The Emmy Noether independent junior research group ‘Computational Nanoelectronics’ lead by Dr. Frank Ortmann at the Cluster of Excellence ‘Center for Advancing Electronics Dresden’ (cfaed), offers, subject to resources being available, a fixed-term position as

**Research Associate / PhD Student: Theoretical Condensed Matter Physics**

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

**Terms:** 50-65% of the fulltime weekly hours, the position may start as soon as possible and is limited to three years. 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 (e.g. PhD).

**Position and Requirements**

The group Computational Nanoelectronics is embedded at the Center for Advancing Electronics Dresden and Dresden Center for Computational Materials Science, which integrates the activities of more than 20 chairs of TU Dresden and various research centers in Dresden to one of the leading hubs of computational materials research worldwide. We also enjoy the close proximity to excellent collaboration partners at TU Dresden – a great asset in the project.

The successful candidate will work on the design of high-performance organic semiconductors based on advanced theoretical modelling and computer simulations of molecular materials (RHODOS project). A significant part will be code development. The project will run in close collaboration to external partners, which will support the project by investigating the predicted organic semiconductors in experiments.

We aim at attracting the best talents in the respective research fields and expect the following: very good university degree (M. Sc. Degree) in physics or chemistry (theory); strong skills in advanced computer simulations and programming and strong analytical skills; knowledge of ab initio and/or molecular dynamics simulations would be very helpful; good communication and writing skills in English; an integrative and cooperative personality with excellent communication and social skills.

**What we offer**

You will join a team of enthusiastic scientists who creatively pursue their individual research agenda inspired by the cluster’s innovative approach and support. cfaed does not only offer a highly inspiring research environment but also a structured career development program in particular for its young researchers which is unique in academia.

Informal enquiries can be submitted to Dr. Frank Ortmann, Tel +49 (351) 463 43260; Email: frank.ortmann@tu-dresden.de.

**Application Procedure**

Your application should include: motivation letter, CV, an officially certified copy of the university degree, short summary of Master thesis.

Complete applications should be submitted preferably via the TU Dresden SecureMail Portal [https://securemail.tu-dresden.de](https://securemail.tu-dresden.de) by sending it as a single pdf document to
recruiting.cfaed@tu-dresden.de quoting the reference number Rhodos-1710 in the subject header or alternatively to TU Dresden, cfaed, Frau Dr. P. Grünberg, 01062 Dresden, Germany. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

The closing date for applications is 01.12.2017 (stamped arrival date of the university central mail service applies).

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.