

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.

At the **Cluster of Excellence „Physics of Life“ (PoL)**, the **Heisenberg Chair of mechanics of active biomaterials** offers a position as

Research Associate / PhD student-(m/f/x)

(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting **February 1, 2025**. The position entails 65% of the full-time weekly hours and is limited until January 31, 2028 with the option of extension. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). The position offers the chance to obtain further academic qualification (usually PhD).

Tasks: scientific research activities within the Heisenberg Chair of mechanics of active biomaterials of Prof. Dr. Elisabeth Fischer-Friedrich with the following research topic: **Regulation of cellular shape in epithelia through distinct surface tensions**. The underlying goal is to identify how cellular shape is adjusted in epithelial cell layers such that either flat or columnar, flat or curved cells emerge. Methods include cell culture, advanced fluorescence microscopy, complex image analysis and data processing, and atomic force microscopy. Furthermore: writing of scientific manuscripts for publication in the relevant periodicals; conducting detailed literature searches; writing regular interim reports; participation in professional conferences and presentation of the research work of the laboratory and its projects; support of the institute for applications for third-party funding.

Requirements: university degree (Diplom / Master) in biophysics, biotechnology, physics or biology; experience with experimental work and coding; strong interest in working in an interdisciplinary environment at the interface of physics, and cell biology; good command of spoken and written English; communication skills; high motivation and teamwork.

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.

Please submit your detailed application with the usual documents by **December 4, 2024** (stamped arrival date 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 elisabeth.fischer-friedrich@tu-dresden.de or to: **TU Dresden, PoL, Heisenberg-Professur für Mechanik aktiver Biomaterialien, Frau Prof. Dr. Elisabeth Fischer-Friedrich, Arnoldstr. 18, 01307 Dresden,**

Germany. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

DRESDEN
concept



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>.