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 a fixed-term position as

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

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

**Terms:** Starting date **as soon as possible** upon mutual agreement. 50-65% of the fulltime weekly hours until 31.05.2021, funded by an Emmy Noether Research Group and by the RHODOS project. Subject to the continued third-party funding, the extension of the contract may be possible. 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 theory group Computational Nanoelectronics is embedded at the Center for Advancing Electronics Dresden and the 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 all projects. The successful candidate will advance the theoretical modelling and computer simulations of electronic transport in the exciting field of organic semiconductor doping. He/She will describe the doping process of organic materials from the molecular level to macroscopic charge transport.

We aim at attracting the best talents in the respective research fields and expect the following: very good university degree (M. Sc.) in theoretical physics, theoretical chemistry or closely related discipline; 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.

Applications from women are particularly welcome. The same applies to people with disabilities.

**Application Procedure**
Your application should include: motivation letter, CV, copy of university degree certificate, short summary of Master thesis.

Complete applications should be submitted preferably via the TU Dresden SecureMail Portal https://securemail.tu-dresden.de by sending it as a single pdf document quoting the reference number **Emmy-PhD1806** in the subject header to recruiting.cfaed@tu-dresden.de or alternatively to **TU Dresden, cfaed, Frau Dr. P. Grünberg, Helmholtzstr. 10, 01069 Dresden, Germany**.
The closing date for applications is **16.07.2018** (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. [https://cfaed.tu-dresden.de/](https://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.