

## PhD Position in Groundwater Management

at The Vienna University of Technology, Institute of Hydraulic Engineering and Water Resources Management

The research group of Engineering Hydrology, offers a PhD position in the field of Groundwater Management. The group for Groundwater Management conducts research that aims at improving the protection and management of groundwater resources. The scientific research at our institute plays a leading international role in the fields of flood control, the impacts of climate change on the water cycle and contaminant transport.

## Key Performance Areas

We welcome talented and motivated researchers (m/f) with interests in numerical modelling and hydrology to apply for the 4-year PhD position. The aim of this position is to gain a doctorate in Environmental or Civil Engineering. The PhD will include the development of models, and experiences in this field are therefore advantageous. In particular, the position involves these tasks:

- Contributing to the academic research work of the group (especially with respect to modelling of flow and transport processes)
- Working collaboratively within a multidisciplinary team and with external partners on scientific papers/publications (e.g. ICC <u>www.waterandhealth.at</u>)
- Taking part at scientific conferences
- Participating in undergraduate and postgraduate teaching

## **Minimum Requirements**

Candidates should hold a Master (or similar) degree in Environmental Sciences, Hydrology, Environmental or Civil Engineering, Mathematics, Physics, or related disciplines, with an excellent speaking and writing knowledge in English. We require and welcome:

- knowledge of hydrological processes and hydraulics
- working experience with modelling in the field of groundwater
- basic skills in programming (Python, Mathematica)
- communication skills and an ability to work in an interdisciplinary team with scientists, engineers, and technicians

We offer:

- interesting and challenging projects
- scientific work at the highest level
- the opportunity to graduate with a PhD
- a highly motivated team
- the opportunity of working in a team of researchers of the Interuniversity Cooperation Centre Water & Health (<u>www.waterandhealth.at</u>) and with partners from the business and science sector.

The position is for four years. Payment will be according to the salary scheme of the Vienna University of Technology (group B1) based on a 30 hours per week contract (optional up to 40 hours). We offer a gross salary of  $\in$  2.148,40 (14x annually). Note: Salary commensurate with qualifications and experience.

Submission deadline is **April 25, 2019** (online or date of postmark). The position should be filled by **Mai 1<sup>st</sup> 2019** until April 30, 2023.



Please send your complete application documents (CV, letter of motivation and list of publications) as a single PDF file to the HR Administration, TU Wien, Karlsplatz 13, 1040 Vienna or to <u>thomas.prager@tuwien.ac.at</u>. Applications received after the deadline will not be taken into consideration. Please note that we cannot reimburse any costs related to the application (travel expenses etc.)

## **Further information:**

In many parts of the world, groundwater is the principal source of clean drinking water. In Austria, practically 100% of the drinking water is supplied from groundwater resources. For a sustainable supply, it is essential to understand the processes of groundwater flows, such as the interaction with surface waters and the transport behaviour of contaminants contained in groundwater. Accordingly, the working group focuses on the following research subjects:

- Further development of microbial and chemical transport models.
- Laboratory and field investigations of microbial transport parameters.
- Assessing the risk of pollutant entry (with the focus on microbial contamination).
- Hydrological/hydraulic analysis in interdisciplinary projects in the field of water management.

