

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 **Cluster of Excellence "Physics of Life"** offers a project position as

Research Associate / Biophysics instrumentation specialist (m/f/x)

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

starting **January 1, 2026**. The position is limited until December 31, 2032. The period of employment is governed by § 2 (2) Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). Balancing family and career is an important issue. The position is generally suitable for candidates seeking part-time employment. Please indicate the request in your application.

The PoL Cluster of Excellence (<https://physics-of-life.tu-dresden.de/en>), a central scientific institution, is an interdisciplinary research center for biology, biological physics, and computer science currently under development and has been funded by the German Research Foundation (DFG) since January 2019.

The role of the Biophysics instrumentation specialist is to provide researchers at PoL with support and training with biophysical measurement tools, both with commercial equipment and also custom-made equipment. The specialist will also collaborate on the development of new technologies for measuring physical properties and support scientists with measurements of physical parameters such as forces acting on the molecular, cellular, and tissue level.

The successful candidate will be in charge of the following tasks:

- scientific research activities
- provide scientific consulting on biophysical workflows to researchers
- train users on and provide technical support for biophysical instruments, including optical tweezers, atomic force microscopy, and laser cutters, etc.
- scientific development of new technologies by acting as a knowledge hub for custom builders within PoL
- support scientists with the analysis of biophysical data to extract physical properties and variables
- maintain, calibrate, and optimize biophysical equipment to ensure optimal performance and reliability

Requirements:

- a university degree (M.Sc., PhD, or equivalent) in physics, biophysics, or related subjects, and a strong background in the measurement of biophysical parameters
- expertise in at least one of the relevant techniques (optical tweezers, AFM, laser cutters), as well as imaging of biological samples, and analysis of biophysical data are crucial

- previous experience in imaging support and/or microscopy sample preparation is considered a strong advantage
- previous expertise in building instrumentation for physical measurements will be considered positively
- excellent communication skills and fluency in English, both written and spoken
- a collaborative mindset with the ability to work effectively in interdisciplinary teams

The candidate should be a proactive, self-motivated, flexible, organized, service-oriented, team player willing to support scientists with basic and advanced aspects of biophysical experiments and to expand her/his knowledge in new microscopy and biophysical techniques.

What we offer: A challenging and varied role in a dynamic, international environment and an innovative team; opportunities for further education and training; flexible working time models that allow you to balance family, career, and caregiving; participation in the additional pension scheme for public service employees through the VBL; and the option to purchase a job ticket.

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. 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 **September 18, 2025** (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 with the **Job-ID w25-234** and a maximum size of 4 MB to recruiting.pol@tu-dresden.de or to: **TU Dresden, Cluster of Excellence "Physics of Life", Prof. Otger Campàs, Arnoldstraße 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.

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>.