Friedrich Schiller University is a traditional university with a strong research profile rooted in the heart of Germany. As a university covering all disciplines, it offers a wide range of subjects. Its research is focused on the areas Light—Life—Liberty. It is closely networked with non-research institutions, research companies and renowned cultural institutions. With around 18,000 students and more than 8,600 employees, the University plays a major role in shaping Jena’s character as a cosmopolitan and future-oriented city.

The DFG-funded Collaborative Research Centre 1076 “AquaDiva – Understanding the Links between Surface and Subsurface Biogeosphere” is an ambitious research centre at Friedrich Schiller University. Its integrated research training group IRTG AquaDiva is educating doctoral researchers in a structured, interdisciplinary training program (www.aquadiva.uni-jena.de) and invites applications for PhD positions in various fields of research.

The Institute of Biodiversity / Aquatic Geomicrobiology Group at the Faculty of Biosciences seeks to fill the position of a

**Doctoral Researcher in Molecular Microbial Ecology (m/f/d)**

commencing on September 1, 2021 or at the earliest possible date in the project "Microbial Responses to Infiltration Inputs into Groundwater of the Hainich CZE" (A03).

**Background**

This project will determine the fate of surface-derived and chemolithoautotrophically produced microbial carbon in groundwater of the Hainich aquifers. By combining Raman microspectroscopy with stable isotope probing (SIP), a novel high-throughput cell sorting method will be established, to track fluxes of microbial carbon and separate metabolically active microbes. Metagenomics analysis of sorted subpopulations will be interpreted within the context of CO$_2$ fixation rate measurements for a transect-wide functional analysis of the deep biosphere.

**Your responsibilities:**

- Design and monitoring of joint microcosm experiments employing SIP
- Exploring microbial community dynamics using advanced bioinformatics and multivariate statistics
- Targeted metagenomics of Raman-sorted populations
- Execution of CO$_2$ fixation rate measurements
- Teamwork within AquaDiva to synthesize data from different omic approaches (metabolomics, metaproteomics)
- Work on a scientific qualification project: doctorate
- Writing and publishing scientific papers in peer-reviewed journals
- Presenting results at national and international conferences

**Your profile**

- M.Sc. degree in Microbiology, Microbial Ecology, Molecular Ecology or similar fields is necessary; candidates expected to earn their degree by September 2021 are welcome to apply
- Strong background in molecular microbial ecology is expected
- Experience with high-throughput sequencing and analysis of amplicon sequencing datasets or metagenomics/metatranscriptomics analyses, with biogeochemistry, and with multivariate statistics (e.g., R, Python) is desirable
- Experience with SIP application and data analysis would be desirable but are not mandatory
- Excellent English communication skills, both written and spoken, are desirable
- Enthusiasm to play an active role in the interdisciplinary research team of AquaDiva
- Highly motivated and creative individuals with an interest to shape their own thesis project
• Readiness and ability to work in the field
• Driver’s license would be advantageous

We offer:

• A doctoral researcher position with generous research funding and the possibility of a three-month research stay abroad
• Participation in a strongly interdisciplinary research project and diverse experimental and theoretical approaches, combined with the opportunity for research on an innovative and unique Critical Zone research platform
• A communicative atmosphere within an international scientific network of universities and research institutes providing top-level research facilities, equipment and infrastructure
• A comprehensive mentoring programme with supervision by a team of advisors and qualification and development measures in the frame of the IRTG AquaDiva and embedded with the Jena Graduate Academy
• A family-friendly working environment with a variety of offers for families, and University health promotion including a wide range of University sports activities
• Remuneration based on the provisions of the Collective Agreement for the Public Sector of the Federal States (TV-L) at salary scale E13 — depending on the candidate’s personal qualifications—, including a special annual payment in accordance with the collective agreement.

The position is initially limited to 3 years, with the possibility of extension to end of June 2025. This is a part-time position with 65% of the working hours of a full-time employee (26 hours per week). The project is supervised by Prof. Dr. K. Küsel and Dr. M. Taubert; the place of work will be Jena – City of Science.

FSU Jena and CRC AquaDiva seek to increase the number of women in those research areas where they are underrepresented and therefore explicitly encourage women to apply. Candidates with severe disabilities will be given preference in the case of equal qualifications and suitability.

Are you eager to work for us? Then submit your application, addressed to Prof. Dr. K. Küsel / Dr. M. Taubert and stating the vacancy ID 170/2021, by 20 June 2021 to our online application portal at https://crc-aquadiva.freshteam.com/jobs.

All applications should be in English and include (in one PDF file, max. size 15 MB) at least the following:
1. Cover letter (max. 1 page, describing your motivation, research interests, and relevant experiences)
2. Curriculum vitae (max. 2 pages, including contact details of at least two scientific references)
3. Scans of certificates, diplomas, and other (e.g., Master’s and Bachelor’s certificate – if not in English or German, please provide a translation)

Selected applicants will be invited for a short presentation and a personal interview with the project leader/s at our online recruitment symposium, presumably in July/August 2021.

Queries concerning the application process should be directed to the IRTG coordinator, Dr. Anke Hädrich (aquadiva-recruitment@uni-jena.de); for project-related questions, please contact Dr. Martin Taubert (martin.taubert@uni-jena.de).

More project details can be found at www.aquadiva.uni-jena.de/Open_Positions.html.

For further information for applicants, please also refer to www4.uni-jena.de/stellenmarkt_hinweis.html (in German)Please also note the information on the collection of personal data at www4.uni-jena.de/en/jobs_information_collecting_personal_data.html