

## **Technische Universität Dresden - Faculty of Physics, Institute of Solid State and Materials Physics (IFMP)**



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.

### **Research Associate / PhD Student (m/f/x)**

At the Faculty of Physics, the Institute of Solid State and Materials Physics (IFMP) 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 at the earliest possible date. The position is limited to 3 years with 75% of the full-time weekly hours.

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).

City: Dresden; Starting Date: At the earliest possible; Duration: limited to 3 years;  
Remuneration: subject to personal qualification employees are remunerated according to salary group E 13 TV-L; Closing date: 29/11/24

### **Working field**

uniaxial stress tuning of quantum spin liquid materials. Uniaxial stress is a new and very powerful way to tune the electronic properties of quantum materials. We have recently established new experimental facilities to explore the electron-lattice interactions in quantum materials by means of x-ray diffraction, x-ray spectroscopy and Raman-scattering. Your task will be to take the next step and use these facilities to explore quantum spin liquid materials as a function of uniaxial stress and temperature. The aim is to discover new collective states of matter and to clarify the interplay of lattice and electrons in quantum materials. Apart from your experiments at IFMP, you will also have the opportunity to work at large scale research centers such as free electron lasers and synchrotron radiation facilities.

You will join the Chair of Physics of Quantum Materials and work within the Collaborative Research Center 1143, both offering an outstanding research environment for your project. Active collaboration with associated research groups is expected, along with project-related supervision of student theses (Bachelor, Master).

## Requirements

very good university degree (e.g. Master) in physics; interest in basic research; ability to work in a team and organizational talent; good command of English and German; ideally experience with advanced x-ray experiments.

## Application

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 send your detailed application with the usual documents by November 29, 2024 (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 **pdqm@mailbox.tu-dresden.de** or to: TU Dresden, DFG-Sonderforschungsbereich (SFB) 1143, Herrn Prof. Dr. Jochen Geck, 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.

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/188726/>  
Angebot sichtbar bis 22.11.2024

