



The Faculty of Architecture, Civil Engineering and Environmental Sciences invites applications for a starting date soonest possible at the Institute of Geoecology (IGÖ), the Leichtweiss-Institute for Hydraulic Engineering and Water Resources (LWI) and in the Research Focus Future Cities for a

**Junior Professorship (W1, Tenure Track W2) in
„Modelling of Urban Environmental Interfaces“
(m/f/d)**

funded by the Tenure Track Programme of the German Federal Government and the Federal States.

The successful applicant will focus on the process understanding of urban hydrological and hydraulic systems and water-related interfaces of the urban environment in research and teaching. This includes interfaces of the critical zone connecting the saturated zone, groundwater, atmosphere, pedosphere, and biosphere in urban regions and urban-rural relationships. The main topics in analytical and process-oriented modelling are expected to strengthen the interdisciplinary team in environmental sciences, environmental and civil engineering as well as urban water management. Research topics could include:

- interactions of water flow, material transport, and biota,
- urban hydrology and hydraulics, spatial pollutant dynamics in urban systems,
- hydraulic processes at interfaces in coastal, riverine and riparian settlements,
- ecosystem services of urban structures.

We expect teaching in Urban Hydrology and Hydrosystem modelling for undergraduate and graduate students of Civil Engineering, Environmental Engineering and Engineering Management. IGÖ's lab facilities (geochemistry and soil sciences) can be used; lab facilities at LWI (hydraulic flumes, wave flume, wave basin) as well as at the Joint Central Institution „Coastal Research Centre (FZK) (Large Wave Flume) in Hannover allow gaining scale-crossing data sets for model comparisons.

An active participation in developing the new research focus "Stadt der Zukunft"/ "Future Cities" as well as interdisciplinary collaborations within IGÖ, LWI and with other institutes of the department is expected. The participation in academic self-governance at all levels is mandatory. Applicants are also expected to have an outstanding publication record, a proven ability to acquire third-party funding, and experience in project coordination.

The junior professor's initial appointment is limited to three years. After a positive evaluation, the appointment will be extended by three more years. In accordance with the tenure track statutes of TU Braunschweig, the appointment will be tenured at the level W2 after a positive final evaluation. The requirements of the position are defined in Section 30 of the Lower Saxony Higher Education Act (Niedersächsisches Hochschulgesetz).

With almost 20,000 students and 3,700 staff members, Technische Universität Braunschweig is the largest Institute of Technology in Northern Germany. It stands for a strategic and achievement-oriented way of thinking and acting, relevant research, exceptional teaching and the successful transfer of knowledge and technologies to industry and society. We consistently advocate family friendliness and equal opportunities.

We focus our research on mobility, infections and therapeutics, metrology, and future city. Our core disciplines include a comprehensive engineering branch and a strong natural sciences branch, closely linked with business sciences, social sciences, humanities and educational sciences.

Our campus is located at the heart of one of Europe's most active research regions. We cooperate closely and successfully with more than 20 research institutions right on our doorstep and maintain strong relationships with our partner universities all over the world.

At TU Braunschweig, we aim to increase the share of women in academic positions and therefore particularly welcome applications from women. Where candidates have equivalent qualifications, preference will be given to female candidates. Applications from international scientists are welcome. A part-time appointment may be possible on request.

Where candidates have the same qualifications, preference will be given to disabled candidates.

For more information, please contact the Chair of the Appointment Committee, Prof. Dr. Stephan Weber, Tel. +49 (0) 531 391 5607.

Please send your written application until April 30th 2020 indicating the reference number **2020_f3_002** and including the appropriate documentation (pdf-file, max. 50 MB, curriculum vitae, copies of grades and titles, list of publications and lecture courses, list of third-party funds acquired with project identification or industrial project responsibilities and a brief description of the research and teaching concept) by e-mail to **berufungen@tu-braunschweig.de** (addressed to TU Braunschweig, Dean of the Faculty of Architecture, Civil Engineering and Environmental Sciences, Prof. Dr.-Ing. Bernhard Friedrich).

By submitting your application documents electronically, you consent to their digital storage and processing for the application process.