



**Technische Universität Berlin**



Technische Universität Berlin offers an open position:

## **Research Assistant - 0.65 working time - salary grade E 13 TV-L Berliner Hochschulen**

There is the possibility of a doctorate.

### **Faculty VI - Institute of Ecology/ Soil Science**

**Reference number:** VI-641/24 (starting at 01/01/25 / for a period of 3 years / closing date for applications 29/11/24)

#### **Working field:**

We are looking for PhD student to support the DFG project MOFANE - Modelling the Impact of Crop Residue Management, Organic Fertilization and associated Application Techniques on N<sub>2</sub>O and N<sub>2</sub> Emissions from Agricultural Soils. You will conduct incubation experiments to investigate the microscale distribution of denitrification hotspots. Using a special combination of O<sub>2</sub> micro-sensors, <sup>15</sup>N isotope labeling, and computed tomography, you will link the rates of relevant processes (production and emission of CO<sub>2</sub>, N<sub>2</sub> and N<sub>2</sub>O) with their regulation by key influencing factors (soil structure, distribution of O<sub>2</sub> and organic matter). In collaboration with the Thünen Institute of Climate-Smart Agriculture, these findings will be incorporated into models.

We are seeking a lab-oriented person who is particularly interested in contributing to this field through greenhouse gas and pore structure analyses. As a research associate in the Department of Soil Science (Prof. Dr. Carsten Müller) at the Institute of Ecology at TU Berlin, we offer you a supportive scientific environment, hands-on project experience, international networking in both academia and industry, regular supervision, specific training in scientific skills, and our support for your long-term career development and PhD aspirations at TU Berlin.

- Conceptualization and execution of incubation experiments to study trace gases
- Acquisition and analysis of 3D computed tomography data
- Data analysis and graphical representation
- Writing scientific publications
- Presenting research results at national and international conferences

We offer an interdisciplinary work environment in a collegial team, with integration into an international scientific community.

#### **Requirements:**

- A completed scientific university degree (Master's, Diplome, or equivalent) in soil science, geoecology, agriculture, or a related field
- Experience in the tasks and topics mentioned
- Experience in data analysis and statistics
- Good knowledge of German and/or English required; willingness to acquire the respective missing language skills

#### **Desirable:**

- Affinity and willingness to deepen your knowledge in areas such as image analysis (computed tomography) and programming (Python, R, etc.)
- Good laboratory skills
- Initial practical experience in the conceptualization, execution, and analysis of scientific experiments, particularly incubation experiments for trace gas analysis (ideally demonstrated through your thesis)
- Strong organizational skills and sense of responsibility
- Scientific writing and presentation skills
- Enthusiasm for high-level research, creativity, persistence, and teamwork

Please send your application with the **reference number** and the usual documents to the Department of Soil Science, Bettina Jander, only by email (single pdf file; max. 5 MB) to [bettina.jander@tu-berlin.de](mailto:bettina.jander@tu-berlin.de).

By submitting your application via email you consent to having your data electronically processed and saved. Please note that we do not provide a guarantee for the protection of your personal data when submitted as unprotected file. Please find our data protection notice acc. DSGVO (General Data Protection Regulation) at the TU staff department homepage: [https://www.abt2-t.tu-berlin.de/menue/themen\\_a\\_z/datenschutzerklaerung/](https://www.abt2-t.tu-berlin.de/menue/themen_a_z/datenschutzerklaerung/).

To ensure equal opportunities between women and men, applications by women with the required qualifications are explicitly desired. Qualified individuals with disabilities will be favored. The TU Berlin values the diversity of its members and is committed to the goals of equal opportunities. Applications from people of all nationalities and with a migration background are very welcome.

Technische Universität Berlin - Die Präsidentin - Fakultät VI, Institut für Ökologie, FG Bodenkunde, Prof. Carsten W. Müller, Sekr. BH 10-1, Ernst-Reuter-Platz 1, 10587 Berlin

The vacancy is also available on the internet at  
<https://www.personalabteilung.tu-berlin.de/menue/jobs/>

