

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 REC²** offers, subject to the availability of resources, at the **Faculty of Chemistry and Food Chemistry, Chair of Inorganic Chemistry I**, a position as

PhD Student

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

starting **as soon as possible**. The position comprises 65 % of the full-time weekly hours. The position is limited to 3 years, with a possible one-year extension. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz – WissZeitVG). The position aims at obtaining further academic qualification (usually PhD).

Tasks:

- design, conceptualization and assembly of electrochemical devices (batteries, supercaps) for sustainable electronic applications and biointerfacing
- synthesis and Structural and physicochemical characterization of electrode materials (porous carbons, conductive polymers, porous polymers) and electrolytes: application of modern analytical methods e.g. XRD, Raman spectroscopy, elemental analysis, thermogravimetric analysis, physisorption measurements, zeta potential measurements
- electrochemical characterization of the samples via cyclic voltammetry, galvanostatic measurements, electrochemical impedance spectroscopy
- documentation and presentation of results: Writing of scientific publications, presentations on national and international conferences, contribution in teaching and supervision of students
- exchange and collaboration with a diverse team of scientists from the REC² Cluster, in particular with those from the fields of sustainability and natural sciences

Requirements:

- very good university degree (M.Sc. or equivalent) in chemistry or materials sciences; specialization in inorganic chemistry, material chemistry or electrochemistry
- practical experience in the synthesis of electrode materials and in the use of analytical methods (adsorption methods)
- profound knowledge in electrochemical characterization techniques
- excellent results on individual performance criteria (e.g., manuscript/publication resulting from Master thesis, awards) and timely completion of higher education
- strong motivation to independently conduct research and to work in interdisciplinary collaborations
- excellent written and verbal communication skills in the English language

We offer: You will join a team of enthusiastic scientists who pursue creatively their individual research agenda inspired by the cluster's innovative approach and support. Your PhD research will be fostered by the REC² philosophy to promote dynamic researchers, which includes:

- access to state-of-the-art research of leading academic institutes
- possibility to apply for GreenRiskFunds to pursue your own high-risk/high-gain research ideas

- possibility of exchange with partner institutions in the Global South
- promotion of gender equality and a family-friendly work environment
- supervision via a dual supervision concept, including a structured PhD project plan, international exchange, and a dedicated Thesis Advisory Committee (TAC)
- mentorship via the REC² mentoring board

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 by **July 20, 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, REC², Prof. Dr. Stefan Kaskel, 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.

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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>.