Technische Universität Dresden - Cluster of Excellence Physics of Life (PoL)

Technische Universität Dresden

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)
Light Microscopy and Image Analysis Specialist

The Cluster of Excellence Physics of Life (PoL) offers a project position as Research Associate (m/f/x) Light Microscopy and Image Analysis Specialist (subject to personal qualification employees are remunerated according to salary group E 13 TV-L) starting as soon as possible. The position is limited until ´December 31, 2032. The period of employment is governed by § 2 (2) Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). (if part-time), (if temporary). (part-time sentence, if applicable). (qualification aim or qualification sentence, if applicable)

City: Dresden; Starting date (earliest): At the earliest possible; Duration: December 31, 2032; Remuneration: subject to personal qualification, employees are remunerated according to salary group E 13 TV-L; Reference number: w26-139; Closing date: 11/06/26

Tasks

- scientific research and development activities
- providing expert support to users of advanced imaging systems, including confocal, FLIM, multiphoton, and light-sheet microscopes, as well as biophysical technologies and all other microscopes in the PoL Light Imaging and Biophysics Facilities
- set up and maintain computing infrastructure dedicated to data storage and analysis
- collaboration with research groups and staff at the facility in the design, planning, and implementation of customized imaging workflows leveraging tools like ImageJ, Python, and machine learning
- development of custom-made image analysis pipelines/code in collaboration with research groups
- training and supporting users in the operation of advanced microscopy systems and in the application of best practices for image acquisition
- help develop, deploy, and operate infrastructure for storing, analyzing, and visualizing research data
- maintaining, calibrating, and optimizing imaging equipment to ensure optimal performance and reliability
- support in defining the facility strategy and acquisition of new equipment

Requirements

- university and PhD degree in biophysics, physics, biology, or a similarly suitable field
- extensive hands-on experience with optical microscopes, particularly light-sheet microscopy
- proficiency in programming languages (e.g., Python, MATLAB, ImageJ Macro, bash) and a willingness to expand your skills
- experience in developing image analysis custom code (e.g., for cell or organelle segmentation, cell tracking, etc.)
- ability to handle large datasets, especially from lightsheet microscopy
- familiarity with open-source and commercial tools, such as ImageJ/Fiji, ilastik, Napari, Imaris, and machine-learning libraries (e.g., scikit-image, scikit-learn, etc), and AI software such as Claude.
- experience in imaging support and/or microscopy sample preparation is a significant advantage
- excellent communication skills and fluent written and spoken English and German
- ability to work effectively in interdisciplinary teams
- a service-oriented attitude and willingness to support and collaborate with instrument users

What we offer

- a dynamic, international, and top-tier research environment with access to state-of-the-art facilities
- professional development opportunities through training and collaboration with experts in advanced imaging, analysis, and biophysical technologies
- participation in the supplementary pension scheme for public sector employees via the VBL
- the option to purchase a VVO-job ticket

Application

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: If you recognize yourself in this profile, we look forward to receiving your application, which we ask you to submit by June 11, 2026 (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 recruiting.pol@tu-dresden.de or to:

TU Dresden
PoL
Dr. Li-Ling Yang
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.

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.

More information at https://stellenticket.de/204434/BEUTH/
Offer visible until 11/06/26