



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

extention until 30 June 2021 is intended under the reserve that funds are granted

#### **Faculty VI - Institute of Civil Engineering / Water Resources Management and Modeling of Hydrosystems**

**Reference number:** VI-68/18 (starting at 01/07/18 / until 31 december 2019 / closing date for applications 23/03/18)

**Working field:** UWI is an interdisciplinary research training group funded by the Deutsche Forschungsgemeinschaft (DFG). It involves engineers and natural scientists, historically rather separate groups with distinct traditions in water research. We have merged these groups to reach a new quality of general process understanding in urban water systems by investigating urban water interfaces as an emerging research focus, by an innovative qualification concept and by interdisciplinary and international collaboration. UWI is developing innovative links between empirical methods, experiments (laboratory and field) and models (conceptual and numerical) to describe the dominant interface processes in urban water systems on different scales of space and time as well as across scales.

Over a 3-year period, doctoral candidates will receive training that aims at facilitating completion of research leading to an original thesis and high-quality publications in the scientific literature. The Technische Universität Berlin (TUB) and the Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB), which is a member of the Forschungsverbund Berlin e.V., have created a unique interdisciplinary platform for urban water research. Together with associated partners from other research institutions, the water industry and local authorities we aim to create a stimulating research environment, facilitate international mobility, and provide support structures and assistance, all aimed at promoting the candidates' skill set required for successful science.

The advertised UWI PhD positions are organised in four common topic groups. We invite suitable candidates to apply for the UWI PhD positions listed below:

#### **Interfaces in urban lakes**

U1 – Interactions between invasive ecosystem engineers and bank filtration in urban lakes

U2 – Cyanobacteria dynamics at the lake – land interface (littoral zone)

U3 – Impact of management measures on sediment water interface in an urban lake

U4 – The GHG Footprint of a Metropolitan Area

#### **Interfaces in hyporheic zone**

H1 – Retention of trace organics in urban hyporheic bioreactors

H2 – Integral modelling approach for flow and reactive transport at surface water - groundwater interfaces

H3 – Abiotic transformation of organic trace compounds

H4 – Redox gradients in natural and technical systems: Population structure and physiological properties

#### **Interfaces in watershed**

W1 – Ecohydrological controls on urban groundwater recharge: an isotope-based modelling approach

W2 – Scaling and connectivity assessment of critical source areas of diffuse pollution in urban catchments

W3 – Heat and vapour fluxes of urban vegetation patterns – a remote sensing based approach

#### **Interfaces in sewers**

S1 – Interfaces in sewer systems - corrosion and odour

S2 – Three-phase simulation model for odour and corrosion in 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/menue/job\\_offers](http://www.uwi.tu-berlin.de/menue/job_offers). Fluency in English is required for all advertised positions.

Please send your application with the **reference number** letter of motivation indicating research interests and experience and the project key(s) (U1-U4, H1-H4, W1-W3, S1-S2), CV including 2 references, letter of recommendation (preferably from a professor), Bachelor and Master certificates, Master Thesis. Please send your application in a single PDF containing all application documents using the online UWI application platform at: <https://webserver.service.tu-berlin.de/candidate.php> or in **written** to Technische Universität Berlin - Der Präsident - **Fakultät VI, Institut für Bauin-**

**genieurwesen, FG DFG Graduiertenkolleg UWI, Sekr. TIB1 - B14, Prof. Dr.-Ing. Hinkelmann, Gustav-Meyer-Allee 25, 13355 Berlin.**

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.

Please send copies only. Original documents will not be returned.

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

