

## Job advertisement

Vacancy ID: 270/2021 (formerly 165/2021)

Closing date: 03 October 2021



**FRIEDRICH-SCHILLER-  
UNIVERSITÄT  
JENA**

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](http://www.aquadiva.uni-jena.de)) and invites applications for PhD positions in various fields of research.

The Institute of Physical Chemistry seeks to fill the position of a

### **Doctoral Researcher in Raman Spectroscopy (m/f/d)**

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

#### **Background**

In project A03, different Raman techniques will be used for the detection of isotopically labeled single bacterial cells. In this subproject, all Raman spectroscopic and coherent Raman spectroscopic experiments will be established for the isotope experiments on single bacterial cells to understand the mechanism of isotope labeling. Establishing 2D correlation spectroscopy will reveal the incorporation mechanism of the different isotopes inside the bacterial cells.

#### **Your responsibilities:**

- Establishing the different Raman spectroscopic experiments
- Cultivating and isotopic labelling experiments of different bacteria
- 2D correlation analysis
- Performing microfluidic experiments
- 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 Natural Sciences (e.g., **chemistry, physics, biology**, or related discipline) is necessary; candidates expected to earn their degree by December 2021 are welcome to apply
- Solid knowledge of Raman spectroscopy is expected
- Experience with bacterial cultivation would be desirable but is 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

#### **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. J. Popp; 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. Jürgen Popp and stating the **vacancy ID 270/2021**, by **3rd October 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)

Queries concerning the application process should be directed to the IRTG coordinator, Dr. Anke Hädrich ([aquadiva-recruitment@uni-jena.de](mailto:aquadiva-recruitment@uni-jena.de)); for project-related questions, please contact Dr. Petra Rösch ([petra.roesch@uni-jena.de](mailto:petra.roesch@uni-jena.de)).

More project details can be found at [www.aquadiva.uni-jena.de/Open\\_Positions.html](http://www.aquadiva.uni-jena.de/Open_Positions.html).