The Institute of Lightweight Engineering and Polymer Technology at the Faculty of Mechanical Science and Engineering invites applications for the

Chair (W3) of Lightweight System Engineering and Multi-Material Design

to be filled on April 1, 2022.

The main focus of the chair to be filled is the comprehensive development, the holistic assessment and the technological implementation of multifunctional lightweight structures with new types of fibre reinforced composites, polymeric, metallic and ceramic construction materials and layered composites, in particular for complex components, parts and systems suitable for series production. Fields of application are to be developed in vehicle construction, electro mobility, aerospace, mechanical and plant engineering and energy technology. You will represent the field in research as well as in teaching, especially within the Mechanical Engineering study program; in particular the courses: Basic Features of Lightweight Engineering, Designing with Fibre Composites, Modelling and Calculation of Composite Materials and Structures, Fibre Composite Technologies, Joining Technologies for Multi-Material Constructions including associated practical courses. Participation in the academic self-administration within the Faculty of Mechanical Science and Engineering is a prerequisite.

Particularly in teaching, you are qualified to cover the above-mentioned areas in German and English and ideally apply your didactic and pedagogical knowledge and skills in digital teaching as well. You are able to prove solid fundamental knowledge as well as application-oriented research and development experience in the field of lightweight system engineering and multi-material designs as well as associated lightweighting technologies. In addition, you have knowledge in the areas: process-structure-property relationships in polymeric, metallic and ceramic fibre composites, non-destructive material and component testing, consistent digitization methods, as well as design and evaluation criteria. You have relevant international research experience and the ability to lead a both nationally and internationally renowned international institute with great success in the acquisition of third-party funding and over 200 employees. Your internationally outstanding research profile is based on research activities in the design of advanced energy- and resource-efficient lightweight structures, in the development of tailored manufacturing processes and joining technologies, in load-adapted reinforcement structures, in digitization and design methods and in virtual twins for structures and processes. You have experience in the acquisition and implementation of research projects in basic research and application-oriented research as well as in establishing and coordinating regional, national and international research networks. Applicants have to 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).

For further questions, please contact the Dean of the Faculty of Mechanical Science and Engineering, Prof. Dr.-Ing. M. Beckmann, tel. +49 351 463-32786; email: berufungen.mw@tu-dresden.de.
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 on these or related topics, please contact the Equal Opportunities Officer of the Faculty of Mechanical Science and Engineering (gleichstellung.mw@tu-dresden.de) or the Representative of Employees with Disabilities (Roberto Lemmrich, Tel.: +49 351 463-33175).

Please submit your application, including a CV in tabular form, a description of your scientific career, an overview of research activities, a list of your scientific publications and patents, and a list of courses taught, results of evaluations as well as a certified copy of the certificate of your highest academic degree in hard copy to TU Dresden, Fakultät Maschinenwesen, Dekan, Herrn Prof. Dr.-Ing. M. Beckmann, Helmholtzstr. 10, 01069 Dresden. Please attach all documents to your application in electronic form (CD or USB storage medium) or send them via the TU Dresden SecureMail Portal https://securemail.tu-dresden.de to berufungen.mw@tu-dresden.de by July 30, 2021 (stamped arrival date of the university central mail service applies).

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