

Center for Advancing Electronics Dresden

Chair of Molecular Functional Materials offers the following position as:

Research Associate / PhD Student

<i>Research area:</i>	Exfoliation and Functionalization of emerging 2D Materials including material preparation and characterization and study the (opto)-electronic properties
<i>Investigators:</i>	Prof. Dr. Xinliang Feng
<i>research path:</i>	Organic/Polymer Path
<i>Terms:</i>	starting as soon as possible , one position for 12 months with the possibility of extension.

Position and Requirements

Within this position, the Chair of Molecular Functional Materials is focused on the synthesis and exfoliation of 2D nanomaterials, which emerge as outstanding candidates for a great number of electronic applications. This research aims to (electro)chemically exfoliate layered structures to achieve 2D materials bearing novel electronic functions.

The successful candidates will be responsible for: Design of layered structure, their (electro)chemical exfoliation, Functionalization of 2D materials, study their morphology and (opto)-electronic properties.

We aim at attracting the best talent in the respective research fields and expect the following: an outstanding university degree and a master degree in inorganic/organic chemistry, polymer chemistry, or similar; previous experience in 2D materials preparation; 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 centers; 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 research center'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.

Informal enquiries can be submitted to Prof. Dr. Xinliang Feng, Tel +49 (351) 463 43250; Email: xinliang.feng@tu-dresden.de and Dr. Ali Shaygan Nia, Tel +49 (351) 463 40413; Email: ali.shaygan_nia@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 via email by sending it as a single pdf document quoting the reference **PhD_2Dmaterials_06_2021** in the subject header to: Dr. Ali Shaygan Nia,

ali.shaygan_nia@tu-dresden.de. 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 2019. As a modern full-status university with 17 faculties it offers a wide academic range making it one of a very few in Germany.