HiWi Position
≥ 30 h/month

Automation of a Setup for the Thermophysical Characterization of Thin Films

While electrical parameters of thin films can be determined easily, the measurement of thermal and thermoelectric properties is still a challenging task in microsystems technology. Thus we are working on methods for the thermophysical characterization of thin films. For this purpose, test structures have been developed at the Microsystem Materials Laboratory.

We are looking for a student to improve and extend a setup for the measurement of these test structures. We are using a cryostat setup for the characterization of the micromachined chips in the temperature range from 90 to 380 K. In order to improve the throughput of measurements and to extend the setup for multiple purposes, the control of the setup needs to be adapted.

The main task of this job is the revision (or renewal) of an existing control software. Furthermore, some electric modifications regarding the connectors and wiring are necessary.

This job requires good programming skills and experience in software control of measurement equipment. The preferential programming language is LabView®, but dependent on the experience of the applicant, other languages are possible as well.

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