Tenure-Track-Professur for Next Generation Photovoltaics (W1)

Job description: Work will focus in particular on photovoltaics using perovskite materials. We are looking for a person who will represent this area in research, academic education, and innovation and should have vast expertise in several of the following fields of work:

- novel perovskite absorber materials for photovoltaics (e.g. 2D/3D hetero structures);
- scalable processes to manufacture perovskite solar modules taking into account vacuum and liquid processes (e.g. ink jet printing);
- tandem solar cells based on perovskite semiconductors (e.g. combined with CIGS and silicon solar cells);
- nanophotonic structures to enhance efficiency;
- systems analysis and yield calculations for perovskite photovoltaics.

Apart from outstanding scientific achievements made within the framework of an excellent doctorate, for instance, successful acquisition of an externally evaluated junior research group is required. You develop and pursue an independent research approach of your own and are responsible for the supervision of students and doctoral researchers.

Experience gained from participation in coordinated research programs is desired. You commit to participating in the future Helmholtz program “Materials and Technologies for the Energy Transition.” In addition, you will join the teaching staff in the study programs offered by the KIT Department of Electrical Engineering and Information Technology. You have gathered work experience abroad and have successfully raised third-party funding from competitive funding programs of national or international funding institutions. Ideally, you already possess first experience from collaboration with industry.

Qualification: According to Article 51, Landeshochschulgesetz Baden-Württemberg (LHG, Baden-Württemberg Act on Universities and Colleges), a completed university degree, pedagogical aptitude, and a special aptitude for scientific work are required. The evaluation procedure and the general evaluation criteria follow the “Qualitätssicherungskonzept für Juniorprofessuren und Tenure-Track-Professuren am Karlsruher Institut für Technologie (KIT)” (quality assurance concept for junior professorships and tenure-track professorships at Karlsruhe Institute of Technology (KIT)). During evaluation, particular attention will also be paid to participation in the program-oriented research scheme of the Helmholtz Association. For a plannable scientific career development, an accompanying process is offered at KIT. If the
final evaluation is positive, you will be appointed to an open-ended professorship (W3).

**Institute:** Division III – Mechanical and Electrical Engineering, KIT Department Electrical Engineering and Information Technology, Institute of Microstructure Technology (IMT)

**Contract duration:** According to Article 51, Landeshochschulgesetz Baden-Württemberg – LHG (Baden-Württemberg Act on Universities and Colleges), the employment is for six years as a civil servant on a temporary basis or as an employee. For a plannable scientific career development, an accompanying process is offered at KIT. If the final evaluation is positive, you will be appointed to an open-ended professorship (W3)."

**Starting date:** as soon as possible

**Application up to:** September 30, 2019

**Application:** Kindly send your application, including the usual documents in German or English (CV, list of publications, graduation and other certificates, documentation of previous and planned research and teaching activities) in written and electronic form to the Dekan der KIT-Fakultät für Elektrotechnik und Informationstechnik (Dean of the KIT Department of Electrical Engineering and Information Technology), Karlsruher Institut für Technologie (KIT), Kaiserstrasse 12, 76131 Karlsruhe, Germany, email: dekanat@etit.kit.edu.

KIT is an equal opportunity employer. Women are especially encouraged to apply. Applicants with disabilities will be preferentially considered if equally qualified.

Karlsruher Institute of Technology
Personalservice