Job advertisement

Vacancy ID: 235/2022
Closing date: 2022-07-06

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 Institute of Geosciences / Applied Geology Group seeks to fill the position of a

Scientist Researcher in Environmental Sciences / Colloid and Interface Sciences

commencing on September 1, 2022 or at the earliest possible date
in the project "Retroaction of Geochemical Perturbations and Critical Zone Media Reactivity on Trace Element Speciation and Transport Parameters" (C07).

Background
This project aims to understand the transport of clay minerals out of the soil zone using synthetic clay mineral colloids with the multi-method nanoparticle/mass spectrometric platform (SP-ICP-MS, (e)AF4, NTA, LC-OCD-OND) available in the group. The characterization of the flow path geometry will be addressed through 3D/4D tomographic methods (µCT/XRM) available. The special focus is on the dynamics, control and feedback of the trace element speciation and transport on the subsurface microbiome of the Critical Zone investigated from the laboratory-scale to the cross-project field experiment.

Your responsibilities:

- Stability/mobility analyses of structurally labelled synthetic clay nanoparticles in natural media
- Rock matrix dissolution experiments and monitoring by tomographic techniques
- Field monitoring and colloid characterization of extreme hydraulic events and joint multi-tracer experiments including the delivery of input parameters for microbiome analyses
- 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 geosciences / environmental sciences / aquatic geochemistry or similar fields is necessary; candidates expected to earn their degree by September 2022 are welcome to apply
- Solid knowledge of aquatic (geo)chemistry, hydrogeology, and analytical (geo)chemistry is expected
- Experience with ICP-MS and/or liquid chromatography methods or tomographic methods

(µCT, XRM) are needed; experience with field water-sampling techniques 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
- 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

Participating Institutions:

The position is limited to June 30, 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. Thorsten Schäfer, 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. Thorsten Schäfer and stating the vacancy ID **235/2022**, by **6 July 2022** to

regina.piechnick@uni-jena.de

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 and project contents can be directed to Prof. Dr. Thorsten Schäfer (thorsten.schaefer@uni-jena.de) or the IRTG AquaDiva coordinator, Dr. Anke Hädrich (irtg-aquadiva@uni-jena.de). More project details can be found at www.aquadiva.uni-jena.de/Open_Positions.html.

Since all application documents will be duly destroyed after the recruitment process, we ask you to submit only copies of your documents.

For further information for applicants, please also refer to https://www.uni-jena.de/stellenmarkt (in German)
Please also note the information on the collection of personal data at https://www.uni-jena.de/en/job-market#dataprotection