TUD Dresden University of Technology, as a University of Excellence, is one of the leading and most dynamic research institutions in the country. Founded in 1828, today it is a globally oriented, regionally anchored top university as it focuses on the grand challenges of the 21st century. It develops innovative solutions for the world's most pressing issues. In research and academic programs, the university unites the natural and engineering sciences with the humanities, social sciences and medicine. This wide range of disciplines is a special feature, facilitating interdisciplinarity and transfer of science to society. As a modern employer, it offers attractive working conditions to all employees in teaching, research, technology and administration. The goal is to promote and develop their individual abilities while empowering everyone to reach their full potential. TUD embodies a university culture that is characterized by cosmopolitanism, mutual appreciation, thriving innovation and active participation. For TUD diversity is an essential feature and a quality criterion of an excellent university. Accordingly, we welcome all applicants who would like to commit themselves, their achievements and productivity to the success of the whole institution.

The **Research Training Group (RTG) 2767** „Supracolloidal Structures: From Materials to Optical and Electronic Devices“ of TUD, funded by Deutsche Forschungsgemeinschaft (DFG), offers a positions as

Research Associate / PhD Student (m/f/x)
(subject to personal qualifications, employees are remunerated according to salary group E 13 TV-L)

starting **as soon as possible**. The position comprises 75% of the full-time weekly hours and is limited until September 30, 2026 with the option of extension until September 30, 2027 subject to the availability of resources. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). The position aims at obtaining further academic qualification (usually PhD).

About the RTG: About the RTG: The RTG 2767 aims to train a new generation of experts who will design materials made of supracolloidal structures from the drawing board to application in components. In order to realize the technical complexity in the training, numerous institutions are connected within the RTG's tight network, including various groups at the TU Dresden, the Universität Leipzig, the TU Dresden Research Cluster cfaed and the Dresden Center for Nanoanalysis as well as the Leibniz Institute for Polymer Research Dresden, the Helmholtz-Center Dresden-Rossendorf and the Kurt Schwabe Institute for Measurement and Sensor Technology Meinsberg e.V.

Tasks: Research on “Single Molecule Sensing of Proteins with Nanopores”, including their processing and fabrication, advanced electrical and microscopic characterization, optimization and analysis. Focus will be placed on the development of new and unexplored device concept and fabrication techniques. The work includes collaboration with national and international research partners.

Requirements:

- above-average university degree achieved in short study period, excellent Master of Science diploma in physics, chemistry, molecular biology, nanotechnology, biotechnology, or similar, with focus on micro- and nanostructures. Ideally with experience in the processing of semiconductor materials, patterning, and/or lithography, and experience with biomolecular interactions
- willingness and ability to think beyond the boundaries of your field, to act in an international and diverse environment and to live an open and constructive communication
- strong analytic and problem-solving skills, creativity
- an independent, target- and solution-driven work attitude
- fluency in English, knowledge of German would be a plus

What we offer: You will join an enthusiastic and ambitious research training group, where you can drive your project forward and benefit from inspirational interactions with like-minded researchers.

The RTG offers structured training program with technical and soft skill courses, research stays abroad as well as contact to industry. It offers the opportunity for PhD thesis completion. The working language of our international team is English.

TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The University is a certified family-friendly university and offers a Dual Career Service. We welcome applications from candidates with disabilities. If multiple candidates prove to be equally qualified, those with disabilities or with equivalent status pursuant to the German Social Code IX (SGB IX) will receive priority for employment.

Your application **(in English only)** must include: a motivation letter, your CV with publication list, copy of degree certificate, and transcript of grades (i.e. the official list of coursework including your grades). Please include also a link to your Master's or diploma thesis. Please submit your complete application by **October 4, 2024** (stamped arrival date of the university central mail service or the time stamp on the email server of TUD applies), preferably via the TUD SecureMail Portal https://securemail.tu-dresden.de by sending it as a single pdf file quoting the **reference number "RTG2767-B8"** to **recruiting.cfaed@tu-dresden.de** or to: **TU Dresden, Graduiertenkolleg 2767, Herrn Prof. Dr. U. Rant, Helmholtzstr. 10, 01069 Dresden, Germany.** 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: https://tu-dresden.de/karriere/datenschutzhinweis