

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

The research will focus on cyanobacteria dynamics in the littoral zone of lakes. The aim is to develop a predictive understanding of lake cyanobacteria ecology considering pelagic – littoral feedbacks. Two of Berlin's lakes (Tegeler See and Müggelsee) will serve as testbeds. Observations will be obtained using *in situ* sensors and sampling and analysis (cell counts, toxins). Modeling will build on past models (IAM, PCLake, Salmo, TELEMAC-MASCARET) and include relevant mechanisms (physical, chemical, synergism with macrophytes, passive transport with macrophytes), and consider pelagic – littoral feedbacks. There will be a close collaboration with other projects focusing on urban lakes (U1, U3, U4) and projects W3 (remote sensing) and H1 (bank filtration).

The successful candidate holds a university degree (Master or equivalent) in Environmental Sciences or Engineering with a focus on water quality or a related field and is enthused about the prospect of working in an interdisciplinary collaborative team of environmental engineers and scientists. The candidate should be experienced in the development and application of water quality models (e.g. programming skills, numerical methods). Supervisors: Prof. Ferdi Hellweger (TUB) and Dr. Sabine Hilt (IGB). Host organization: Technische Universität Berlin. Please address enquiries to Prof. Ferdi Hellweger (ferdi.hellweger@tu-berlin.de).

Applicants should submit the following documents: letter of motivation indicating research interests and experience and the project key U2, 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 under:** <https://webserver.service.tu-berlin.de/candidate.php>