



The **Brandenburg University of Technology Cottbus–Senftenberg (BTU)** is a young and dynamic university and the only technical university in the state of Brandenburg. With over 1,500 employees, BTU is one of the largest employers in the Lausitz region, standing out for its commitment to work-life balance.

The **Faculty of Environment and Natural Sciences** is seeking to fill the following position in the **Soil-Plant Systems department** in Cottbus as soon as possible:

Academic Staff Member (m/f/d) Qualification Position

Fixed-term for 4 years, part-time 50%, E 13 TV-L

Reference number: 250/24

The Soil-Plant Systems Chair investigates dynamic interaction between soil, organisms, and plants, and the interaction with nutrient availability, soil properties as well as climate. In ecosystems particularly vulnerable to climate change, our goal is to deepen the understanding of carbon, nitrogen, and phosphorus dynamics.

The position concerns 'Soil and plant interactions and nutrient cycling in Arctic tundra under extreme events'. Nitrogen fixation, transformation and transport in Arctic terrestrial ecosystems must be better understood as N is a limiting element. Extreme events in the Arctic such as winter warming affects ecosystem N cycle processes, but very little is known about the effects for nutrient limitation of mosses and lichens. Furthermore, the effects that cryptogams have on soil crust stabilization and nutrient retention is affected by the extreme events, but both short term and long term effects need to be investigated.

It is of merit to have experience with stable isotope research using ^{15}N tracing in plants and microbes. Mesocosm experiments are to be planned in greenhouse and incubators at BTU campus to trace nutrient mobilisation during freezing – thawing events. Field work at Disko Island, Greenland is possible using *in situ* winter warming experiment.

Your Responsibilities:

Teaching Assistance, including:

- Contributing to the department's teaching tasks as per content and methodological guidelines, currently in the Environmental and Resource Management as well as Land Use and Water Management programs, for imparting subject knowledge, practical skills, and training in the application of scientific methods
- Preparing, conducting, and following up on exercises and practical courses
- Assisting in the preparation of lectures and seminars as well as other teaching-related administrative tasks
- Developing/updating teaching materials, resources, and task collections
- Preparing, conducting, and evaluating oral and written exams
- Supporting the supervision of student research and thesis projects

Research Work:

- Conducting scientific work within the department's research focus areas
- Assisting with the preparation and execution of third-party-funded projects (e.g., BMBF, DFG, industry projects)
- Presenting and publishing research findings
- Preparing contributions for reports and presentations

- Own in-depth scientific work in preparation for a doctorate or for the provision of additional scientific achievements to the extent of at least one third of the respective working time
- Additional research-related administrative tasks

Your Profile:

A completed scientific university degree as per the TV-L collective wage agreement (accredited Master's / university diploma / equivalent) in a relevant field (e.g., environmental sciences or related) is required.

Additionally, you bring the following knowledge and/or skills:

- Experience in research on stable isotopes using ¹⁵N tracing in plants and microbes
- Experience in sampling soils, sediments, and plants
- Experience in conducting experiments, including in greenhouses
- Experience in designing and conducting laboratory experiments
- Knowledge of complex laboratory analyses
- You are personally distinguished by your ability to conduct scientific work, independence, flexibility, and strong communication skills.

For further information about the position, please contact Prof. Dr. Louise Rütting (Email: ruetting@b-tu.de, Tel.: 0355 69 5064).

What We Offer:

BTU offers excellent conditions for your scientific qualification and research. Additionally, the Cottbus–Senftenberg location boasts the benefits of interdisciplinary collaboration, convenient transportation links to Berlin and Dresden, and attractive, affordable housing in the Lausitz lake region.

If you want to actively shape change in the Lausitz, become part of the BTU family. We look forward to meeting you.

BTU Cottbus-Senftenberg is committed to equal opportunity and diversity and aims for balanced gender representation across all employee groups. Individuals with disabilities or equivalent status will be given preference if equally qualified.

BTU aims to increase the proportion of women in research and teaching and thus strongly encourages qualified female candidates to apply.

Please refrain from submitting application photos.

Please refer to BTU's website for [further information](#) on the selection process.

Please submit your application materials in a single PDF file, **quoting the reference number, exclusively by email by 16.12.2024 to the Dean of the Faculty of Environment and Natural Sciences, Brandenburg University of Technology Cottbus-Senftenberg, Email: fakultaet2@b-tu.de.**

