Center for Advancing Electronics Dresden

For the DFG project “MXene-organic semiconductor blends for high-mobility printed organic electronic devices” MX-OSMOPED the Chair of Molecular Functional Materials offers a position as

**Research Associate / PhD Student**
(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

**Research area:** Synthesis and functionalization of new 2D materials

**Investigators:** Prof. Dr. Xinliang Feng

**research path:** [Organic/Polymer Path](#)

**Terms:** 50% of the fulltime weekly hours, starting **June 1, 2019** for one year until May 31, 2020. The period of employment is governed by the Fixed-Term Research Contracts Act (Wissenschaftszeitvertragsgesetz – WissZeitVG).

**Position and Requirements**
The DFG Project encourages the highest quality research in Europe through competitive funding and by supporting investigator-driven frontier research on the basis of scientific excellence. The project allows researchers to identify new opportunities and tries to fund new and promising topics with a great degree of flexibility. Ultimately, with this project we would like to address the needs of a knowledge-based society and provide Europe with the capabilities in frontier research necessary to meet global challenges.

Within this project, the Chair of Molecular Functional Materials is focused on the applications of new 2D materials dedicated to electronic applications.

The successful candidates will be responsible for: Exfoliation and functionalization of graphene and 2D materials; Optimization of Exfoliation/functionalization conditions to increase production rate; Formulation of graphene/2D materials in different matrix e.g. Inks and polymer composites; Characterization of graphene/2D materials via AFM, RAMAN, SEM; Organizational tasks within the project.

We aim at attracting the best talent in the respective research fields and expect the following: an outstanding university degree in organic chemistry, polymer chemistry or similar; previous experience in organic or polymer synthesis; very good interpersonal and communication skills; in particular, the ability to effectively work in collaborative research efforts; an independent, target- and solution-driven work attitude; inter- and multidisciplinary thinking; strong motivation and interest to join one of the most ambitious interdisciplinary research clusters; fluency in English - written and oral.

**What 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 research will be fostered by the cfaed philosophy to promote young researchers, which includes: access to state of the art research of leading academic institutes; promotion of gender equality and family-friendly work environment as well as an individual thesis advisory committee (TAC) for PhD students.
Informal enquiries can be submitted to Prof. Dr. Xinliang Feng, Tel +49 (351) 463 43250; Email: xinliang.feng@tu-dresden.de. Applications from women are particularly welcome. The same applies to people with disabilities.

Application Procedure
Your application (in English only) should include: motivation letter, CV, copy of degree certificate and proof of English language skills.
Complete applications should be submitted with the reference 0419_MX-OSMOPED to: TU Dresden, cfaed, Prof. Xinliang Feng, Helmholtzstr. 10, 01069 Dresden. The closing date for applications is 09.05.2019 (stamped arrival date of the university central mail service applies). 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

About cfaed
cfaed is a central academic unit of TU Dresden and brings together 300 researchers from the university and 10 other research institutes in the areas of Electrical and Computer Engineering, Computer Science, Materials Science, Physics, Chemistry, Biology, and Mathematics. cfaed addresses the advancement of electronic information processing systems through exploring new technologies which overcome the limits of today's predominant CMOS technology. www.cfaed.tu-dresden.de

TU Dresden
The TU Dresden is among the top universities in Germany and Europe and one of the eleven German universities that were identified as an 'elite university' in June 2012. As a modern full-status university with 18 faculties it offers a wide academic range making it one of a very few in Germany.