Tenure-track Professorship for Real-time Systems in Energy Technology (W1)

Job description: We are looking for a person, who will represent the area of future-oriented energy systems and applications in research, academic education, and innovation and should have vast expertise in several of the following fields:

- Power-hardware-in-the-loop systems for testing novel energy storage technologies in realistic use cases.
- Analysis of the stability and accuracy of power-hardware-in-the-loop test systems.
- Real-time modeling and testing of components in multi-modal energy systems, such as cogeneration units, fuel cells, storage systems.
- Power grid services of converters in power grids with a high penetration rate of power electronics.

Qualification: Candidates should have an internationally outstanding scientific qualification and reputation, excellent didactic skills, and first leadership experience. A successful acquisition of an externally evaluated junior research group will be required. In addition, experience in the initiation of collaborations with industry and in product development and testing will be strongly appreciated.

Regarding academic teaching, candidates are expected to actively participate in existing and newly established German and English study programs offered by the KIT Department of Electrical Engineering and Information Technology as well as in related programs offered by other departments of KIT. Besides courses in the fields covered by the professorship, this also includes basic lectures in electrical engineering and information technology.

Institute: Division III - Mechanical and Electrical Engineering, KIT Department of Electrical Engineering and Information Technology

According to Article 15, par. 2, KIT Act (leave of absence in analogy to the Jülich model), the professor will head the Real-time System Integration Group of the Institute for Technical Physics and is expected to cooperate closely with the Institute of Electric Energy Systems and High Voltage Engineering in the area of real-time systems.

Contract duration: limited term (6 years)

Employment, by leave of absence according to Article 15, par. 2, KIT Act, as civil servant for a limited term (Beamte/r auf Zeit) or employee (Angestellte/r) will be limited to six years. In the third year, an interim evaluation will be conducted, at the end of the term a final evaluation will be made. In case of a positive final evaluation, the candidate will be appointed tenure-track professor (W3) according to Article 15, par. 2, KIT Act (leave of absence in analogy to the Jülich model).
The evaluation procedure and general evaluation criteria are outlined in the “Quality Assurance Concept for Junior Professorships and Tenure-track Professorships at Karlsruhe Institute of Technology (KIT)”; for the original German version, click http://www.sle.kit.edu/downloads/AmtlicheBekanntmachungen/2019_AB_001.pdf.

During evaluation, particular attention will be paid to participation in the program-oriented large-scale research of the Helmholtz Association. For a plannable scientific career development, an accompanying process support is offered at KIT.

KIT wishes to increase the proportion of female professors and, hence, strongly encourages qualified women to apply. Handicapped applicants (m/f/nb) having the same qualification will be preferred. The employment conditions as outlined in Article 51, Landeshochschulgesetz Baden-Württemberg (Law of Baden-Württemberg on Universities and Colleges) in conjunction with Article 20, KIT-Gesetz (KIT Act) in the version valid until the entry into force of the 2nd KIT Further Development Act and the “Quality Assurance Concept for Junior Professorships and Tenure-track Professorships at Karlsruhe Institute of Technology (KIT)” shall apply.

KIT is certified as a family-friendly university and offers part-time employment, leave for family reasons, dual career services, and accompanying coaching for enhancing the compatibility of job and family.

Your personal data will be processed by Karlsruhe Institute of Technology (KIT) in accordance with the privacy policy of KIT, click https://www.sek.kit.edu/english/appointment-procedures.php.

**Starting date:** Employment is to start at the earliest date possible.

**Application up to:** April 15, 2021

**Contact person in line-management:** If you have questions relating to the appointment procedure, mail to the Dean’s Office of the KIT Department of Electrical Engineering and Information Technology, Managing Director Nicole Landeck, email: dekanat@etit.kit.edu.

**Application:** Kindly mail your application, including the usual documents (CV, list of publications, graduation and other certificates, teaching evaluations, documentation of previous and planned research and teaching activities, and research and teaching concept), preferably in a single PDF file, to Professor h.c. Dr.-Ing. Joachim Knebel, Head of Division III – Mechanical and Electrical Engineering, Karlsruhe Institute of Technology (KIT), c/o Dekanat ETIT, Kaiserstrasse 12, 76131 Karlsruhe, Germany, email: dekanat@etit.kit.edu, by March 15, 2021. For a comparative evaluation of applications as part of the appointment procedure, please submit the CV and the research and teaching concept in English.