



Stellenausschreibung Reg.-Nr.: 127/2017

Friedrich-Schiller-Universität Jena

The Collaborative Research Center SFB 1076 “**AquaDiva** – Understanding the Links between Surface and Subsurface Biogeosphere” is funded by the Deutsche Forschungsgemeinschaft (DFG). AquaDiva is an ambitious interdisciplinary research center with more than 70 researchers and Institutes at four faculties of the Friedrich Schiller University Jena (FSU), and three non-university research institutes in Jena or Leipzig ([www.aquadiva.uni-jena.de](http://www.aquadiva.uni-jena.de)).

The Collaborative Research Center AquaDiva invites applications for a

## **Postdoc Position (m/f; Ref.No. 127/2017) in “Molecular Microbial Ecology”**

at the Aquatic Geomicrobiology group at the Institute of Ecology, FSU Jena  
(subject to the final grant decision end of May)

**Subsurface microbes can be either chemolithoautrophic or depend on the fluctuating input of surface-derived organic matter. About 50% of them tend to be ultra-small, with cell sizes below 0.2 µm. Especially heterotrophs are known to regulate their cell size based on carbon availability. To differentiate between autotrophs and heterotrophs, we will apply a novel method for single cell sorting of active cells based on Raman micro-spectroscopy. This will allow us to follow the response of the groundwater microbiome to simulated surface inputs in microcosms by a combination of D<sub>2</sub>O stable isotope probing (SIP) with meta-omics.**

### **Work description:**

- Design and monitoring of joint microcosm experiments employing SIP
- Exploring microbial community dynamics using advanced bioinformatics and multivariate statistics
- Collaboration with physical chemists to combine SIP with Raman technology
- Targeted metagenomics of Raman-sorted populations
- Teamwork within AquaDiva to synthesize data from different omic approaches (metabolomics, -proteomics)
- Writing high-ranking scientific publications and data presentations in international conferences

### **Requirements:**

- A doctoral degree in Microbiology, Microbial Ecology, Molecular Ecology, or related discipline; candidates expected to earn their degree by July 2017 are welcome to apply
- The ideal candidate has demonstrated experience in SIP application and data analyses, in high-throughput sequencing and analysis of amplicon sequencing datasets, in metagenomics/metatranscriptomics analyses, and in biogeochemistry documented by an international publication record
- Solid experience in multivariate statistics (e.g., R, Python)
- Enthusiasm to play an active role in the interdisciplinary research team of AquaDiva
- Excellent written and oral communications skills in English

### **We offer:**

- A postdoctoral researcher position (TV-L E13 - salary agreement for public service employees, 100%) with funding starting from July 1, 2017, until Jun 30, 2021, as well as generous research funding
- Collaboration with world leading experts in photonic technologies from the Leibniz Institute of Photonic Technology (IPHT)
- Excellent working conditions for research in molecular microbial ecology, including state-of-the-art laboratory equipment as well as extensive computational power for sequence analysis
- A communicative atmosphere within a scientific network; a young vivid and supportive group, who promotes mutual exchange also with other institutions and early participation in international and national conferences and workshops
- The place of work is Jena, Germany, a young and lively university town with dynamic business activities, successful scientific centers of innovation, and a vibrant cultural scene around a university with a rich tradition

Severely disabled applicants with equal qualification and aptitude are given preferential consideration.

Applications should be written in English. The **application deadline is June 16<sup>th</sup>**, 2017. The position is open until filled.

Applications are submitted exclusively via an online application tool: <https://apply.jsmc.uni-jena.de>

For more **information on the position**, feel free to contact Prof. Kirsten Küsel ([kirsten.kuesel@uni-jena.de](mailto:kirsten.kuesel@uni-jena.de)) or Dr. Martin Taubert ([martin.taubert@uni-jena.de](mailto:martin.taubert@uni-jena.de)). For more **information on the application process**, please contact the coordinator, Dr. Maria Fabisch ([maria.fabisch@uni-jena.de](mailto:maria.fabisch@uni-jena.de)).