



## **Faculty of Mechanical Science and Engineering**

The Institute of Textile Machinery and High Performance Material Technology, Chair of Textile Technology is seeking to appoint 9 students as

student assistant (max. 10hrs./week).

## **Research project:**

Dresden researchers want to generate an innovative class of materials within the Research Training Group 2430 "Interactive Fiber Rubber Composites" (I-FRC), i.e. fiber-reinforced composite materials including structurally integrated actuator and sensor networks. It is aimed at the simulation-based development of smart material combinations to create so-called self-sufficient fibre rubber composites. For this purpose, actuators and sensors are directly integrated into these reinforcing structures instead of adding them subsequently. Hence, systems become more robust and complex deformation patterns can be specifically adjusted, whereas these changes are produced in a reversible and contactless manner. The RTG2430 is the organizational roof of several institutes from four faculties at TU Dresden involved in this research project. Further information can be found here: <a href="https://tu-dresden.de/ing/for-schung/graduiertenkollegs/grk2430">https://tu-dresden.de/ing/for-schung/graduiertenkollegs/grk2430</a>

The position is temporary starting at the **earliest possible date** and ending by December 31, 2021. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG).

**Tasks:** scientific auxiliary activities, in particular evaluation and documentation of experiments; research activities in the fields of: materials sciences, textile technology, lightweight engineering, measuring and sensor technology, modelling and simulation, control technology.

**Requirement:** student enrolled at a college/university in any of the the above-mentioned fields. Applications from women are particularly welcome. The same applies to people with disabilities. Please send your application by **April 30, 2021** (stamped arrival date of the university central mail

service applies) preferably via the TU Dresden SecureMail Portal <a href="https://securemail.tu-dresden.de">https://securemail.tu-dresden.de</a> by sending it as a single pdf-document to <a href="grk2430@mailbox.tu-dresden.de">grk2430@mailbox.tu-dresden.de</a> or to: TU Dresden, Fakultät Maschinenwesen, Institut für Textilmaschinen und Textile Hochleistungswerkstofftechnik, Professur für Textiltechnik, z. Hdn. Herrn Dr. Rico Hickmann, Helmholtzstr. 10, 01069 Dresden. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

**Reference to data protection:** Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: <a href="https://tudresden.de/karriere/datenschutzhinweis">https://tudresden.de/karriere/datenschutzhinweis</a>