TUD Dresden University of Technology, as a University of Excellence, is one of the leading and most dynamic research institutions in the country. Founded in 1828, today it is a globally oriented, regionally anchored top university as it focuses on the grand challenges of the 21st century. It develops innovative solutions for the world's most pressing issues. In research and academic programs, the university unites the natural and engineering sciences with the humanities, social sciences and medicine. This wide range of disciplines is a special feature, facilitating interdisciplinarity and transfer of science to society. As a modern employer, it offers attractive working conditions to all employees in teaching, research, technology and administration. The goal is to promote and develop their individual abilities while empowering everyone to reach their full potential. TUD embodies a university culture that is characterized by cosmopolitanism, mutual appreciation, thriving innovation and active participation. For TUD diversity is an essential feature and a quality criterion of an excellent university. Accordingly, we welcome all applicants who would like to commit themselves, their achievements and productivity to the success of the whole institution.

At the Faculty of Mechanical Science and Engineering, the Institute of Manufacturing Science and Engineering and the Fraunhofer-Gesellschaft seek to fill the Chair (W3) of Surface and Coating Technology to be exercised in conjunction with Position as Head of Department at Fraunhofer Institute for Material and Beam Technology IWS in a joint appointment procedure at the earliest possible date.

The Fraunhofer Gesellschaft (www.fraunhofer.de) currently operates 76 institutes and research facilities in Germany and is the world's leading organization for applied research. Approximately 32,000 employees contribute to the annual research volume of 3.4 billion euros.

The Fraunhofer Institute for Material and Beam Technology IWS develops industrially viable system solutions in laser and material technology. More than 320 employees develop customized solutions based on laser applications, functionalized surfaces and material and process innovations. The research focuses, among other things, on the development of PVD processes and nanotechnology for the production of thin films with unique properties such as high hardness, low friction, customized electrical conductivity, or high reflectivity. Customers and partners of Fraunhofer IWS include various industries such as the automotive industry, aerospace, medical technology, energy and environmental technology, as well as mechanical engineering.

You (m/f/x) will represent the field of Surface and Coating Technology in teaching and research and take over the organizational and technical management of the Technology Field PVD and Nanotechnology at Fraunhofer IWS. The development and implementation of innovative, modern teaching concepts as part of the Mechanical Engineering degree program is a particular focus. This relates both to the areas of production engineering in general and to the processes and technologies of the two main groups "Coating" and "Changing Material Properties". Especially in teaching (courses and examinations) we appreciate your willingness and ability to cover the above-mentioned areas in German and English. Furthermore, we expect your willingness to participate in academic self-administration. Independent project acquisition in the areas of knowledge-orientated basic research and applied research is a given for you.

With profound knowledge in the area of modeling and simulation of manufacturing processes and the resulting properties, you will be able to contribute to the digital factory. We require the use of
modern coating technologies as well as the use and adaptation of modern analysis and calculation methods such as the finite element method or artificial intelligence methods. You should be an internationally recognized personality in the fields of the development of thick and thin film technologies and the resulting property-oriented production of functional (e.g. sensory, actuator, adaptronic or tribological) layer systems. In addition, you have relevant experience in the field of manufacturing processes that are categorized in the main group "changing material properties”. You already have experience in the management of national and international projects, pedagogical and didactic knowledge and relevant management experience. In addition to the general requirements under public employment law, applicants must fulfill the employment qualification requirements of § 59 of the Institutions of Higher Education Act in the Free State of Saxony (SächsHSG).

For further questions, please contact the Dean of the Faculty of Mechanical Science and Engineering, Prof. Dr.-Ing. M. Beckmann, tel. +49 351 463-36931; email: berufungen.mw@tu-dresden.de and about the position at Fraunhofer IWS, contact Dr. P. Hoyer, tel. +49 89 1205-1114, (patrick.hoyer@zv.fraunhofer.de).

TUD and Fraunhofer-Gesellschaft strive to employ more women in academia and research. We therefore expressly encourage women to apply. The University is a certified family-friendly university and offers a Dual Career Service. We welcome applications from candidates with disabilities. If multiple candidates prove to be equally qualified, those with disabilities or with equivalent status pursuant to the German Social Code IX (SGB IX) will receive priority for employment. The Fraunhofer-Gesellschaft also pursues a family-friendly personnel policy and therefore offers flexible working hours and support for an adequate work life balance to all employees. If you have any questions about these topics, please contact the team of the Equal Opportunity Officer of the Faculty of Mechanical Science and Engineering (gleichstellung.mw@tu-dresden.de) and the Equal Opportunities Officer of Fraunhofer-Gesellschaft (Mrs. Dipl.-Ing. R. Böckler, tel. +49 89 54759-322, regina.boeckler@emft.fraunhofer.de) or the Representative of Employees with Disabilities of TUD (schwerbehindertenvertretung@tu-dresden.de, Mr. R. Lemmrich, tel. +49 351 463-33175).

We look forward to receiving your application by September 16, 2024 (time stamp on the email server or the stamped arrival date of the University Central Mail Service of TUD applies). Please attach the following documents to your letter of application: curriculum vitae in table form, a synopsis of your academic career, a list of academic publications, a list of courses, results of teaching evaluations covering the last three years, a research and teaching concept, offprints of your five most important publications, summary of your third-party funding, and a copy of the certificate of your highest academic degree.

We kindly ask you to submit your application by email. Please use the SecureMail Portal of TUD (https://securemail.tu-dresden.de) and send your documents in a single PDF document to: berufungen.mw@tu-dresden.de. If you are applying by regular mail, please also attach your application documents in electronic form (CD or USB thumb drive) and send them to: TU Dresden, Fakultät Maschinenwesen, Dekan, Herrn Prof. Dr.-Ing. M. Beckmann, Helmholtzstr. 10, 01069 Dresden, Germany. Your application will be made available to the Fraunhofer-Gesellschaft.

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.