



Brandenburgische
Technische Universität
Cottbus - Senftenberg

Gemeinsam Zukunft gestalten

working hours: Full-time
Time limit: unlimited
Remuneration: E11
Start: as soon as possible
Application deadline: until 2025-09-08
Place of work: Cottbus

We are a young and dynamic technical university in the heart of Lusatia, developing practical, science-based solutions to address major future challenges and global transformation processes.

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

In the **Faculty of Environment and Natural Sciences** the following position is to be filled:

Lab Engineer (m/f/d)



Your area of responsibility includes in particular:

Responsible planning, organization, coordination, and quality assurance of laboratory analytics

- Instruction and training of scientists and students
- Ensuring functionality and quality assurance of measurement systems and laboratory equipment, particularly in isotope analysis (e. g. calibration, validation, and quality assurance of analytical systems, including error analysis and minimization)
- Assignment and coordination of maintenance and repair tasks, as well as execution of regular system checks
- Monitoring compliance with safety standards, chemical management, and conducting laboratory inventories

Execution, evaluation, and scientific-technical development of laboratory analytics

- Performing advanced laboratory analyses with a focus on the determination of isotope ratios (e. g. $\delta^{13}\text{C}$, $\delta^{15}\text{N}$, $\delta^{18}\text{O}$) in environmental samples (soil, water, plants)
- Evaluation and interpretation of isotope measurement data using statistical methods, as well as preparation of reports and publications
- Supervision and further development of IRMS instruments and associated analytical systems (e. g. gas chromatographs, elemental analyzers)
- Professional support and training of users in IRMS technology, including guidance on experimental measurement
- Development and implementation of new sample preparation and analytical methods to enhance the precision, reproducibility, and sensitivity of measurements Collaboration with academic staff and the head of department
- Further development of isotope analytics in the laboratory to broaden its application range and optimize existing procedures
- Interdisciplinary collaboration with scientists (e. g. from geo-sciences, environmental sciences) in the application of isotopic analytical techniques within research projects

- Coordination of national and European laboratory intercomparison studies (e. g. with Belgium, United Kingdom) on new and established methods of isotope analysis, and contribution to the publication of results



Your requirements profile:

- ✓ a completed university degree in a relevant field as defined in the remuneration regulations of the TV-L (e. g. chemistry, physics, geosciences, environmental engineering, or related natural sciences)
- ✓ driving licence class B

they also have the following knowledge:

- ✓ extensive and verifiable long-term expertise in the analysis of stable isotopes, particularly in the use of isotope ratio mass spectrometry (IRMS), with in-depth knowledge in the precise determination of isotope ratios and their interpretation for scientific and environmental analysis
- ✓ proficiency in isotopic mathematical calculation methods
- ✓ advanced practical experience in chemical analysis and system calibration, with a special focus on stable isotopes
- ✓ proficient in the use of leading analytical software and database management systems (e. g. LabVIEW, MATLAB, Excel) for efficient data evaluation, visualization, and billing of analytical services
- ✓ sound knowledge in soil science and the use of physical, chemical, and biological analysis methods (e. g. ICP-OES, TOC, FIA, IC, elemental analysis) for the investigation of environmental and geodata
- ✓ very good English language skills at C1 level or equivalent for communication in international scientific communities and for evaluating English-language scientific literature



What we offer!

- 30 days of vacation and flexible, family-friendly working hours
- option for remote work
- job ticket for public transportation
- comprehensive professional development and health programs
- and much more

Take your chance and shape the future together with us!



Further [notes and information on selection procedures](#) have been compiled in the separate document.

Please send your application documents, including certificates and references, stating the reference number in a **PDF document exclusively by e-mail** until **08.09.2025** to the **Dean of the Faculty of Environment and Natural Sciences**, Brandenburg University of Technology Cottbus-Senftenberg, e-mail: fakultaet2@b-tu.de.

For further information about the position to be filled, please contact Prof. Dr. Louise Rütting (e-mail: ruetting@b-tu.de, phone: 0355 69 5064).