Chair of Hydrogeology

Research at the Interfaces of Hydrogeology, Biogeochemistry and Engineering

Are you interested in a research career and in working at the frontiers of hydrogeology and biogeochemistry linked with engineering aspects? Then here is an opportunity to do a PhD in an internationally recognized research environment supported by national cooperation partners and companies. For further information, please visit our web site: **https://www.cee.ed.tum.de/hydro/projects-ongoing/nitrat-lurch/#c29411**

Scientific focus of the announced PhD position

Climate change may also have a great impact on groundwater resources that are often used as drinking water. Presently, the use of shallow aquifers can be limited by high nitrate concentrations, particularly under agriculturally used regions. In this project we will develop and test a novel method to enhance natural denitrification in shallow nitrate contaminated aquifers. To reach this goal an interdisciplinary team was brought together in this project supported by engineers, microbiologists, hydrogeologists, and modelers.

Qualifications

At the date of appointment candidates must hold an MSc degree in natural science, preferably with a specialization in the following fields: biogeochemical/chemical/environmental/ hydrogeological sciences or engineering. The successful candidate works efficiently in teams, has good communication skills, and has a critical approach to the formulation and testing of hypotheses. Practical experience and willingness to work in the field and laboratory is a prerequisite.

Approval and Enrolment

The scholarships for the PhD degree are subject to academic approval and the candidates will be enrolled in one of the general degree programs of TUM. For information about the general requirements for enrolment and the general planning of the scholarship studies, please see TUM Graduate School (https://www.gs.tum.de/promovieren-an-der-tum)

PhD at TUM

As PhD student at TUM you will be part of the scientific staff. In addition to your scientific work, you are also integrated in the teaching program of the Chair of Hydrogeology (max. 1 contact hours/ semester). You are integrated in courses that prepare undergraduates in the field of hydrogeology. We are one of the leading university institutes in Europe with a large network worldwide. We have an international environment with an international MSc education and supervise almost 10 PhD students in our group. Munich is a pleasant place to live with easy transport and a rich cultural life.

Salary and appointment terms

Salary and appointment terms are consistent with the current rules (75% of a full researcher position) for PhD degree students. The period of employment is 3 years.

The successful candidate will be employed and enrolled as a PhD student at TUM, School of Engineering and Design. The starting date is negotiable but a starting point beginning of March 2023 is preferred.

Further information

Further information is available from Dr. Anja Wunderlich (anja.wunderlich@tum.de).

Application

- A cover letter explaining the applicant's motivation to apply for the research project (not more than one page)
- A curriculum vitae providing relevant academic, employment and personal details
- Authorized academic transcripts and copies of master thesis work or publications
- Contact details for two reference persons that we may contact for further inquires

Candidates will be evaluated based on their research potential and commitment and selected candidates will be invited for an interview.

The scholarship is open to both German and international applicants.
All interested candidates irrespective of age, gender, race, religion or ethnic background are encouraged to apply.

Deadline

Deadline for application is open until position is filled. Please send your application to anja.wunderlich@tum.de (subject: "PhD-nitrate").