

## **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 automatisisation
- 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](mailto:alejandra.castro@tu-dresden.de)

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

