



The Institute of Environmental Physics (IUP) at the University of Bremen offers a

3-year PhD position (f/m/d)

German federal pay scale E13 TV-L (75%) in the research area

Research for an integrated Greenhouse Gas (GHG) monitoring system (via satellite CO₂ observations)

The time limitation is subject to the scientific qualification according to the Act of Academic Fixed-Term Contract, §2 (1) (WissZeitVG – Wissenschaftszeitvertrags-gesetz). Therefore, candidates may only be considered if they dispose of the respective scope of qualification periods according to §2 (1) WissZeitVG.

Emissions of the greenhouse gas carbon dioxide (CO₂) are the primary cause of man-made climate change. Satellites are used to measure the global distribution of atmospheric CO₂. The department "Physics and Chemistry of the Atmosphere" of the Institute of Environmental Physics (IUP) of the University of Bremen is a leading international research group in this field (http://www.iup.uni-bremen.de/carbon_ghg/). At the end of 2019, the European Space Agency ESA decided to implement the CarbonSat concept proposed by the University of Bremen. The planned Copernicus CO2M mission is to be launched in 2025. We are preparing for CO2M using existing satellite data. For this purpose, we are looking for a committed young scientist to determine CO₂ emissions from OCO-2 and OCO-3 CO₂ satellite data (see <https://www.atmos-chem-phys.net/19/9371/2019/>). The research work is part of the project RiGHGorous of the German Weather Service (DWD) and is carried out in cooperation with the Max-Planck-Institute for Biogeochemistry (MPI-BGC).

Requirements:

- A M.Sc. degree or equivalent in physics, geophysics, meteorology etc. with a grade point average better than B (English grade) or 2.0 (German grade).
- Very good knowledge in at least one of the following areas: satellite remote sensing, radiative transfer, inversion theory, numerical modelling of complex systems
- Very good programming skills in at least one high level programming language (ideally Python) and good knowledge of Linux (including shell scripting)
- A strong interest to work in the field of satellite remote sensing of the atmosphere
- Good communication skills as cooperation with various European partners is required
- Very good knowledge of the English and German languages in writing and speaking (if German is not your mother tongue, please provide proof of at least level B1)

The Institute of Environmental Physics provides a stimulating, international, and pleasant work environment and is very well connected with the international research community. As the University of Bremen intends to increase the proportion of female employees in science, women are particularly encouraged to apply. In case of equal personal aptitudes and qualification priority will be given to disabled persons.

For questions concerning the research project:

Dr. Michael Buchwitz, Tel. +49 421 218 62086, buchwitz@uni-bremen.de

See also for general information on this topic: http://www.iup.uni-bremen.de/carbon_ghg

Please explicitly address each of the specified requirements in the application. Please send your application documents (cover letter, CV, and copy of your degree certificates including high school) until **April 1st, 2020** by indicating the **job id A51/20** to:

University of Bremen FB1
Institute of Environmental Physics
Secretary of Prof. J.P. Burrows
Mrs Stephanie Drath
Otto-Hahn-Allee 1
D-28359 Bremen

or (as a single PDF file) by e-mail: sdrath@iup.physik.uni-bremen.de Tel.: +49 421 218 62101.

For applicants wishing to send your applicants by surface mail, please send us your application on plain paper (no folders) and do not send us original certificates as we are not able to return your applications.