



The Bavarian Academy of Sciences and Humanities invites applications for a

Researcher in hydrology (m/f/d)

E 13 TV-L | *(initially)* limited to 2 years | Full Time | Application deadline: 15.12.2022

working in the research group [Geodesy and Glaciology](#).

The BAdW is characterized by innovative long-term research in the humanities and natural sciences. It brings researchers together on an international and interdisciplinary basis, uses its expertise to make an impact on politics and society, promotes young scientists and informs the public about current scientific findings.

At the Academy, the research group for Geodesy and Glaciology deals with questions of glaciology and geodesy in relation to Alpine glaciers and their role in the Earth system, among others. A special focus is laid on the long-term observation of Alpine glaciers and their interaction with the environment (geosphere, hydrology, climate). A considerable part of the work is connected to the glacier Vernagtferner in the southern Ötztal Alps. In addition, other mountain glaciers in the Alps, Northern Europe and Central Asia are investigated by different projects. This new position will strengthen the competence in the field of hydrology, in order to strongly contribute to current questions about the changes of the cryosphere and its environment in the context of climate change. A permanent employment is intended, provided that the necessary research funds are made available.

Responsibilities:

- Analysis and exploitation of local hydrological data, in particular runoff and precipitation measurements, which have been recorded for decades in the Vernagtferner catchment.
- Runoff modelling of high alpine catchments with state-of-the-art numerical models and their improvement with respect to the specific processes of runoff generation in snow and ice.
- Coupling hydrological modelling with numerical ice dynamic models and climatic scenarios to predict future runoff from glaciated catchments.
- Investigation of the influence of glacial runoff and its variation in the immediate glacier environment and in the downstream reach.
- Analysis of the impact of changing hydrological conditions in glaciated catchments, especially for the stability of permafrost and periglacial areas.

Required skills:

- University degree with above-average success and a doctorate in the field of hydrology, preferably with experience in high mountain regions
- Programming skills (e.g. C/C++, Fortran, Python/Matlab)
- Good reporting and presentation skills, including intensive publication activities in international scientific journals
- Excellent level of written and spoken English
- Interest in participating and carrying out field work on glaciers and their surroundings within the framework of the existing observation programme and in the installation/support of new hydrological/glaciological initiatives
- Willingness to raise research funds
- After a transition period, we expect the candidate to communicate in German

We offer:

- An attractive working environment in an internationally renowned team of scientists in high mountain research
- An existing and continuously maintained unique data basis for hydrological data in glaciated catchment areas
- The opportunity to develop your own initiatives and own research approaches, also on the basis of existing research projects in high mountain regions worldwide
- Diverse fields of development and demanding tasks with a high degree of personal responsibility and scope for action
- Professional development through regular and wide-ranging training opportunities

BAdW is a member of the Diversity Charter and is committed to the diversity of its employees. We support the compatibility of work, family and care. Equal opportunities are of particular importance to the Academy. People with disabilities are given preference in employment if they have equivalent qualifications. The Academy is characterized by the diversity of its employees and welcomes applications from all qualified candidates, regardless of age, gender, sexual orientation, religion, ideology or ethnic origin.

Your application:

We look forward to receiving your application documents by 15.12.2022. Please send them as a PDF file (max. 5 MB) to office-keg@badw.de. If you have any questions about the application process or the content, please contact Dr. Christof Völksen (voelksen@badw.de, 089-23031-1272).

With your online application, you confirm that you have read and understood the [information sheet on data protection](#) and consent to the collection of personal data in the context of the application to the Bavarian Academy of Sciences and Humanities.