For the Graphene Flagship Project “Graphene-based disruptive technologies” GrapheneCore2 the Cluster of Excellence ‘Center for Advancing Electronics Dresden’ (cfaed), Chair of Molecular Functional Materials offers the following positions:

1 Research Associate / Postdoc
1 Research Associate / PhD Student

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

Research area: Organic synthesis of graphene nanoribbons for optoelectronics applications and Conjugated molecules and polymers for organic electronics

Investigators: Prof. Dr. Xinliang Feng

research path: Organic/Polymer Path

Terms: 50% of the fulltime weekly hours for PhD, starting June 1, 2018 until the end of the GrapheneCore2-Project March 31, 2020. 100% of the fulltime weekly hours for Postdoc, starting August 1, 2018 until the end of the project march 31,2020. The period of employment is governed by the Fixed-Term Research Contracts Act (Wissenschaftszeitvertragsgesetz – WissZeitVG).

Position and Requirements

The Graphene Flagship is, along with the Human Brain Project, the first of the European Commission's Future and Emerging Technology (FET) Flagships, whose mission is to address the big scientific and technological challenges of the age through long-term, multidisciplinary research and development efforts. In particular, it is tasked with bringing together academic and industrial researchers to take graphene from the realm of academic laboratories into European society in the space of 10 years, thus generating economic growth, new jobs and new opportunities.

Within this European Project, the Chair of Molecular Functional Materials is focused on the synthesis and production of Graphene and other 2D nanomaterials which emerge as outstanding candidates for a great number of electronic applications. The goal of this research is to synthesize graphene molecules and 2D materials bearing electronic functions.

The successful candidates will be responsible for: design and synthesis of graphene molecules and 2D materials with novel edge structures; production and functionalization of graphene and 2D materials; formulation of graphene and 2D materials into nanocomposites with added functionality; development and preparation of graphene and 2D material dispersions and inks and application research in the field of energy storage, energy conversion and energy generation; organizational tasks within the Flagship project.

We aim at attracting the best talent in the respective research fields and expect the following: an outstanding university degree (for postdocs additionally a doctoral 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 postdoc 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.
Applications from women are particularly welcome. The same applies to people with disabilities. Informal enquiries can be submitted to Prof. Dr. Xinliang Feng, Tel +49 (351) 463 43250; Email: xinliang.feng@tu-dresden.de.

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 to TU Dresden, cfaed, z. Hdn. Fr. Dr. Grünberg, 01062 Dresden quoting the reference 1803_Graphene2 in the subject header. The closing date for applications is 19.03.2018 (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.

About cfaed

cfaed is a cluster of excellence within the German Excellence Initiative. As a central scientific unit of TU Dresden, it 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 14 departments it offers a wide academic range making it one of a very few in Germany.