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 **Faculty of Physics,** the **Institute of Solid State and Material Physics** offers, subject to the availability of resources, a position as

State-certified Technician (m/f/x)
(subject to personal qualification employees are remunerated according to salary group E 9a TV-L)

starting at the **earliest possible date**. The position is limited until December 31, 2029 (time limitation pursuant to TzBfG).

Tasks:

- technical management of the laboratory equipment
- creation of technical drawings with CAD program
- dimensioning, simulating and optimizing physical-technical processes and devices collaboration with scientific staff
- planning and monitoring assembly and commissioning as well as maintenance and servicing measures for laboratory equipment
- technical advice and support in the cost-effective as well as project-oriented selection and procurement of laboratory equipment and laboratory inventory
- providing technical instructions to the scientific staff in the handling of laboratory equipment
- technical cooperation with other technical employees of the institute and cooperation partners (IWF, MPI, HZDR, JMU Würzburg) within the scope of the project.

Requirements:

- state-certified technician - specializing in physics technology, materials technology, mechanical technology or in a similarly suitable field for the position based on a completed relevant vocational training or comparable qualification with equivalent skills and experience
- several years of proven professional experience, preferably in an experimental laboratory
- expertise and experience in the use and design of cryostats down to 4 K, handling of cold gases, vacuum techniques, superconducting magnets, and design of precision mechanical and electronic components
- high level of motivation, reliability and diligence as well as ability to work independently
- technical and mechanical knowledge as well as interdisciplinary technical and manual knowledge and skills
- knowledge of the regulations on general occupational and laboratory safety
- knowledge of written and spoken English

- solid PC skills
- willingness to undergo further training
- CAD knowledge, SAP knowledge
- knowledge of cryogenics, high frequency electronics, optics, and ultra-high vacuum is preferred

We offer: The research activities of the Chair of Nanoscale Quantum Materials focus in the field of nanoscale magnetism, coherent quantum control, and nanoscale transport phenomena using scanning probe techniques (scanning NV-magnetometry, AFM, STM). The group will be established starting at January 1, 2025 at the TUD, within the Cluster of Excellence: Complexity and Topology in Quantum Matter (ct.qmat). We offer you a varied and challenging job with an excellent working environment in a highly motivated international team.

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.

For further information about the advertised position, please contact Prof. Dr. A. Singha (e-mail: aparajita.singha@mailbox.tu-dresden.de).

Please submit your detailed application including CV, previous work experiences (max 3 pages), all certificates regarding the training as a technician, and a short letter of intent (max 1 page), by **March 31, 2025** (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 **aparajita.singha@tu-dresden.de** or to: **TU Dresden, Fakultät Physik, Institut für Festkörper- und Materialphysik, Frau Prof. Dr. Aparajita Singha, Helmholtzstr. 10, 01069, Dresden, Germany.** We perform initial interviews via video-calls. Candidates that will be successful in these initial interviews will be invited for further in-person interviews. 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.

About ct.qmat

The Cluster of Excellence "Complexity and Topology in Quantum Matter - ct.qmat" is a joint project of the Technische Universität Dresden and the Julius-Maximilians-Universität Würzburg and has been funded by the Excellence Strategy of the German federal and state governments since January 1, 2019. ct.qmat brings together more than 270 researchers from the two universities and 5 other research institutes in the fields of physics, materials research and chemistry. The aim of ct.qmat's basic research is to understand, design and control solid-state topological systems. www.ctqmat.de

ct.qmat
Complexity and Topology in Quantum Matter