Technische Universität Berlin

Research Assistant - 0.75 working-time - salary grade E13 TV-L Berliner Hochschulen

Faculty VI - Planning Building Environment, Institute of Applied Geosciences / Applied Geochemistry
Reference number: VI-449/25 (starting at 01/01/26 / limited until 31/12/2028 / closing date for applications 14/11/25)

Your responsibility:

Within the framework of the DFG project “Dynamic Assessment and Predictive Modeling of Vulnerability of Karst Springs (MOIN)”, we are looking for a research assistant to work on hydrogeochemical and hydrogeological topics. The aim is to develop and apply new methods for real-time assessment and prediction of karst groundwater vulnerability.

The tasks include in particular:

- Application and further development of hybrid discharge models (combined rainfall-runoff and groundwater models) using Python
- Integration and application of indicators (e.g. electrical conductivity, turbidity, organic micropollutants, trace elements)
- Planning and execution of field campaigns (sampling of spring and mixed water, use of online sensors)
- Laboratory analysis of samples (e.g. ICP-MS, LC-MS/MS) in cooperation with partner institutions
- Support in project coordination, preparation of reports, presentation of results and publication

The advertised position is suitable for a doctorate and is embedded in an interdisciplinary collaborative project with partner institutions from science and practice.

Your profile:

- Successfully completed university degree (Master, Diplom or equivalent) in geosciences, hydrogeology, geochemistry, environmental sciences or related fields
- Advanced knowledge of programming with Python
- Experience in hydrogeology/hydrogeochemistry and data analysis (e.g. time series analysis, modeling) or comparable
- Basic knowledge of solute transport in groundwater
- Class B driver’s license
- Willingness to carry out field and laboratory work in cooperation with project partners
- Good German language skills (C1) in spoken and written form are required in connection with fieldwork in Southern Germany (professional communication with authorities, water managers and residents in the context of applications, permits and fieldwork)
- Previous experience in modeling of groundwater or karst systems desirable
- Knowledge in sampling and analysis of hydrogeochemical parameters (e.g. ICP-MS, LC-MS/MS, online sensors) desirable
- Initial experience in scientific presentation or publication desirable

Expected skill development:

Upon completion of the position, you will have acquired solid knowledge in:

- Process-based modeling of karst systems
- Application and interpretation of hydrogeochemical indicators
- Experimental and analytical hydrochemistry (organic and inorganic trace substances)
- Interdisciplinary collaboration with practice partners and authorities
- Scientific communication and project organization

How to apply:

Please send your application, **quoting the reference number**, with the usual documents as a single PDF file (max. 5 MB) to Dr. Ferry Schiperski by e-mail (schiperski@tu-berlin.de, cc: peggy.schmidt@tu-berlin.de) or by post to: Technische Universität Berlin, Faculty VI, Institute of Applied Geosciences, Chair of Applied Geochemistry, Prof. Dr. Neumann, Sekr. BH 9-3, Ernst-Reuter-Platz 1, 10587 Berlin.

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: