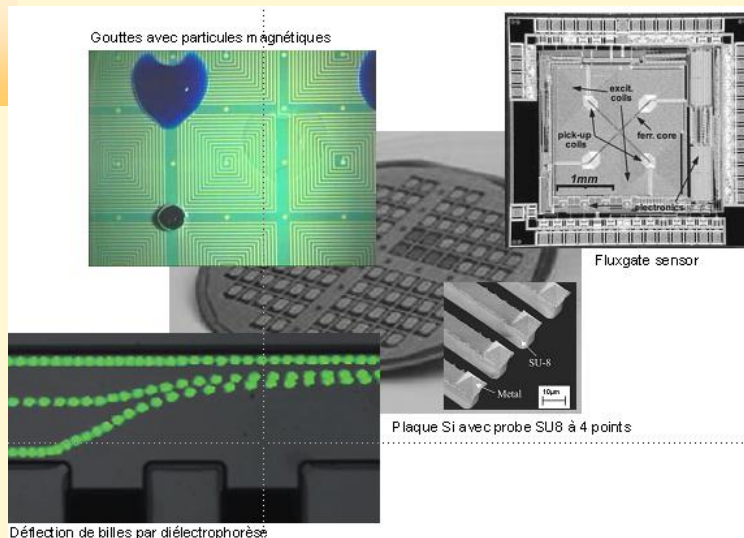
Laboratory of Microsystems (LMIS)

Staff: 60 professors, researchers, engineers, technicians, PhD students and post-docs

Research fields: Micro/nanofluidics, magnetic sensors and beads, stencil lithography

Research topics in Micro and NanoSystems

- Micro/nanofluidics for cells, DNA, proteins
- Dielectrophoretic cell manipulation
- Bioimpedance and neural probes
- Patch clamp and biocalometry
- Magnetic beads manipulation
- Nanopores and stencil lithography
- Inkjet printing of functional polymers
- Hall, fluxgate and NMR sensors



Different devices made by our 4 groups

Technology

- 430 m² clean rooms class 100 & 1000
- UV, laser, FIB and e-beam lithography
- Porous Si
- Si and SOI wet and dry etch
- HF vapour etcher
- Electroplating
- Chemical-mechanical polishing
- Excimer laser

Design, simulation & characterization tools

- ANSYS, Comsol Multiphysics
- SEM, AFM
- Ellipsometer
- Spectro-reflectometer
- Optical and mechanical profilometers
- Optical microscopes

Laboratory of Microsystems

BM-Ecublens, STATION 17
CH-1015 Lausanne
Switzerland
<http://lmis.epfl.ch/>

NAMIS contact: Philippe Renaud

Tel: (+41) 21 693 25 96 , e-mail: philippe.renaud@epfl.ch