The Leibniz Institute for Solid State and Materials Research (IFW) Dresden offers within the SAWLab Saxony – Competence and application center for acoustoelectronic fundamentals, technologies and devices from now on the possibility to work on a master’s / diploma thesis.

Within the SAWLab Saxony we are working on innovative micro-actuator concepts based on surface acoustic waves (SAW). The SAW actuators are used in microfluidics (e.g. for the generation of airborne droplets). For this purpose, an experimental setup has to be realized as well as investigations on the SAW-based droplet generation need to be performed.

You realize and qualify the experimental setup. Therefore, you can refer to previous work and existing expertise of the working group. In addition to the experimental setup, the activity includes the application of different preparation and measurement methods (electrical and optical characterization of the SAW components and microfluidic structures). In addition, investigations are to be carried out on various parameters that influence the droplet generation.

As an applicant, you study electrical engineering, mechanical engineering, process engineering or materials science. Advantageous are first experiences in optical microscopy and experimentation. The ability to work in a team and the willingness to conscientious and careful work are required.

In the context of employment as a student assistant compensation is possible.

If you are interested or have questions, please contact Dr. Robert Weser (r.weser@ifw-dresden.de) or Dr. Hagen Schmidt (h.schmidt@ifw-dresden.de). Further information can be found at: www.SAWLab-Saxony.de