Faculty of Environmental Sciences

At the **Department of Hydro Sciences**, the **Institute of Groundwater Management** offers a position as

Research Associate / Postdoc in Large-Scale Water Resources Modeling (m/f/x)
(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting **April 1, 2022** limited until March 31, 2025. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). The position aims at obtaining further academic qualification (e.g. habilitation).

Background: Large-scale water resources assessment has become more and more important in recent years. This is due to the emerging need (1) to understand and quantify interactions between the world's water resources and climate/land-use changes, (2) to inform water policy in an increasingly globalized world, and (3) to create visualizations and interactive opportunities to educate local and global populations. In most large-scale modeling studies, groundwater, the world's largest source of drinking water, is represented with strong simplifications mainly due to a lack of observations.

Tasks: The aim of this postdoc position is to contribute to the improvement of groundwater processes in large-scale models through advancing (conceptual) model development and model evaluation at regional to global scales using data beyond the typical groundwater level observations or discharge observations. This may include remote sensing information, water quality or isotopic observations, or any other information that can be integrated directly or indirectly (e.g., through hydrological signatures) into large-scale model development and evaluation. Within this research field, the postdoc will further develop her/his own scientific profile and scientific network, independently supervise BSc/MSc and PhD students, and apply for funding of research projects to set up her/his own research group. In addition to research, the postdoc will actively contribute to teaching courses (according to DAVOHS).

Requirements: university and PhD degree in hydrosciences, hydro(geo)logy, civil engineering (or related); preferably at least one year of postdoc experience; proven experience in working in international teams, scientific publishing, and presenting at international conferences; excellent skills in programming, model development, and model evaluation; interest or experience in working at larger scales combined with some good ideas to develop an independent research profile; knowledge of German is desirable but not mandatory.

We offer: an international working atmosphere; attractive working conditions and opportunities for further education at the Technische Universität Dresden; flexible working hours and the possibility to combine family and career.

For questions, please get in touch with Prof. Dr. Andreas Hartmann (andreas.hartmann@tu-dresden.de).

Applications from women are particularly welcome. The same applies to people with disabilities. Please submit your comprehensive application (incl. letter of motivation, curriculum vitae, publication list, certificates, and diplomas) by **January 19, 2022** via the TU Dresden SecureMail Portal https://securemail.tu-dresden.de/ as a single PDF document to **grundwasser@mailbox.tu-dresden.de** or by mail to: **TU Dresden, Fakultät Umweltwissenschaften, Fachrichtung Hydrowissenschaften, Institut für Grundwasserwirtschaft, Professur für Grundwassersysteme, Herrn Prof. Hartmann, Helmholtzstr. 10, 01069 Dresden**. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.