Dresden University of Technology

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.

The **Faculty of Environmental Sciences** is looking for three Research Associates to work together in a larger project consortium with six Chairs from TUD. The aim of the joint project **„Forests in transition: The future of European beech under drought stress“** (funded by the Eva Mayr-Stihl foundation) is to quantify the influence of stem density reduction (i.e., varying degrees and forms of forest thinning) on the water supply and associated biomass development and vitality, as well as carbon storage in beech stands across Saxony, Germany. This will be achieved through a novel combination of different cross-scale monitoring approaches, which will enable an improved understanding of the causes and consequences of varying water availability to individual beech trees, as well as upscaling to larger areas and model-based predictions for the future.

In this project, the **Chair of Forest Botany** at the **Institute of Forest Botany and Forest Zoology** offers, subject to the availability of resources, a project position as

Research Associate (m/f/x)

in Tree Physiology

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

starting **April 1, 2026.** The position is limited until December 31, 2029 and entails 65% of the full-time weekly hours. The period of employment is governed by § 2 (2) Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG).

The subproject “Water status of the tree crown and stem, transpiration, and radial growth“ will determine tree water status via sap flow sensors and automatic dendrometers in combination with targeted measurement campaigns to determine hydraulic thresholds such as stomatal responses, xylem vulnerability, and midday canopy water status.

Tasks: Within the collaborative research project, this subproject we will quantify whole-tree water use and canopy water status in dependence on the local neighborhood and tree competition release by thinning. Tasks include the installation and maintenance of sap flow sensors and automated dendrometers, quantification of upper-canopy water status and characterization of key hydraulic thresholds related to the drought response of trees.

You will be able to further develop your own scientific profile, e. g. through courses offered by TUD’s graduate academy; as well as support BSc/MSc students on a project-related basis under the professional responsibility of the chairholder.

Requirements:

- an excellent university degree in ecology, forestry, environmental sciences, or a related discipline with field and/or lab experience; candidates with experience in plant water relations are preferred
- proven scientific publishing skills (see required documents) is essential, while advanced knowledge in statistical analyses with R is a plus
- proven experience in working in diverse teams, team-oriented and willing to learn and work independently
- a German driver’s license (class B) is mandatory
- advanced command of English is essential while basic knowledge of German is desirable

We offer:

- an inspiring, international and interdisciplinary working environment, specialized in forest ecology, ecophysiology and plant hydraulics
- attractive working conditions and opportunities for further professional development at TUD

For project-related questions, please contact Prof. Dr. Bernhard Schuldt (bernhard.schuldt@tu-dresden.de).

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.

Please submit your detailed application with the usual documents (among others motivation letter, curriculum vitae, certificates and grades) by **February 16, 2026** (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 **forstbotanik@tu-dresden.de** or to:

TU Dresden, Institute of Forest Botany and Forest Zoology, Prof. Bernhard Schuldt, 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.

TUD is a founding partner in the DRESDEN-concept alliance.

DRESDEN concept

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.