

Karlsruhe Institute of Technology (KIT) – The Research University in the Helmholtz Association creates and imparts knowledge for the society and the environment. It is our goal to make significant contributions to mastering the global challenges of mankind in the fields of energy, mobility, and information. For this, about 9000 employees of KIT cooperate in a broad range of disciplines in research, academic education, and innovation.

Our **Institute of Meteorology and Climate Research – Atmospheric Environmental Research (IMK-IFU)**, KIT-Campus Alpin in **Garmisch-Partenkirchen, Germany** invites applications for a

### Postdoctoral researcher:

## ‘Modelling ecosystem water demand and drought stress under climate change’

as part of the joint project ‘Biodiversity and Water Economy’ (BioWaWi), funded by the Federal Ministry of Education and Research (BMBF).

**We seek** a motivated and communicative colleague in the Plant Ecophysiology Group (<https://ecophys.imk-ifu.kit.edu>), based in KIT’s Atmospheric Environment Division in Garmisch-Partenkirchen. Your specific role will be to assess ecosystem water demand in a changing climate using the biogeochemistry model LandscapeDNDC. You will be responsible for modelling water and carbon fluxes within selected ecosystems, especially forests, that contribute to the water supply of a particular region in the Rhine valley in Southern Germany. Simulations will be carried out based on climate and management scenarios in order to assess interactions and feedbacks between water extraction and ecosystem development. Modelling setup and results will be closely communicated to stakeholders, and the necessary reports and publications need to be written.

**We offer** to work in a highly collaborative research team, well connected to national and international networks and activities. The KIT-Campus Alpin is located at the foothill of the Alps and offers a multi-disciplinary research environment with excellent research infrastructure and support. Salary and benefits will be according to the Collective Agreements for state employees (TV-L). Appointment is for a period of two years. Salary and benefits will be based on the Collective Agreement for the German Public Service Sector (TV-L EG13). The position is available from **September 2022 for 2 years initially**.

**You will have** a PhD degree in a relevant discipline and strong skills in numerical modelling and coding (e.g., Python, R, C++) as well as analysis of large-scale datasets in the environmental sciences. Experiences with GIS would be an asset. You will need to have proficiency in the English language, both spoken and in writing and preferably a working knowledge of German. Willingness to travel to interact with project partners is required.

**Applications** should be submitted within a single PDF document that includes your CV, publications list, a short (1-2 page) letter of motivation and contact details for 2 referees. The motivation letter should clearly state your computer modelling experience and how your research interests relate to the job specifications provided above.

Please send your application by **30 April 2022 to Dr. Nadine Ruehr** ([nadine.ruehr@kit.edu](mailto:nadine.ruehr@kit.edu)) quoting the reference number **ModEco**.

KIT strives to achieve gender balance at all levels of employment. We therefore particularly encourage female candidates to apply for this position. With appropriate qualifications, applications from persons with handicaps are treated preferentially.