

Research assistant (pre-doc) statistical space-time modeling of low flow, stream temperature and water pollution (project employment)

at the

**University of Natural Resources and Life Sciences, Vienna (BOKU), Austria
Institute of Statistics, Environmental statistics group**

OFFER DESCRIPTION

The Department of Landscape, Spatial and Infrastructure Sciences, Institute of Statistics at BOKU University is currently seeking a research assistant (pre-doc) for statistical modeling of low flow and stream temperature and Bayesian modeling of water pollution (project employment).

- 🌱 Starting date: 1.12.2022 (to be confirmed)
- 🌱 Duration: 3 years
- 🌱 Location: 1190 Vienna, Austria
- 🌱 Application deadline: 23.10.2022 (to be confirmed)

Background:

The Austrian Climate Research Programme (ACRP) has approved funding of the project “DIRT”, which aim is to assess the impact of summer low flows on the remobilization of pollutants from river sediments. The analyses are carried out for eastern Austria, where agricultural input and the predicted risk of climate warming on low flow and water temperature are particularly high. The innovative combination of data-based models with laboratory experiments and water quality monitoring will provide an overall assessment of the sediment-related risk of quality impairment along the water network.

Job description:

- 🌱 The research assistant will perform advanced statistical modelling of low flow and stream temperature.
- 🌱 The research will include geostatistical models, statistical learning, and other space-time methods for stream networks. Bayesian methods shall be developed that combine space-time predictions with lab experiments and in-situ monitoring.
- 🌱 The research assistant will work in a team of environmental statisticians with a focus on drought hydrology, in close collaboration with an interdisciplinary consortium of hydrochemists and hydrobiologists. He/she is expected to work towards his/her dissertation project on a project-related topic.

Requirements:

- 🌱 The successful candidate will have a Master (or similar qualification) in statistics, hydrology, water management or a related field of environmental sciences and engineering.

- Profound knowledge of statistical and geostatistical methods of extreme events and their application to environmental processes and data is essential, preferably with experience in water sciences and natural hazards.
- The applicant should have excellent analytical and computer skills and experience in statistical software (R) and Geo Information Systems. Very good skills in English and German (speaking and writing) are necessary, along with the willingness to write scientific papers.

Conditions of employment:

Pre-doc position (30 h/week), duration 3 years according to the "Kollektivvertrag" of the Austrian Universities.

Gross monthly salary and pay grade in terms of collective agreement for university staff (payable 14 times per year): B1, approx. € 2.293,95

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 and CV to Assoc.Prof. Priv.-Doz. DI Dr. Gregor Laaha, gregor.laaha@boku.ac.at.

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

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