



The Collaborative Research Centre SFB 1076 "AquaDiva – Understanding the Links between Surface and Subsurface Biogeosphere" is funded by the Deutsche Forschungsgemeinschaft (DFG). AquaDiva is an ambitious research centre 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. AquaDiva combines different research areas, such as ecology, microbiology, hydrogeology, soil science, geomorphology, geochemistry, geology, geophysics, chemistry, and information science, to a comprehensive picture of subsurface research (www.aquadiva.uni-jena.de).

The Collaborative Research Centre AquaDiva invites applications for a

Postdoctoral Researcher Position Microbial Metabolomics (m/f/d)

at the Instrumental Analytics Group, Institute of Inorganic and Analytical Chemistry at the Friedrich Schiller University Jena (FSU).

This project aims to give insight into the chemical diversity and metabolic activities in the Critical Zone (CZ). We use state-of-the-art mass spectrometry-based metabolomics to identify new marker compounds for the elucidation of biogeochemical processes in this environment. We focus our research activities on answering the questions: what is the qualitative input signal in the upper soil layer? Which biological and environmental factors influence the molecular composition of dissolved organic matter? Which new marker compounds can be identified and validated, in order to study biogeochemical processes? Which metabolites and metabolic processes in particulate organic matter can be linked dissolved organic matter signatures?

Work description:

- Optimization of extraction and analysis methods (high-resolution GC/MS and LC/MS will be applied)
- Data analysis using multiple statistical approaches
- Analysis of seepage water and groundwater for prevalent and trace organic compounds
- Analysis of microbial transformation products in model cultures within seepage water
- Planning and running of joint (field) experiments in the Hainich Critical Zone Exploratory
- Direction of Bachelor and Master theses
- Presentation and publication of data

Requirements:

- A doctoral degree in **chemistry, microbiology, chemical biology, biochemistry**, or related discipline; candidates expected to earn their degree by September 2019 are welcome to apply
- **Solid knowledge** of instrumental analytics, especially in GC/MS and LC/MS
- **Skills** in statistical data evaluation, metabolomics, microbiology, or field work are beneficial
- Interest in supervising student projects
- Enthusiasm to play an active role in the **interdisciplinary research team** of AquaDiva
- Excellent written and oral communications skills in **English**

We are looking for a highly dedicated scientist to join our group; a team player, who works efficiently, delivers on time lines and who is highly interested in interdisciplinary work combining metabolomics and environmental analytics.

We offer:

- A postdoctoral researcher position (TV-L E13 - salary agreement for public service employees, 100%) with funding until Jun 30, 2021, as well as generous research funding
- Opportunity for research on an innovative and unique Critical Zone research platform
- Excellent working conditions for research in metabolomics including state-of-the-art laboratory equipment as well as hands-on experience



- A communicative atmosphere within a scientific network; a young and supportive group, who promotes mutual exchange also with other institutions and early participation in inter/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.

The application deadline is 30.09.2019. The position is open until filled. Applications should be written in English and indicate the ref. no. 288/2019. Complete applications (including motivation letter, CV, certificates, references ideally in one pdf file) are to be addressed to:

Prof. Dr. Georg Pohnert
E-Mail: Georg.Pohnert@uni-jena.de

Friedrich-Schiller-Universität Jena
Chemisch-Geowissenschaftliche Fakultät
Institut für Anorganische und Analytische Chemie
Professur für Instrumentelle Analytik/ Bioorganische Analytik
Lessingstr. 8
07743 Jena

Please consider our application information: http://www.uni-jena.de/stellenmarkt_hinweis.html. Please also note the information on the collection of personal data on: www.uni-jena.de/Universität/Stellenmarkt/Datenschutzhinweis.