W3-Professorship for Mobility Systems and Vehicle Systems for High Transport Capacity

Job description: The tasks of the professorship include research, teaching and innovation in the field of high-capacity transport systems, such as railways, tramways, metros, buses and cable cars. Ships are not in focus.
Core areas of the professorship are
- consideration of the entire system on vehicle level
as well as the derived requirements on
- vehicles and their major systems (vehicle concepts, drive systems, supporting structures, bogies and running gears, brakes, control and communication system, interaction between human and mobility system, etc.),
- power supply,
- handling systems (loading and unloading installations, coupling systems),
- predictive maintenance management (vehicle components, wheel-rail contact),
- integration of vehicles into the total system and
- automatic and autonomous driving, automated operation.

Teaching in both German and English includes courses for the bachelor’s and master’s programs in Mechanical Engineering as well as in Mechatronics and Information Technology. An appropriate contribution to the teaching export of engineering modules to other faculties and for scientific professional training is expected.
A major contribution to innovation of mobility systems and vehicle systems within collaboration projects with industry and transport companies is expected.
Membership in the collegial management board of KIT’s Institute of Vehicle System Technology (FAST) is part of the professorship. A close cooperation and coordination of research and education activities within the other professorships of FAST and an active role in the KIT Mobility Systems Center is expected.

Personal qualification: Applicants are expected to have extensive experience in research, development and application in several of the areas mentioned above, reflected in academic achievements of international visibility, and to comprehensively represent these topics in academic education and research. Several years of working experience in industry or transport companies are advantageous.
Interdisciplinary collaboration within the KIT, both in the Mobility Systems Center and in academic self-administration, is expected.

The candidate’s ability to actively acquire public and private third-party funds is required.

Habilitation or equivalent work experience that includes didactic skills is required. Teaching experience is desired.

Employment conditions as outlined in Article 47, LHG (Act of Baden-Württemberg on Universities and Colleges) in conjunction with § 20 KITG (KIT-Gesetz) shall apply.

Institute: FAST- Institute of Vehicle System Technology

Contract duration: permanent

Starting date: earliest possible date

Application up to: 14th February 2020

Technical Enquiries: For technical enquiries regarding this position please contact Prof. Marcus Geimer, E-Mail: marcus.geimer@kit.edu, Phone +49721/608-48601.

Application: Applications should contain all relevant documents (CV, list of publications, degree certificates, description of previous research and teaching activities, three own contributions of high impact in the areas of research, academic education, or innovation, and a teaching and research concept for the professorship). Send the application package to Karlsruhe Institute of Technology (KIT), Division III, Mechanical and Electrical Engineering, Head of Division Prof. h.c. Dr. Joachim Knebel, Campus South, Dean’s Office of the KIT Department of Mechanical Engineering, D-76131 Karlsruhe, preferably in the form of a single PDF file mailed to: dekanat@mach.kit.edu.

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 processing of personal data by the Karlsruhe Institute of Technology (KIT) is carried out according to the Privacy Policy.