

Within the **Cluster of Excellence ‘Center for Advancing Electronics Dresden’ (cfAED)**

10 positions of



Research Group Leaders (TV-L)

are available from November 2012 or as early as possible thereafter (mutually agreed entry date). This is a full-time fixed term position for 5 years initially, funded by cfAED (until October 2017). The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). After a successful review of the cluster and a personnel evaluation, the post may become permanent.

About cfAED

cfAED addresses the advancement of electronic information processing systems through exploring new technologies which overcome the limits of today's predominant CMOS technology. To achieve the cluster's visions and goals and to actively support the interdisciplinary exchange of ideas, nine ‘Research Paths’ are being explored by interacting teams, looking for solutions and new approaches:

A: Silicon Nanowire Path | B: Carbon Path | C: Organic/Polymer Path | D: Biomolecular-Assembled Circuits
| E: Chemical Information Processing Path | F: Orchestration Path | G: Resilience Path | H: Collaborative
Research Center HAEC `Highly Adaptive Energy-Efficient Computing` | I: Biological Systems Path

cfAED integrates discovery-driven natural sciences and innovation-driven engineering, comprising research from materials to large-scale heterogeneous information processing systems. cfAED is a cluster of excellence within the German Excellence Initiative. It brings together 200-400 researchers mainly from TU Dresden, as well as TU Chemnitz, the Leibniz Institutes IPF and IFW, the Max Planck Institutes CBG and PKS, the Fraunhofer Institutes IZFP and ENAS, and Helmholtz Center Dresden-Rossendorf from the areas of Electrical and Computer Engineering, Computer Science, Materials Science, Physics, Chemistry, Biology, and Mathematics.

It is our intention to strengthen the following areas by the appointment of the open positions:

- Reconfigurable Nanowire Electronics
- Nanowire Biosensor Devices
- Modeling and Design of Carbon-Based Transistors
- Carbon-Based Circuit Technology
- DNA Chemistry
- Chemical Information Processing Systems
- Heterogeneous System-Software Verification
- Microkernel-Based Systems Architecture for Heterogeneous Systems
- Orchestration of Resilience Mechanisms
- Bio-Inspired Information Processing

Position and Requirements

All posts offer highly challenging research topics, an inspiring scientific environment as well as the opportunity of systematic and fostered career development.

We are seeking to support and enhance the academic excellence of cfAED by the appointment of distinguished researchers and rising stars in the scientific community who are able and willing to contribute to cfAED's targeted world-class reputation. The successful candidate will be required to conduct research that meets the highest standards of excellence. It is planned that the group leaders can participate in teaching undergraduates and postgraduates for the degree programs and in supervising PhD students under the guidance of cfAED mentors. Our vision is to find an individual who

- has an excellent track record in his/her field of expertise, with a completed PhD
- has Postdoc experience or equivalent
- has experience in supervising the scientific work of other researchers
- agrees with our philosophy to work interdisciplinary, in partnership with industry and to systematically foster new talents
- is able to build new relationships with external institutions

Informal enquiries can be submitted to the Program Management Director (Dr. Uta Schneider, Tel +49 (351) 463 41016; Fax +49 (351) 463 41099; Email: recruiting.cfaed@tu-dresden.de). More information about the Cluster of Excellence cfAED can be found here (www.cfaed.org).

TU Dresden seeks to employ more women in leadership positions. Hence we would particularly like to encourage qualified women to apply. Applications from disabled candidates or those with additional support needs are welcome. TU Dresden declares itself to be a family-friendly university and offers a dual career service. Also the cfAED philosophy includes an intensive program for newly appointed staff, including support with the organization of relocation, child care and daily life service support.

Application Procedure

Your application (in English only) should include a brief statement of research interests that explains how your accomplishment and professional goals match the description of the position and the intended research area, a curriculum vitae, an outline of your scientific career, a list of publications (last 3 years only), copies of 2 most important papers, a statement of teaching experience, a copy of the highest academic degree certificate. Complete applications should be submitted preferably by e-mail as a single PDF document quoting the reference number RGL1201 in the subject header to recruiting.cfaed@tu-dresden.de or alternatively to **TU Dresden, cfAED, Herr Prof. Gerhard Fettweis, 01062 Dresden, Germany**. (Please note: We are currently not able to receive electronically signed and encrypted data). The closing date for applications is **15.09.2012** (stamped arrival date of the university central mail service applies).

About TU Dresden

The TU Dresden is among the top universities in Germany and Europe: strong in research, offering first-rate programs with an overwhelming diversity, with close ties to culture, industry and society. The TU Dresden is one of the eleven German universities that were identified as an "elite university" in June 2012. As a modern full-status university with 14 faculties it offers a wide academic range making it one of a very few in Germany. TU Dresden is the largest technical university in Germany. TU Dresden encompasses 36.500 students, 5.319 publicly

funded staff members – among them 510 professors – and approximately 3.265 externally funded staff members.

Announcement – further vacancies

Additionally the “Center for Advancing Electronics Dresden” plans to appoint up to 5 new **Tenured Professorships and cfAED Chairs (W2/W3)** in the areas of **Organic Devices, Organic Materials, Processor Design, Compiler Construction and Adaptive Networks**. These Strategic Professors will strengthen cfAED’s research areas and, thus, increase the probability of achieving research breakthroughs. These positions will tackle the research challenges of cfAED in innovative and interdisciplinary ways to enhance cfAED’s research excellence. In addition, these professorships will advance cfAED’s strategic development by actively building new relationships within DRESDEN-concept (www.dresden-concept.de) and other external partners.

A **variety of PhD positions** will also become available in due course to underpin the cluster’s research program. However, we encourage open applications **at any time** to recruiting.cfaed@tu-dresden.de. Please refer to the cfAED website for detailed information on the cfAED research objectives.

All posts will be based in Dresden, Germany and offer highly challenging research topics, an inspiring scientific environment as well as the opportunity of systematic and fostered career development.

Please check our website regularly for updated information: www.cfaed.org

The quality of life in the Dresden region is unique in Europe. Please find more information at: <http://home.meinestadt.de/dresden/attraktivitaets-ranking>