The Department of Water, Landscape and Infrastructure, Institute of Hydraulic Engineering and River Research is currently seeking a

Postdoctoral Research Associate

project employment

(Reference code 169)

Extent of employment: 40 hours per week
Duration of employment: 1st of October 2026, limited to 30th of September 2029

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: € 5.014,30 (payable 14 times per year)

Responsibilities

- Lead the development of a novel high-turbulence experimental facility to reproduce realistic wave-breaking turbulence and sea spray generation under controlled laboratory conditions
- Design and implement cutting-edge experimental infrastructure
- Track air bubbles, droplets and particles using high-speed imaging
- Apply aerosol measurement techniques to quantify the emission of micro- and nanoplastics across a wide range of turbulence intensities
- Conduct aerosolization experiments to elucidate microplastic emission mechanisms
- Quantify turbulence-driven microplastic scavenging and emission fluxes
- Work closely with and support the PhD students within the AERIAL consortium
- Collaborate with experimentalists, aerosol scientists and atmospheric modelling teams across the consortium
- Disseminate research results through scientific publications and scientific meetings

Required skills and qualifications

- Doctorate degree/PhD preferably in experimental fluid mechanics, turbulence, multiphase flows, environmental fluid mechanics, aerosol physics or a related field
- Language skills: Excellent written and spoken English
- Strong background in experimental fluid mechanics, turbulence, multiphase flows,

environmental fluid mechanics, aerosol physics or related fields
- Experience with optical diagnostics, image processing, instrumentation or laboratory development
- Scientific programming and data analysis skills

Desirable skills and qualifications

- Experience with high-speed imaging and particle/bubble/droplet tracking
- Experience in aerosol measurement or aerosolization experiments
- Experience in experimental facility development
- Ability to work independently and as part of an interdisciplinary research team
- Willingness to travel for national and international conferences and workshops

Applications can be submitted until: 22nd of September 2026

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.

People with disabilities and appropriate qualifications are specifically encouraged to apply.

Please send your job application incl.

- motivation letter
- CV
- List of publications

to HR Management, BOKU University, Peter-Jordan-Straße 70, 1190 Vienna;
E-Mail: recruiting@boku.ac.at. **(Reference code: 169)**

We regret that we cannot reimburse applicants travel and lodging expenses incurred as part of the selection and hiring process.

www.boku.ac.at