



University of Natural Resources and
Life Sciences, Vienna
Institute of Sanitary Engineering and
Water Pollution Control

FFoQSI is the Austrian Competence Centre for research and innovation in the agri-food sector and bundles a wide international partner consortium. For our research in cooperation with the Institute of Sanitary Engineering and Water Pollution Control (SIG) at the University of Natural Resources and Life Sciences, Vienna we are searching a

PhD position (f/m/d) in “Microbiological water quality assessment”

www.ffaosi.at

boku.ac.at

Your responsibilities

In water quality assessment, the investigation of microbial entry paths and source tracking along river systems play an important role. For reliable results, an exact taxonomic assignment of the abundant bacteria is needed, but common methods are time and labour consuming. While MALDI-TOF-MS is widely used for rapid taxonomic assignment in clinical microbiology, there are hardly any protocols or databases for the analysis of environmental and aquatic samples. To fill this gap, we are looking for a PhD-student to:

- > Develop MALDI-TOF-MS protocols for bacteria from aquatic environments
- > Use existing interfaces for the analysis and exchange of MALDI-TOF-MS data with alternative software algorithms
- > Establish a strain and spectra collection of waterborne bacterial isolates
- > Analyse microbial communities in aquatic environments based on MALDI-TOF-MS and 16S-rDNA technologies-based

Your most important abilities and qualifications are

- > MSc degree (or similar) in microbiology, molecular biology, biotechnology, food science and technology, biochemistry or related
- > Highly motivated and highly interested in the investigation of freshwater bacteria
- > Experience with basic microbiological and molecular methods (e.g. PCR techniques)
- > Experience with MALDI-TOF-MS or 16S-rDNA sequencing is an asset
- > Experience with, or the willingness to learn data analysis using R and/or Python
- > Fluent in English (both, written and spoken), German is an asset

We are offering

- > Integration in the Doctoral School “Human River Systems in the 21st Century (HR21)” (<https://boku.ac.at/docservice/doktoratsstudien/doktoratsschulen/human-river-systems-in-the-21st-century-hr21>)
- > Close collaboration with partner companies and exchange between the project groups
- > Numerous education and training opportunities, attendance of scientific conferences
- > Flexible working hours
- > Gross monthly salary EUR 2.196,75 (14 x p. year), based on 30h/week

Planned start and duration of work: 01.03.2021 for 36 months

We especially encourage women to apply for this position. Please send your CV and a letter of motivation until 24.01.2021 to DI Philipp Proksch, (philipp.proksch@boku.ac) using the ID [MWQA-SIG].

FFoQSI GmbH, Technopark 1C, A-3430 Tulln

Geschäftsführung Dr. Jürgen Marchart

www.ffaosi.at | office@ffaosi.at | +43 2272 22700

FN466700z | LG St. Pölten | UID: ATU72007605 | AT64 1200 0100 1896 8486 | BIC: BKAUATWW