

**Technische Universität Berlin**

Technische Universität Berlin offers an open position:

Research assistant - salary grade E 13 TV-L Berliner Hochschulen

part-time employment may be possible
under the reserve that funds are granted

Permanent grassland is home to more than half of all animal and plant species found in Germany and thus has a high benefit for biodiversity. Furthermore, grassland provides a variety of other ecosystem services and is known as a carbon sink. In addition, grassland serves as a fodder supplier in agriculture and forms a basis for biogas. However, due to intensification in agriculture and growing settlement and transport land development, there is increasing pressure on permanent grassland areas. Species-rich grassland is an integral part of the habitat types (LRT) according to Annex I Fauna-Flora-Habitat (FFH) Directive and an important pillar of biodiversity protection. In the course of digitization and to achieve federal digitization goals, the development of remote sensing-based methods should therefore help to make site management more efficient and support the existing management systems of NATURA 2000 sites.

Against this background, the SensGrün project "Evaluation of current remote sensing-based sensors and methods for quality analysis of FFH grassland habitat types" aims to investigate the potentials and synergies of hyperspectral data from the EnMAP satellite and data from the Sentinel-1 & 2 satellites for the investigation of quality-giving parameters in NATURA 2000 grasslands. The aim is to determine which quality characteristics can be reliably identified by remote sensing. The satellite data will be compared with drone and field spectrometer data to estimate scale effects. The project thus makes a relevant contribution to EU-wide area management and supports the implementation of European nature conservation law and the biodiversity strategy.

Faculty VI - Institute of Landscape Architecture and Environmental Planning / Geoinformation in Environmental Planning

Reference number: VI-642/24 (starting at 01/02/25 / until 31/03/26 / closing date for applications 29/11/24)

Working field:

We are looking for highly motivated candidates with above-average qualifications, enthusiasm for and experience in research and a willingness to actively work on collaborative projects. The Geoinformation for Environmental Planning Lab at the Technische Universität Berlin is therefore offering a position for a Scientific Assistant (d/m/f) in the field of remote sensing. The aims of these position within the SensGrün research project are:

- Carrying out spectral measurements with a field spectrometer in one of the Biodiversity Exploratories
- Supporting and carrying out drone flights over the research areas
- Development of a method to detect grassland quality indicators with remote sensing data
- Comparison of different sensors and sensor combinations with focus on differences and synergies between drones and satellite data
- Verification of the transferability of the method to other areas
- Programming and preparation of an executable script on the CODE-DE platform

Requirements:

- Successfully completed university degree (Master, Diplom or equivalent) in relevant discipline, preferably Environmental Sciences, Geo-Ecology, Physical Geography, Hydrology, or a related field with a strong link to remote sensing
- Strong experiences in remote sensing image analysis (especially hyperspectral pre-processing)
- Experience and enjoyment of field work is essential for this position
- Basic knowledge of plant communities for the classification of LRTs in grassland ecosystems
- Good programming (R, Python) and machine learning skills
- Good knowledge of German and/or English required; willingness to acquire the respective missing language skills

Desirable:

- To be enthused about the prospect of working in a collaborative team with international participation
- A car driver's and drone flight license are an advantage for this position, as are German language skills

Please send your application with the **reference number** and a cover letter including description of research interests and relevant experiences, a current CV, academic transcripts, a list of publications and contact details of two referees by e-mail in one single pdf-document to sekretariat@geoinformation.tu-berlin.de. If you have any questions, please contact **Prof. Dr. Birgit Kleinschmit** or **Dr. Christine Wallis** (birgit.kleinschmit@tuberlin.de; Christine.Wallis@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 guaranty 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.

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.

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

