At the "Friedrich List" Faculty of Transport and Traffic Sciences, the Institute of Railway Vehicles and Railway Technology seeks to appoint an outstanding candidate to the Chair (W3) of Rail Vehicle Technology
to be filled on April 1st 2021.

Starting from the role of rail transport in multimodal mobility concepts, the chair's research will focus on vehicle concepts for sustainable, automated rail transport and the life cycle management of rail vehicles and their components. Based on modern coupled simulation systems such as multi-body dynamics and FEM, it will be your responsibility to conduct scientific research and investigations on the life cycle behaviour, the interaction of vehicle and track components during operation and the effects of automated driving on vehicle design and safety. In addition, virtual reality (VR) and augmented reality (AR) elements will have to be more strongly integrated in research and teaching. Your basic teaching tasks include driving dynamics of rail transport, running and supporting structures, vehicle and track configurations as well as braking systems of rail vehicles. Possible specialisations include design and manufacturing processes, system simulations and mechatronic systems for rail vehicles. Your ability and willingness to conduct classes in English is expected. The duties include participation in academic self-administration.

We are looking for a scientist with international experience in the field of rail vehicle technology with a focus on the design, manufacture, operation and life cycle management of rail vehicles. We welcome applications with a strong profile in at least one of the following areas:

- construction, operation and maintenance of rail vehicles
- development methods and tools in rail vehicle construction
- design and production methods including modern multi-material construction methods
- simulation systems for verification in the design and approval process
- lifetime management (RAM-S) taking into account production and maintenance processes, obsolescence and environmental aspects.

We particularly encourage applications with proven methodological skills in the field of development, design or production that are not restricted to one mode of transport as well as expertise with VR and AR applications. A laboratory including the virtual vehicle platform „virturo“ is available to you. It will be your task to develop the systems laboratory of railway vehicle technology for modern vehicle and drive systems, in collaboration with the Chair of Electric Railways. If you hold a university degree, possess pedagogical aptitude as well as the special aptitude for scientific work, which is usually proven by a doctorate / PhD degree, as well as further outstanding scientific achievements, which can be demonstrated by a habilitation, a junior professorship or equivalent achievements, we welcome your application. We particularly appreciate your experience in applying for and carrying out research projects, in obtaining third party funding (with special consideration given to DFG funding) and in successful international publication activities. Applicants must fulfil the employment qualification requirements of § 58 of the Act on the Autonomy of Institutions of Higher Education in the Free State of Saxony (SächsHSFG).
If you have any questions regarding the call for applications, please contact the chairman of the appointment committee, Prof. Dr.-Ing. Arnd Stephan (+49 351 463-36730).

TU Dresden seeks to employ more female professors. Hence, we particularly encourage women to apply. Applications from candidates with disabilities or those requiring additional support are very welcome. The university is a certified family-friendly university and offers a Dual Career Service. If you have any questions about these topics, please contact the Equal Opportunities Officer of the “Friedrich List” Faculty of Transport and Traffic Sciences (Dr. Susann Richter, +49 351 463-36514) or the Representative of Employees with Disabilities (Roberto Lemmrich, +49 351 463-33175).

Please send your application with a curriculum vitae in tabular form, a description of your scientific career, a list of publications and previous teaching activities, including the results of the teaching evaluation (preferably of the last three years) as well as a certified copy of the certificate of the highest academic degree acquired until 23.10.2020 (stamped arrival date of the university central mail service applies) to: TU Dresden, Dekan der Fakultät Verkehrswissenschaften „Friedrich List“, Herrn Prof. Dr.-Ing. Günther Prokop, Helmholtzstr. 10, 01069 Dresden and in electronic form via the TU Dresden SecureMail Portal https://securemail.tu-dresden.de to dekanat.vw@tu-dresden.de.

Reference to data protection: Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: https://tu-dresden.de/karriere/datenschutzhinweis