

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 Biology**, the **Chair of Botany** offers a position as

Research Associate / PhD Student (m/f/x)

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

starting at the **earliest possible date**. The position is limited until June 30, 2028 and entails 65% of the full-time weekly hours. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). The position aims at obtaining further academic qualification (usually PhD).

Within the DFG funded CRC/Transregio 280 we are looking for a motivated engineer or biologist who is capable of conducting research in a transdisciplinary project combining botany and engineering.

Tasks: As part of your scientific work, you will dedicate yourself to the investigation of plants, their structural elements and materials as models in order to derive design principles for future construction with carbon fiber reinforced concrete. Particular attention is paid to the arrangement and distribution of strengthening elements and their characterization on all relevant size scales. In addition to light and electron microscopy, other imaging methods such as micro-computed tomography or MRI and biomechanical test procedures are the subject of your activities. The data obtained will be processed by you for modeling and simulation within the framework of the SFB/TRR 280 and made available to other working groups as part of the cooperation.

Requirements: university degree in Biology, Engineering or material sciences (Master or Diploma).

As a biologist, you have good knowledge of morphology, anatomy and biomechanics of plants and are willing to learn engineering-specific aspects of material characterization and the basics of simulation and modelling. As an engineer, you are willing to familiarize yourself with the project-relevant properties of plants.

We offer an exciting interdisciplinary research environment within the framework of the CRC/Transregio 280 in close cooperation with many partners from engineering.

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 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.

Please submit your detailed application including the usual documents by **August 2, 2024** (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 christoph.neinhuis@tu-dresden.de or to: **TU Dresden, Fakultät Biologie, Professur für Botanik, Herrn Prof. Christoph Neinhuis, 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>.