W3-Professorship for Modeling and Simulation for Medical Engineering

Job description: We are looking for a person, who is to represent in research, academic education, and innovation the interdisciplinary field of modeling and simulation for medical engineering. Applicants should be experienced and have a high reputation in several of the following areas:

- Digitization and personalization in medical engineering ("digital twin," virtual patient, individualized medical engineering)
- Use of methods of artificial intelligence for personalized diagnosis and therapy processes
- Development and application of new simulation methods for medical engineering
- Development and application of computer-based models for medical engineering problems (e.g. modeling of cells, cell clusters, organs, organ systems, or of the complete organism)
- Systemic modeling and simulation of measurement chains from the biosignal source to sensor components to signal processing

Qualification: Candidates should have an internationally outstanding scientific qualification, excellent didactic skills, and leadership experience. In addition, we attach value to experience gained from the initiation of collaborations with industry or startups, in the acquisition of third-party funding, and in industrial product development, testing, and approval.

In the area of academic education, candidates are expected in particular to actively participate in the organization of the planned medical engineering program. In addition, active involvement 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 is expected. Besides courses in the field covered by the professorship, this also includes basic lectures in electrical engineering and information technology.

The employment conditions as outlined in Art. 47 LHG (Law of Baden-Württemberg on Universities and Colleges) shall apply.

Institute: Division III – Mechanical and Electrical Engineering, and Member of the Board of the Institute of Biomedical Engineering (IBT) at KIT Department of Electrical Engineering and Information Technology

Contract duration: permanent

Starting date: Employment is to start at the earliest date possible.
Application up to: January 6th, 2021

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, research and teaching concept) by January 06, 2021 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, Kaiserstr. 12, 76131 Karlsruhe, Germany, email: dekanat@etit.kit.edu.

For a comparative evaluation of applications as part of the appointment procedure, please submit the CV and the research and teaching concept in English.

In case of questions relating to the appointment procedure, contact the Dekanat (Dean’s Office) of the KIT Department of Electrical Engineering and Information Technology, email: dekanat@etit.kit.edu, phone: +49(0)721/608-47513 (Managing Director: Nicole Landeck).

KIT is an equal opportunity employer. Women are especially encouraged to apply. Recognized severely disabled persons will be preferred if they are equally qualified.

The KIT is certified as a family-friendly university and offers part-time employment, leaves of absence, a Dual Career Service and coaching to actively promote work-life-balance.