

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 **Center for Advancing Electronics Dresden (cfaed)**, the junior research group **Transport in Hybrid Materials** (Dr. Fabian Paulus) offers, a position as

Research Associate / PostDoc (m/f/x)

(subject to personal qualification employees are remunerated according to salary group E13 TV-L)

starting **as soon as possible**. The position is limited until December 31, 2024. 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.

Tasks: Research on colloidal nanomaterials and small organic molecules (ligands, linkers etc.), involving their synthesis, characterization and deposition on a variety of substrates, including ultrathin van der Waals semiconductors. Our goal is to use these materials to controllably and reversibly manipulate properties of underlying nanosheets. The work is based on a close collaboration with Prof. Dr. Chernikov (TUD) and Dr. Fery (IPF) in Dresden and other collaborators on a national and international level.

Requirements: university degree (master or comparable) in Chemistry and PhD degree in Synthetic Chemistry or Material Science. Interest to conduct basic and application-related research; experience in the synthesis of colloidal nanomaterials and/or organic compounds, experience with Schlenk-technique; standard characterization methods for these materials; excellent command of English language; excellent computer skills; high self-motivation. Ideally ready-to-use and up-to-date knowledge of quantum dots materials and 2D materials.

What we offer: You will join a dynamic interdisciplinary team of enthusiastic scientists who pursue their research agenda by creativity, mutual exchange of knowledge and collaboration across disciplines and institutions. Your research will be fostered by our philosophy to promote aspiring researchers, which includes:

- access to state-of-the-art research facilities of a leading academic institute
- international doctoral program
- promotion of gender equality and family-friendly work environment.

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.

Your application (**in German or English**) should include: motivation letter, CV, copy of degree certificate, transcript of grades (i.e. the official list of coursework including your grades) and proof of English language skills. Complete applications should be submitted by **March 31, 2023** (stamped arrival date of the university central mail service applies), preferably via the TU Dresden Secure-Mail Portal <https://securemail.tu-dresden.de> by sending it as a single pdf-document quoting the reference **DiMani_Paulus** in the subject header to recruiting.cfaed@tu-dresden.de or to: **TU Dresden, cfaed, Nachwuchsforschungsgruppe Transport in hybriden Materialien, Dr. Fabian Paulus, 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>.