

Open PhD position Nano-Geochemistry



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Department of Environmental Geosciences

The University of Vienna (15 faculties, 4 centres, about 174 fields of study, approx. 9.500 members of staff, more than 94.000 students) seeks to fill the position as soon as possible of a

Ph.D student at the Department of Environmental Geosciences

The Department of Environmental Geosciences at the University of Vienna is a highly experienced and internationally visible team carrying out research on environmental contaminants, hydrogeology and nanogeosciences. We currently have an opening for an exciting opportunity to complete a PhD degree over a 3 year programme on the topic of

Elucidating natural nanoparticle driven processes in different geochemical environments

The Department of Environmental Geosciences is at the forefront of investigations on natural nanoparticle analysis in the environment. The over-arching goal of this PhD project is to explore natural systems to achieve significant advances in our understanding of natural colloidal systems, to understand how they drive geochemical systems and to significantly advance our understanding of nanoscale processes in the environment. The processes in the focus of this PhD project include: colloid deposition, transformation and release in/from peat bogs as well as colloid formation and interaction with trace metals in acid mine drainage.

The Ph.D. student will develop a robust methodology for multi-element single-particle analysis on ICP-TOF-MS including the analysis of in complex environmental samples, and related data treatment tools. For details on this emerging technique see Praetorius et al. (2017) in Environmental Science: Nano. The project is nested in a team of international collaborators who support the field work.

Preferred period of employment is 01.06.2018 - 31.05.2020.

Duration of employment: 3 year/s

Extent of Employment: 30.0 hours/week

Job grading in accordance with collective bargaining agreement: Approximately 30.000/22.000 € gross/net salary including social security and health plans.

We offer:

- The **support** from internationally recognised senior researchers to develop all the skills necessary to complete a PhD project + excellent **laboratory** facilities
- An **international** working environment (working language is English) with many opportunities for career development (networking, conferences, project meetings etc...)
- Vienna, a city second to none in **quality of life worldwide** (Mercer, 2016)

Requirements:

- Completed graduate degree in a relevant field of science
- Background in Environmental Geology, especially in geochemistry and/or nanoparticles

- Experiences in trace metal analysis, esp. ICP-MS
- Knowledge in MS Office
- High ability to express yourself both orally and in writing
- Excellent command of written and spoken English
- Willingness for field work and international travel for sampling campaigns and analysis
- Ability to work in a team

Desirable qualifications are:

- Knowledge in programming languages (any of the following: R, Matlab, IgorPro)
- Basic experience in research methods and academic writing

Application documents:

- Letter of Motivation
- Academic curriculum vitae
- Degree certificates

Please send a single pdf file including a letter of motivation, a CV with university grades, the contact details of two referees, and if available, copies of research papers/conference abstracts or the Master thesis. Applications should be addressed to environment@univie.ac.at, max. 5 MB.

For questions related to the project, contact Dr. Frank von der Kammer (frank.kammer@univie.ac.at) (no applications).

The University of Vienna is an equal opportunity employer and intends to increase the number of women on its faculty, particularly in high-level positions, and therefore specifically invites applications by women. Among equally qualified applicants, women will receive preferential consideration.

Further information at <http://umweltgeologie.univie.ac.at/>