Technische Universität Braunschweig - Division Hydrology and River Basin Management of the Leichtweiß-Institute for Hydraulic Engineering and Water Resources

With around 16,000 students and 3,800 employees, the Technische Universität Braunschweig is one of Germany´s leading institutes of technology. It stands for strategic and performance-oriented thinking and acting, relevant research, committed teaching, and the successful transfer of knowledge and technologies to the economy and society. We consistently advocate for family friendliness and equal opportunities. Our research focuses are mobility, engineering for health, metrology, and city of the future. Strong engineering and natural sciences are our core disciplines. These are closely interconnected with economics, social and educational sciences and humanities. Our campus is located in the midst of one of the most research-intensive regions in Europe. We work successfully together with over 20 research institutions in our neighborhood as we do with our international partner universities. Starting from 1 September 2025, the Division Hydrology and River Basin Management of the Leichtweiß-Institute for Hydraulic Engineering and Water Resources is looking for a

Research Associate (m/f/d) in the field of Hydrology and Water Resources

(EG 13 TV-L, full time/part-time) The position is to be filled on a fixed-term basis for a period of 3 years. The successful applicant will be given the opportunity to pursue a doctorate or to gain further scientific qualifications as a postdoctoral researcher. The position is within the 'HiGrav - High-resolution gravity fields for better flood forecasting' project funded by the DFG. The main focus is developing enhanced regional flood forecasting tools using a combination of process-based and data-driven approaches and the dynamic assimilation of GRACE/GRACE-FO total water storage and wetness index data. The work is carried out at the Leichtweiß Institute in Braunschweig in collaboration with GFZ Helmholtz Centre for Geosciences, ETH Zurich and the University of Bern. The Division Hydrology and River Basin Management has its research focus on the integrated consideration of water quantity and water quality for surface and groundwater in the context of hydrological extremes and associated risks. The work aims at a deeper understanding of the interactions between hydrological processes and human interventions for the modern management of water resources. To this end, we develop methods, simulation models and tools for the sustainable and flexible management of future water resources systems. Further details regarding our research activities and recent publications can be found on our website.

City: Braunschweig; Starting date (earliest): 01/09/25; Duration: 3 years;
Remuneration: EG 13 TV-L; Closing date: 30/05/25

Working field

• You will carry out research in the area of process-based and data-driven hydrological modelling for flood forecasting.
• You will publish research findings and participate in national and international

conferences.
• You will be involved in teaching at the University (preparation and implementation of courses as well as supervision of students’ work).

Requirements

• You have a degree (Master’s or equivalent, for Postdocs a PhD) in Hydrology, Civil / Environmental Engineering or Geoinformatics.
• Experience with data-processing and programming in Python, R and/or C++
• You have very good knowledge of the German and English language.
• You are flexible and work well in a team.
• You are aiming for a doctorate.

What we offer

• Work on exciting future-oriented research topics in an inspiring work environment as part of the university community
• A vibrant campus life in an international atmosphere with lots of intercultural offers and international cooperations
• Pay in accordance with the collective agreement TV-L (a special payment at the end of the year as well as a supplementary benefit in the form of a company pension, comparable to a company pension in the private sector) including 30 days' vacation per year
• Flexible working and part-time options and a family-friendly university culture, awarded the "Family-friendly university" audit since 2007
• Special continuing education programs for young scientists, a postdoc program, as well as other offerings from the Central Personnel Development Department and sports activities.

Application

We welcome applicants of all nationalities. At the same time, we encourage people with severe disabilities to apply. Applications from severely disabled persons will be given preference if they are equally qualified. Please attach a proof of disability to your application. We are also working on the fulfilment of the Central Equality Plan based on the Lower Saxony Equal Rights Act (Niedersächsisches Gleichberechtigungsgesetz—NGG) and strive to reduce under-representation in all areas and positions as defined by the NGG. Therefore, applications from women are particularly welcome in this case.

The personal data will be stored for the purpose of processing the application. By submitting your application, you agree that your data may be stored and processed electronically for application purposes in compliance with the provisions of data protection law. Further information on data protection can be found in our data protection regulations at https://www.tu-braunschweig.de/datenschutzerklaerung-bewerbungen . Application costs cannot be reimbursed.

Questions and Answers
For more information, please contact Prof. Dr.-Ing Kai Schröter via mail kai.schroeter(at)tu-braunschweig.de or by phone +49 (0) 531 391-3950.

Deadline for applications is 30 May 2025

Are you interested? Please send your application (motivation letter, CV, certificates) as a single PDF not larger than 3MB via email to s.festerling(at)tu-braunschweig.de

More information at https://stellenticket.de/193420/LUH/
Offer visible until 30/05/25