

PhD position at KIT within the project “Current and future precipitation behaviour and its influence on water chemistry in the northern Black Forest (Germany).”

The Karlsruhe Institute of Technology (KIT) is a distinguished research university that combines three core tasks – research, education and innovation – into a single mission. With 9,300 employees and almost 25,000 students, it is one of the largest institutions of research and higher education in natural sciences and engineering in Europe. KIT was awarded the title "University of Excellence" within the German Excellence Strategy launched by the federal and state governments on 19 July 2019. In the area of Atmospheric Science, KIT is ranked #1 in Germany by the Shanghai Ranking.

The Institute of Meteorology and Climate Research - Troposphere Research (IMKTRO) will participate in the BMBF-funded transdisciplinary consortia project “Sustainable water management for municipal water suppliers in times of climate change” in the sub-project “Current and future precipitation behaviour and its influence on water chemistry”. The meteorological research tasks will be carried out by the PhD affiliated to KIT-IMKTRO, while the aspects on water chemistry will be covered by a PhD from KIT-AGW (Institute for Applied Geoscience).

We have one open (meteorological) PhD position for 3 years

Within the Ph.D. project, automated weather stations will be deployed and maintained in the Northern Black forest region together with the KIT-AGW Ph.D. Using their rainfall data and gauge rainfall from various other sources, as well as high-resolution numerical model output, the quality of the operational DWD RADLON gridded rainfall products for high-resolution rainfall monitoring in the study region will be assessed. Furthermore, the skill of freely available raw and postprocessed DWD medium-range ICON ensemble forecast will be evaluated for extreme precipitation events. Existing convection-permitting climate projections will be examined with regard to future extreme dry periods and extreme precipitation events. Monitoring and prediction tools shall be developed that will be transferred to waterworks in the study region, which are partners in the project.

The KIT PIs are Profs. Dr. Andreas Fink and Prof. Dr. Joaquim Pinto.

Requirements: A MSc in Meteorology, Climate Science, Earth Sciences, or related disciplines. The applicant must be proficient in spoken and written English.

Additional qualifications: Experience in statistics, extreme event diagnostics and scientific programming (e.g., python, R, fortran, cdo, Matlab) are required. Ideally experience with global or regional models, weather prediction and forecast verification is available. German language skills are helpful but not mandatory.

The application should contain (all in one PDF):

- A Curriculum Vitae.
- A cover letter stating your scientific interests and what motivates you to apply for this position.
- A list of scientific publications.
- Contact details (incl. email and telephone number) of two references.

The candidates will be short-listed based on the materials in the application, the top ranked candidates will be interviewed digitally and the references will be collected.

Salary: The remuneration is based on the collective agreement of the public service in the remuneration group TVL E13.

Starting date: 01-06-2025 or as otherwise agreed.

Terms and conditions of employment: IMKTRO is based on the two research campuses of KIT; the Ph.D. will be working at Campus South which is near the city centre of Karlsruhe.

Scope of employment: 3-years PhD student 75%

For further information about this position please contact: Andreas Fink (andreas.fink@kit.edu) and Joaquim Pinto (joaquim.pinto@kit.edu)

Please e-mail the documents requested above for the application all in one pdf file by **15 April 2025** to the above mentioned PIs.

KIT actively supports equality, diversity and inclusion, and as an equal opportunity employer, KIT explicitly encourages applications from women as well as from all others who will bring additional diversity to the university's research and teaching. Applicants with disabilities will be preferentially considered if suitably qualified.

Are you considering moving to Germany to work at KIT? If so, you will find a lot of information about working and living in Germany at <http://www.intl.kit.edu/ischolar/index.php>. You are also welcome to contact the International Scholars & Welcome Office at scholar@intl.kit.edu.