



The Technische Universität Berlin and the Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB) jointly offer open positions within the DFG Research Training Group "Urban Water Interfaces (UWI)":

13 positions - Research Assistant - 0.75 working time - salary grade E 13

salary grade E 13 TV-L Berliner Hochschulen for TUB positions (8 positions)

salary grade E 13 TVöD for IGB positions (5 positions)

under the reserve that funds are granted

Faculty VI - Institute of Civil Engineering / Water Resources Management and Modeling of Hydrosystems, Research Training Group UWI

Reference number: VI-821/20 (starting at 01/07/21 / until 30/06/2024 / closing date for applications 01/03/21)

Working field: UWI is an interdisciplinary Research Training Group funded by the German Research Foundation (DFG). It brings together aquatic science and engineering, historically separate fields with distinct traditions in water research. By joining these perspectives and focusing all individual projects on water interfaces in cities, the Research Training Group aims to generate a new quality of process understanding in urban water systems. Other features of the program are an innovative qualification concept and opportunities to foster interdisciplinary and international collaborations. UWI is developing innovative links among empirical approaches, experiments (laboratory and field) and models (conceptual and numerical) to describe the dominant interface processes in urban water systems on different spatial and temporal scales as well as across scales.

Over a 3-year period, the doctoral candidates will receive a qualified interdisciplinary training and conduct original research for publication of the results in scientific journals as the basis for receiving a doctorate degree. To this end, the Technische Universität Berlin (TUB) and the Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB), together with partners from additional research institutions, water management bodies and local authorities have created an attractive, interdisciplinary and stimulating environment for urban water research. Moreover, the Research Training Group promotes international mobility and offers the best possible support to complete successful dissertations.

The 13 newly advertised UWI PhD positions are organised in four areas. We invite suitable candidates to apply for the UWI PhD positions listed below:

Interfaces in urban watersheds

W4: Assessing and managing ecohydrological sources of urban moisture re-cycling and atmospheric cooling

W5: Analysis of multiple pathways of diffuse pollution from the atmosphere to the saturated soil zone in complex urban landscapes

W6: Modelling impacts of urban green and blue infrastructure on urban cooling based on remote-sensing

Interfaces in urban freshwater ecosystems

F5: Effects of invasive mussels on urban lake water quality for drinking water production by bank filtration

F6: Modeling cyanobacteria ecology and toxin production

F7: Impact of natural and technical interfaces on phosphorus fluxes in urban water systems

F8: Greenhouse gas dynamics in natural and engineered urban aquatic systems

Interface urban hyporheic zones

H5: Improving retention of trace organics in hyporheic zones of metropolitan areas

H6: Extension and application of an integral surface water-groundwater model

H7: Impact of enhanced anoxic zones on contaminant transformation during bank filtration

H8: Microbial transformation of mobile halogenated aromatics in redox gradients of urban hyporheic zones

Interfaces in sewer systems

S3: Sewer corrosion by biochemical processes – microbiological investigations and inhibition effects

S4: Extension and application of a multiphase flow approach for sewer systems

Requirements: Successful candidates hold a university degree (Master, Diplom or equivalent) in Civil, Water or Environmental Engineering, Geosciences, Biology, or a related field and are enthused about the prospect of working in an interdisciplinary collaborative team of engineers and natural scientists. Detailed project descriptions and requirements for each position can be found at http://www.uwi.tu-berlin.de/menu/job_offers. Fluency in English is required for all advertised positions.

Please send your application with the **reference number**, a letter of motivation indicating research interests and experience and **the project key(s)** (W4-W6, F5-F8, H5-H8, S3-S4), your CV including 2 references, a letter of recommendation (preferably from a professor), Bachelor and Master certificates, and your Master thesis in a single PDF containing all

application documents using the online UWI application platform at:
<https://webservice.service.tu-berlin.de/candidate.php>.

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/ or quick access 214041.

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.

Technische Universität Berlin - Der Präsident - Fakultät VI, Institut für Bauingenieurwesen, FG Wasserwirtschaft und Hydrosystemmodellierung, DFG Graduiertenkolleg UWI, Sekr. TIB1 - B14, Prof. Dr.-Ing. Reinhard Hinkelmann, Gustav-Meyer-Allee 25, 13355 Berlin

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

