

Technische Universität Dresden - Faculty of Electrical and Computing Engineering / Institute for Solid-State Electronics



The Chair of Coating Technologies in Electronics at the Institute for Solid State Electronics (IFE) is a joint professorship with the Fraunhofer Institute for Electron Beam and Plasma Technology FEP in Dresden.

Master Thesis Project Opportunity

Development and Optimization of the Fabrication Process of Stimuli Responsive Materials using Digital Light Processing for Photopolymerization

City: Dresden; Starting date (earliest): At the earliest possible; Duration: 6 months;
Remuneration: NO

Tasks

- Contributing to the assembly of the optical, electrical, and mechanical components of an in-house built DLP-based photopolymerization system
- Systematic testing and characterization of the working status of system (optical, mechanical, and electrical)
- Assistance in calibration protocol development and report
- Printing tests of different polymeric resin compositions
- Experimental data and Simulation correlation

Requirements

- Enrolled student at a University
- Studying Electrical/Mechatronics and Systems Engineering, Physics or a comparable subject
- Knowledge of process automatisation
- Experience in working with microcontrollers
- Basic knowledge of optics is a asset

What we offer

- The opportunity to work as part of a dedicated team at the intersection of research
- The opportunity to participate in process development for applied science
- A collaborative environment between TUD and Fraunhofer FEP

Application

Please submit your detailed application, together with the usual supporting documents, preferably via the TUD's SecureMail portal at <https://securemail.tu-dresden.de> as a single PDF document to: alejandra.castro@tu-dresden.de

More information at <https://stellenticket.de/205672/BEUTH/>
Offer visible until 29/07/26

