

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, Institute of Textile Machinery and High Performance Material Technology**, the **Chair of Textile Technology** offers a project position as

Research Associate (m/f/x)

(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting **as soon as possible** with 100% of the full-time weekly hours. The position is initially limited until September 30, 2026 with the option of extension subject to new research projects. The period of employment is governed by § 2 (2) Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz – WissZeitVG).

Tasks: Carrying out research projects in the fields of CFD simulation of air and fluid flow processes such as in wet and melt spinning of fibers, yarn spinning, textile manufacturing but also simulation-based machine and process modification; preparation of publications and scientific papers.

Requirements: university degree (M.Sc. or equivalent) in an engineering discipline (e.g. mechanical engineering, computational mechanics, computational engineering science); creativity and organizational skills in interdisciplinary project work; at least a good knowledge of English and German; a high level of commitment and the ability to work in a team as well as independently and an interest in dedicated research work in the fields of modelling and simulation of high performance fiber structures and products as well as fiber manufacturing processes. Experience in two or more of the following areas is an advantage: very good knowledge in CFD simulations of air and/or fluid flow processes; experience in modelling and optimizing flow processes using CFD (e.g. OpenFOAM, Ansys Fluent) desirable; in-depth knowledge of fluid mechanics; programming language(s), such as Matlab or Python.

TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The University is a certified family-friendly university. 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.

If you have any questions about the position, please contact Dr. Gereke by e-mail at thomas.gereke@tu-dresden.de.

Please submit your detailed application with the usual documents by **May 12, 2025** (stamped arrival date of the university central mail service or the time stamp on the email server of TUD applies), preferably via the TUD SecureMail Portal <https://securemail.tu-dresden.de> by sending it as a single pdf file to i.textilmaschinen@tu-dresden.de or to: **TU Dresden, Professur für Textiltechnik, Herrn Prof. Cherif, Helmholtzstr. 10, 01069 Dresden, Germany**. Please submit copies only, as your

application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

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>.