

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.

For our **Institute of Meteorology and Climate Research - Atmospheric Environmental Research (IMK-IFU)**, Working Group “Atmospheric Variability and Trends”, Campus Alpin in Garmisch-Partenkirchen, Germany, we are looking for a

Postdoc (physics/chemistry/meteorology) (m/f/d)

Atmospheric Sciences/Trace Gases FTIR Remote Sensing

We offer:

Payment in accordance with the German public service (TV-L E13). Duration of the contract will be for 2 years, with the option of extension.

Research Field:

The “Atmospheric Variability and Trends” Research Group is founded in the field of atmospheric chemistry and physics. Our team operates the triple midlatitude site - Zugspitze (2964 m a.s.l.), Schneefernerhaus (2650 m a.s.l.) and Garmisch-Partenkirchen (734 m a.s.l.) - which is one of the best-equipped atmospheric observation facilities on the globe. Using up-looking optical soundings along with numerical models for data analysis, we address some of the big questions in climate sciences.

Currently we perform a substantial upgrade of our activities in solar FTIR spectrometry of atmospheric trace gases (reactive trace gases, ozone relevant trace gases, and greenhouse gases). The goal is to operate 4 solar FTIR spectrometers in parallel at the FTIR sites Zugspitze and Garmisch: Two instruments will be part of the global „Network of the Detection of Atmospheric Composition Change” (NDACC), and another two instruments contribute to the “Total Column Observing Network” (TCCON). At the same time, these measurement activities form a “National Facility” of the European Research Infrastructure „ACTRIS” (Aerosols, Clouds and Trace Gases Research Infrastructure).

Team:

You will perform your work as part of a team of scientists and engineers skilled in the fields of physics, chemistry, meteorology, optoelectronics, and IT. The team is highly integrated in the national and international science community.

Your tasks:

- Contribute to the build-up of two new solar FTIR spectrometers (Bruker IFS 125 HR)
- Develop/optimize retrieval strategies for columns and profiles of various trace gases from FTIR measurements
- Analyze the long-term measurement series
- Publish the scientific results

Your skills:

- PhD in Physics, Chemistry, or Meteorology
- Above average publication record from your earlier research

- Advanced programming skills in Python or similar
- Dedicated interest in Atmospheric Sciences and attitude for permanent self-learning
- Having fun in disentangling scientific problems
- High skills in communicating within a team
- Work in a structured and autonomous way
- Fluent in spoken and written English language

Applications should be sent by email as one pdf file to PD Dr. Ralf Sussmann (ralf.sussmann[at]kit.edu) and should include a detailed CV and two contacts for references as well as a statement addressing your specific interest, motivation and qualifications for the position.

The application will remain open until a suitable candidate has been found.

We prefer to balance the number of employees (f/m/d). Therefore, we kindly ask female applicants to apply for this job. Recognized severely disabled persons will be preferred if they are equally qualified.

Start of application phase: 24.01.2023