

Technische Universität Dresden - Faculty of Electrical and Computer Engineering, Institute of Semiconductors and Microsystems, Chair for Microsystems



TUD Dresden University of Technology, as a University of Excellence, is one of the leading and most dynamic research institutions in the country. 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.

Research Associate (m/f/x)

(subject to personal qualification, employees are remunerated according to salary group E 13 TV-L) At the Faculty of Electrical and Computer Engineering, Institute of Semiconductors and Microsystems, the Chair for Microsystems offers a project position as Research Associate (m/f/x) starting January 1, 2027. The position is limited to 36 months.

The period of employment is governed by § 2 (2) Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG).

Stadt: Dresden; Beginn frühestens: Frühestmöglich; Dauer: The position is limited to 36 months.; Vergütung: subject to personal qualification, employees are remunerated according to salary group E 13 TV-L; Kennziffer: w26-251; Bewerbungsfrist: 09.10.2026

Aufgabenbeschreibung

Within the framework of SPP 2526, we are seeking a research associate to join our project "MCChemO". The project is conducted in collaboration with the Chairs of Information Theory and Machine Learning and the Deutsche Telekom Chair of Communication Networks at TUD, the Chair of Theoretical Information Technology at the Technical University of Munich, and the Institute of Pharmacology and Toxicology at TUD. The successful candidate will contribute to the development of a modular, active chemofluidic circuit platform for synthetic molecular communication, designed for complex biological application scenarios.

Your responsibilities will include:

- developing a portfolio of chemofluidic components from a molecular communication perspective
- developing fundamental functions for synthetic molecular communication, both experimentally and using computational design methods
- developing a robust and reproducible chemofluidic platform for specific organ-on-chip applications
- investigating and characterizing the developed components, fundamental functions and organ-on-chip circuits

Erwartete Qualifikationen

- an excellent university degree in electrical engineering, microsystems

engineering, microfluidics or a related field

- ideally, experience in at least three of the following areas: electrical engineering, microtechnology, microfluidics, and computer-aided design of microelectronic, micromechanical and/or microfluidic circuits
- the ability and willingness to work independently and in a goal-oriented manner
- a high level of commitment and motivation
- excellent command of English

Unser Angebot

- the opportunity for engaging and independent work within a flat hierarchy, in an open-minded team and supportive atmosphere
- flexible arrangements for work hours to support a good work-life balance
- 30 days of vacation per year (based on a 5-day workweek)
- extensive opportunities for professional development and continuing education
- health care and sports programs offered by TUD
- a discounted job ticket (also available as a Deutschlandticket)
- participation in the supplementary pension scheme for employees in the public sector via VBL (Federal and State Government Employees Retirement Fund)

Bewerbung

TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The university is a family-friendly university. 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.

Application: Please submit your detailed application with the usual documents by October 9, 2026 (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 to andreas.richter7@tu-dresden.de or to:

TU Dresden, Institute of Semiconductors and Microsystems, Prof. Dr. Andreas Richter, 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.

TUD is a founding partner in the DRESDEN-concept alliance.

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>.

Weitere Informationen unter <https://stellenticket.de/207446/BEUTH/>
Angebot sichtbar bis 09.10.2026

