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 170)

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

- Develop data-driven and physics-informed models to upscale experimentally measured micro- and nanoplastic emissions toward regional and global predictions
- Connect laboratory observations with environmental forcing parameters
- Integrate emission parameterizations into atmospheric transport models
- Perform statistical analysis and predictive modelling
- Synthesize large experimental and environmental datasets to constrain marine plastic emission fluxes und er realistic ocean conditions
- Develop and apply approaches for upscaling laboratory measurements to regional and global emission estimates
- Work closely with experimentalists and atmospheric modelling teams across the AERIAL consortium
- Contribute to the development and evaluation of model parameterizations
- Disseminate research results through scientific publications and scientific meetings

Required skills and qualifications

- Doctorate degree/PhD preferably in environmental modelling, turbulence, geophysical flows, atmospheric sciences, data science, machine learning, applied mathematics or a related field
- Language skills: Excellent written and spoken English

- Strong background in one or more of the above fields
- Experience with scientific programming and large-scale data analysis
- Experience with statistical analysis and predictive modelling
- Strong quantitative and analytical skills

Desirable skills and qualifications

- Experience with physics-informed modelling or machine learning
- Experience with atmospheric transport modelling
- Experience working with large experimental and environmental datasets
- Knowledge of marine or atmospheric processes relevant to plastic transport and emissions
- 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: 170)**

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

www.boku.ac.at