Post-Doc position at KIT in modelling extreme precipitation in a warming climate with ICON (SCENIC).

Karlsruhe Institute of Technology (KIT), Institute of Meteorology and Climate Research

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 was ranked #1 in Germany and #8 worldwide in the 2019 Shanghai Ranking.

The Institute of Meteorology and Climate Research (IMK) participates in the KIT Centers "Climate and Environment" and "MathSEE (Mathematics in Sciences, Engineering, and Economics)" and contributes significantly to the program "Changing Earth" of the Helmholtz Association. The department "Troposphere Research" IMK-TRO (http://www.imk-tro.kit.edu/english/index.php) focuses on troposphere research, climate variability and change, water cycle and trace substance budgets. The Working Group "Regional Climate and Weather Hazards" (http://www.imk-tro.kit.edu/english/7144.php) focuses on an integrated analysis of extreme weather and climate events, climate change, climate variability and risk assessment. This includes both fundamental and applied research. Particular attention is given to the links between the weather, climate, regionalisation and risk assessment perspectives associated with extreme events.

We have an open 2 year position for a postdoctoral candidate.

**Duties:** As a Post-Doc, you will analyse characteristics of extreme precipitation in a warmer climate based on a storyline approach. The candidate will conduct simulations with the regional ICON model using boundary conditions from global storyline experiments with and without ‘upper boundary nudging’ for extreme precipitation events over Europe and evaluate the results. The aim is to achieve a better understanding of possible changes in the frequency, intensity and persistence of extreme precipitation in Europe in a warmer climate. Additionally, a close collaboration with the other partner in the SCENIC consortium is expected.

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

**Additional qualifications:** For this position, extensive experience with diagnostics of model data, statistics, extreme events are required. Previous experience with numerical modelling is required. Experience with ICON would be advantageous. The candidate should also be experienced in scientific programming (e.g., linux, python, fortran, ncl, cdo, Matlab, R). German language skills are helpful but not mandatory.

**The application should contain:**

- 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: As soon as possible

Terms and conditions of employment: The group is based on the research campus of KIT located about 10 km to the North of Karlsruhe city centre.

Scope of employment: 100%

For further information about this position please contact: Prof. Dr. Joaquim Pinto, e-mail: joaquim.pinto@kit.edu, and Dr. Patrick Ludwig, e-mail: patrick.ludwig@kit.edu

Please submit your application by 14 April 2023 online: https://www.pse.kit.edu/english/karriere/joboffer.php?id=132234

Position Nr. 217/2023

The documents requested above for the application should be put together in a single PDF file and uploaded under “Complete Application Documents” in the online form.

(Note: The text on the first Website is in German language but when you click on the “apply” button, you will be forwarded to an English language online form)

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.