As part of the Tenure Track Programme of the German Federal Government and the Federal States, the Faculty of Environmental Sciences, Institute of Urban and Industrial Water Management, seeks to fill the

**Junior Professorship (W1) in Urban Water Resources Management (with tenure track to W3)**

with a four year contract as a temporary public official, to be filled at **1st October 2019**. If the interim evaluation is positive, the employment contract will be extended to a total of six years. In the fifth year, a tenure evaluation will be carried out by a TU Dresden evaluation commission. Following a positive evaluation, a permanent Chair (W3) of Urban Water Resources Management will be granted.

Evaluation criteria mutually agreed upon when the position is accepted will form the basis of the evaluation procedures. Essential elements of the evaluations will be the development of a relevant and independent research profile by means of high-quality publications, raising of third-party research funds and related project leadership, the successful (further-)development of innovative components in academic training programmes, each on the level of a Chair (W3) as well as the establishment of national and international co-operations.

Teaching is dedicated to Bachelor and Master students, mostly from the study courses offered by the Department of Hydro Sciences and including courses taught in English language. The courses deal with urban water management and the interaction with neighbouring systems of hydrology, groundwater management and surface waters. Main emphasis is put on rain-runoff process in urban areas, wastewater treatment with conventional and advanced processes, water distribution, modelling of transport and conversion processes in wastewater systems and rivers, integrated water resources management as well as on dealing with priority substances in urban water systems. Teaching responsibilities will be jointly arranged together with the Chair of Urban Water Management.

In research, the junior professor is expected to work on the development of innovative approaches of water quantity and water quality management in urban areas. This includes the development and assessment of alternative systems to cope with changing boundary conditions, the investigation of the behaviour of micro-pollutants in urban waters, and wastewater design for reuse for various purposes e.g. in agriculture, for groundwater recharge and for energy crop production. A main part of the research will be model development and coupled modelling of transport and conversion processes across compartment boundaries. Potential topics refer to the input to the system of substances from various sources, the dynamics of extreme events and urban flooding, the interaction of sewers with groundwater through un-tight systems and through stormwater infiltration as well as chronic and acute impacts on surface waters. Due to the structure of the Department of Hydrosciences and the respective co-operation with natural science working groups, the Junior Professorship in Urban Water Resources Management shall direct a main part of its research capacity towards fundamental investigations.

There is a requirement for experiences and high development potential in the field of urban water management, model development and modelling of interfaces between compartments
and disciplines, as well as in third-party funded project acquisition and international co-operation. Special attention will be paid to the capability for interdisciplinary co-operation, which is of outstanding significance for the joint research in the Center for Advanced Water Research (CAWR) – a co-operation between the water sectors at TU Dresden and the Helmholtz Centre for Environmental Research – UFZ. The holder of the position shall co-operate on topics related to integrated water resources management with the Dresden-based Institute FLORES of the United Nations University (UNU).

Applicants must fulfil the employment qualification requirements of § 63 of the Act Governing Academic Freedom in Higher Education in the Free State of Saxony (SächsHSFG).

TU Dresden supports tenure track professors with a programme specifically tailored to their needs. Mentoring, various coaching sessions, and special continuing education programmes and support offers provide active professional guidance throughout the duration of the temporary position at the Junior Professorship.

TU Dresden seeks to employ more female professors. Hence we particularly encourage women to apply. Applications from candidates with disabilities or those requiring additional support are very welcome. The university is a certified family-friendly university and offers a dual career service. If you have any questions about these topics, please contact the Equal Opportunities Officer of the Faculty of Environmental Sciences (Prof. Dr. Doris Krabel, +49 351 463-31857) or the Representative of Employees with Disabilities (Ms. Birgit Kliemann, +49 351 463-33175).

Please submit your application, including CV in tabular form, description of your scientific career, a list of your scientific publications, copies of the most important publications, a list of courses taught and teaching evaluation results, a copy of your highest academic degree as hard copy as well as with a supplementary letter, in which you explain the motivation for applying together with your research and teaching concept to TU Dresden, Dekan der Fakultät Umweltwissenschaften, Herrn Prof. Dr. Karl-Heinz Feger, Helmholtzstr. 10, 01069 Dresden, Germany and as electronic copy via the TU Dresden SecureMail Portal https://securemail.tu-dresden.de by sending it to dekan.uw@tu-dresden.de until 06.12.2018 (stamped arrival date of the university central mail service applies).

Reference to data protection: Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: https://tu-dresden.de/karriere/datenschutzhinweis