3 year PhD Position

Advanced Groundwater Modelling



How we are: The Department for <u>Environmental Geosciences</u>, University of Vienna is a highly motivated and international team carrying out research on groundwater modelling, pollutant dynamics and nanogeosciences.

Your project: Providing safe drinking water is one of the major challenges of this century. Apart from quantitative problems, groundwater contamination is a major environmental concern. Such inorganic, organic, or biological contamination can derive from various sources. Water suppliers might operate at very complex hydrogeological settings, including flow and chemical/water quality heterogeneities at all scales, varying river-aquifer interaction, and water works operations.

At such a setting you will apply the most recent inverse groundwater modeling techniques to identify and minimize model uncertainties and to better predict and guide water works operations (e.g., including temporal varying natural/anthropogenic tracers, stochastic modelling with HPC, rigorous uncertainty analysis). The ultimate goal is to inform a large water supplier how to provide the best possible water quality at very complex and time variant hydrogeological/chemical settings.

We are inviting applications for a PhD position and offer:

- Working in a motivating and stimulating internationally recognized scientific environment with excellent facilities
- Continuous support, mentoring, career planning and coaching
- Competitive salary (€ 31.000/22.500 gross/net annual salary including full social security coverage)
- The city of Vienna is continuously ranked among the <u>top cities in the world</u> for quality of life. <u>Costs of living</u> are moderate compared to other major European and international cities.

Requirements:

- Strong background in groundwater modelling including transient and inverse problems
- Good knowledge of FEFLOW, FePEST, programming, e.g., Phyton, MATLAB
- Fluent spoken and written English (German would be beneficial) and excellent communication skills
- Motivated, independent and reliable

How to apply: Please send a single pdf file including a letter of motivation, a full CV with a detailed description of your skills, and the contact details of two referees. Applications will be considered until the position has been filled.

Questions/applications to thilo.hofmann@univie.ac.at and mamarazuela@outlook.com

