



## **Professor Christofer Hierold**

«Good teamwork is the key for successful research and development in engineering projects. It's founded on three pillars: excellent individual contributions, a failure-tolerant culture and unconditional sharing of knowledge.»

# Micro and Nanosystems

We carry out research on ultra-low power sensor systems for applications in environmental sensing, medical implants and robotics. We explore new materials for nano-electromechanical systems, for example carbon nanotubes, and develop new concepts for MEMS and thermoelectric devices. Silicon and microsystems process technologies are key for our research. We often work in joint teams with ETH spin-off companies, preferably from our lab. For our research we use ETH Zurich's cleanroom facilities and technology platforms FIRST, BRNC and ScopeM. In addition, we operate a chemical and a physical lab for material integration and device characterization and collaborate with partners in Switzerland and around the globe.

## Focus

- Carbon nanotube sensors and fabrication methods for environmental sensors
- Thermoelectric and memristive materials for zero power sensor systems
- Sensor integration for new generation medical implants and robotics

Further details online:  
[www.micro.mavt.ethz.ch](http://www.micro.mavt.ethz.ch)

