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. 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 Chemistry and Food Chemistry,** the **Chair of Inorganic Chemistry I** offers, subject to the availability of resources, a full-time project position as

Research Associate / Postdoc (m/f/x)

(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 March 31, 2029. The period of employment is governed by § 2 (2) Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz – WissZeitVG).

Tasks:

- synthesis, up-scaling, and structural and physicochemical characterization of materials for solid-state Lithium Sulfur batteries, especially solid state electrolyte separator development and cathode development for an increase in energy density, cycle stability, and rate capability
- application and interpretation of modern analytical methods e.g. scanning electron microscopy, X-ray powder diffraction, Raman spectroscopy, thermogravimetric analysis, physisorption measurements
- electrochemical characterization of the samples via cyclovoltammetry, galvanostatic measurements, electrochemical impedance spectroscopy
- collaboration and exchange with project partners: close collaboration with partner groups within the joint project, participation in project meetings, exchange stays and integration into the networks of all contributing institutions
- documentation and presentation of results: writing of scientific publications, presentations on national and international conferences, project-related support in the supervision of students

Requirements:

- very good university degree (M.Sc. or equivalent) in chemistry or materials sciences; specialization in inorganic/material/physical chemistry, ideally in solid state batteries
- practical experience in the synthesis, and ideally up-scaling of battery materials, and in the use of analytical methods (X-ray diffraction, scanning electron microscopy, galvanostatic (dis)charging, cyclovoltammetry)
- excellent results on individual performance criteria (e.g., manuscript/publication resulting from Master and PhD thesis, awards) and timely completion of higher education
- strong motivation to independently conduct research and to work in interdisciplinary collaborations
- experience in supervising student assistants and/or Master students
- strong interest in interdisciplinary research on battery cells and battery component development
- excellent written and verbal communication skills in the English language, at least passive understanding of German

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: Please submit your detailed application with the usual documents, quoting the **reference number w26-121** by **June 5, 2026** (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 **linda.petersohn@tu-dresden.de** or to:

TU Dresden, Chair of Inorganic Chemistry I, Mrs. Petersohn, 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.

TUD is a founding partner in the DRESDEN-concept alliance.

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.