

University of Natural Resources and Life Sciences Vienna – responsibility for Humans and Nature. We work for the sustainable use and protection of natural resources.



The Department of Water, Atmosphere and Environment, Institute of Hydraulic Engineering and River Research wishes to fill a career position in compliance with § 99 (5) UG (tenure-track) in the field of

# Hydraulics, hydrodynamics and hydroinformatics with a focus on numerical modelling of hydraulic processes

Research topics include the development of numerical models for hydrodynamic and sediment transport processes on different scales as well as the modelling of morphodynamics. A focus is given by the investigation of interactions with processes of the hydro-ecosystem, the functioning and optimization of hydraulic engineering structures and the study of flood processes. Moreover, the development of hybrid models in the context with physical models and coverage of the field of hydroinformatics including its societal responsibilities is a particular focus of the position. Teaching of the fundamentals of hydraulics and hydromechanics, hydrostatics, hydrodynamics, pipe hydraulics, channel hydraulics as well as numerical methods in hydrodynamics, computer-based river modelling, modelling of fluvial transport processes, numerical methods in hydraulic engineering and computer programming in hydroinformatics is expected.

Working time: 40 hours a week

Term of the employment relationship: limited to a period of 6 years

Workplace: Vienna

Allocation in compliance with the Collective Agreement for University Staff to job group: B1 lit. b Gross monthly salary (depending on previous eligible experience) at least: €3,803.90 (14 x a year, in addition we also offer an attractive career development programme and an extensive range of social benefits)

#### **Target group**

§99 (5) positions offer academics with high potential and the relevant achievements the opportunity of an academic carrier ranging from a postdoc position to that of assistant professor and on to associated professor. The position of associated professor can be achieved at the latest six years after the appointment. §99 (5) positions are aimed at academics with a doctorate/PhD degree, with high potential, who are close to or have already successfully completed a habilitation. Experience at other universities or research institutes abroad is expressly welcome.

### Tasks and focus areas

- Research in the field of hydraulics, hydrodynamics and hydroinformatics with a focus on numerical modelling of hydraulic processes
- Teaching and supervision or co-supervision of final papers within the scope of legal possibilities
- Transfer of knowledge and the promotion of junior researchers in line with the social responsibility of the University of Natural Resources and Life Sciences
- Assumption of administrative tasks within the framework of university self-administration
- Independent publication activities in national and international journals
- Submission, realization and administration of national and international research projects, including competitive research programmes
- Representation of the scientific subject in a national and international context
- IT-related advisory duties (technical and methodological) of early-stage researchers

### Requirement profile

- Completed doctorate in a relevant field
- Sound professional experience in the scientific field as a postdoc
- Excellent publication achievements as well as international orientation and recognition
- Willingness and ability to lead your own research team incl. the necessary funding this requires (third-party funding)
- Enthusiasm for outstanding teaching
- Profound research experience in hydraulics, hydrodynamics or hydroinformatics in the context of fundamental as well as applied scientific research
- Experience in the application and development of numerical models in the field of hydrodynamics and/or sediment transport
- Excellent IT-knowledge including profound programming skills

## Other desired qualifications

- Experience abroad as well as in teaching and leadership at universities and research institutions
- Teaching experience in hydraulics, hydrodynamics or hydroinformatics
- Interdisciplinary research experience in mixed research teams
- Advantageous: Experience in educational projects and/or societal responsibilities of hydroinformatics ("third mission" of universities)
- Advantageous: Experience in design and development of components of hydroinformatics systems (e.g. data bases, data mining front ends, etc.)
- Willingness to travel for international congresses/workshops
- Excellent command of spoken and written German and English
- High level of social skills, reliability, ability to work in a team

Publication date: 11th of April 2019

Closing date for applications: 16<sup>th</sup> of May 2019

University of Natural Resources and Life Sciences Vienna seeks to increase the number of its female faculty and staff members. Therefore qualified women are strongly encouraged to apply. In case of equal qualification, female candidates will be given preference unless reasons specific to an individual male candidate tilt the balance in his favour.

Please submit your application in English incl.

- Curriculum vitae
- Publication list
- List of oral presentations, teaching activities, (co-)supervised theses and research projects
- Rough concept for future plans in research and teaching and contribution to the scientific profile to the Department
- Brief explanation of why you think you should be particularly suitable for this job (max. 1 page A4)

and indicating the reference code 67 to rektorat@boku.ac.at until 16<sup>th</sup> of May 2019.

Applicants are not entitled to reimbursement of travel and accommodation costs incurred as a result of the selection procedure.

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