Job advertisement

Vacancy ID: 292/2021 (formerly 168/2021)
Closing date: 03 October 2021

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 Laboratory of Organic and Macromolecular Chemistry seeks to fill the position of a

Doctoral Researcher in Polymer Sciences (m/f/d)

commencing on December 1, 2021 or at the earliest possible date
in the project "**Monitoring migration pathways in the subsurface using polymer tracer libraries**" (C05).

Background

This project aims to understand complex migration pathways in the subsurface by a synthetic design of novel macromolecular tracers based on the uniqueness of the anionic ring opening polymerization of ethylene oxide monomers. The chemical scratchboard should thereby address water solubility, hydrophilicity/hydrophobicity, stability/degradability, nontoxicity, and traceability. The worldwide unique combination of synthesis facilities and advanced characterization techniques established in the laboratory should be developed and utilized in the framework of the highly interdisciplinary project. The new tracers should then find applications (in strong collaboration with geoscientists) to mimic and trace the transport behaviour of natural matter.

Your responsibilities:

- Design and synthesis of new poly(ethylene oxide)-based tracers, utilizing existing facilities in the laboratory
- In-depth characterization by high-end and established physicochemical methods in the group
- Interaction with the partners from the Geosciences to concertedly reach the project goals
- 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 chemistry or similar fields is necessary; candidates expected to earn their degree by December 2021 are welcome to apply
- Basic knowledge of polymer science and standard characterization techniques is expected
- Experience with synthetic methods is needed; experience with more advanced polymer characterization (hydrodynamic methods, light scattering, chromatography) 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 interdisciplinary field of chemical design and real applications in environmental settings

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 Professor Dr. Ulrich S. Schubert; 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. Ulrich S. Schubert and stating the **vacancy ID 292/2021**, 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); for project-related questions, please contact Prof. Dr. Ulrich S. Schubert (ulrich.schubert@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