Technische Universität Dresden (TUD), 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 Molecular Chemistry offers, subject to resources being available, 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)

at the next possible date in a BMWK funded project „Recovery and reuse of electrolyte salts and solvents“. Collaboration project between two industrial partners, renown for battery research, and the TU Dresden. The position comprises 50 % of the fulltime weekly hours. The position is limited to October 31, 2025. The period of employment is governed by Fixed Term research Contracts Act (Wissenschaftszeitvertragsgesetz WissZeitVG). The position offers the chance to obtain further academic qualification (PhD thesis).

**Tasks:** Independent work on research towards the identification and separation of phosphorus based electrolyte degradation products, coupled with their transformation to value-added phosphorus chemicals, e.g. re-formation of PF₆-salts. In depth characterization of the obtained products and intermediates, via spectroscopic methods such as NMR, UV-vis, IR/Raman, mass spectrometry and X-ray structure determination. Scale up of the developed separation processes and follow-up syntheses. Summarizing and presenting the results in front of a scientific and/ or industrial audience.

**Requirements:** university degree (Master or equivalent) in chemistry; an integrative and cooperative personality with high teamwork abilities, self-motivation skills and organizational talent; interest in application-oriented chemical research; deep knowledge in inorganic and organic chemistry, safe handling of inert gas techniques, i.e. air and moisture free conditions. Understanding and profound knowledge of analytical methods for molecular chemistry such as NMR, IR/ Raman, mass spectrometry and X-ray structure determination. Scale up of the developed separation processes and follow-up syntheses. Summarizing and presenting the results in front of a scientific and/ or industrial audience.

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 submit your comprehensive application including the usual documents by November 29, 2022 (stamped arrival date of the university central mail service applies) to: TU Dresden, Fakultät Chemie und Lebensmittelchemie, Professur für Anorganische Molekülchemie, Herrn Prof. Dr. Jan J.
Weigand, Helmholtzstr. 10, 01069 Dresden or as a single pdf-document via e-mail to sekretariat.weigand@chemie.tu-dresden.de (Please note: We are currently not able to receive electronically signed and encrypted data.). 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.