

The Institute of Environmental Physics (IUP) at the University of Bremen offers - under the condition of job release - at the earliest possible date a

3-year PhD position (f/m/d)
German federal pay scale E13 TV-L (65 %)

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.

The Atmospheric Chemistry and Physics branch of IUP (led by Prof. John P. Burrows) has an internationally recognized expertise in atmospheric research. One key focus of our research is the development and use of the satellite remote sensing of atmospheric constituents. The vacant research position addresses the study of small-scale changes in the composition of the Arctic stratosphere and troposphere and is part of a joint project Synopsys funded by the German Ministry of Education and Research (BMBF), addressing the understanding of dynamical processes in the coupled troposphere-stratosphere system. The candidate will use measurements of the scattered solar electromagnetic radiation in the limb and nadir viewing geometries made by the Ozone Mapping Profiler Suite limb profiler (OMPS-LP) on the joint NASA/NOAA Suomi National Polar-orbiting Partnership (Suomi NP) and by the TROPOspheric Monitoring Instrument (TROPOMI) on the Copernicus Sentinel-5 Precursor mission. Furthermore, existing ozone data sets, mainly from the Microwave Limb Sounder (MLS) and Infrared Atmospheric Sounding Interferometer (IASI), will be explored. Specific research tasks are: i) the assessment of the quality and potential improvements in terms of accuracy and spatial resolution in existing ozone retrievals in the Arctic lower stratosphere and upper troposphere (UTLS), ii) the development and application of an automatic diagnostics for the detection of synoptic events by using ozone data fields, and iii) the investigation of interaction processes between the stratosphere and the troposphere in the Arctic based on ozone and reanalysis data.

Prerequisites:

- M.Sc. degree or equivalent in physics, astronomy, or meteorology with a grade point average equal or better than B (English grade) or 2.0 (German grade)
- excellent expertise in at least one of the following areas: physics of the Earth's atmosphere, satellite remote sensing, radiative transfer modelling, stratospheric ozone, retrieval of atmospheric parameters from remote sensing measurements
- good programming skills in a high level programming language
- a good command of written and spoken English (level B2)

The Institute of Environmental Physics provides a stimulating environment to work in that is well connected to the international research community.

The University has received several awards for its gender equality policy. Female candidates are explicitly encouraged to apply. Applicants with a severe handicap will be given priority if they have essentially the same technical and personal qualification. Applicants with a migrant status are particularly invited to apply for this position.

Applicants with disabilities will be preferred over other applicants with equivalent qualifications.

Please send us your application, comprising of a cover letter, expressing your motivation, curriculum vitae, list of names of two scientific referees, being willing to provide a reference letter upon request, and a copy of your degree certificates (high school, BSc, and MSc) until **December 9, 2020**, by indicating the **job id A268/20** to:

Institute of Environmental Physics
Universität Bremen FB1
Stephanie Drath (Sekretariat Prof. Burrows)
Otto-Hahn-Allee 1
D-28359 Bremen
Germany

or by e-mail to: sdrath@iup.physik.uni-bremen.de with cc to: weber@uni-bremen.de (Dr. Mark Weber) and alex@iup.physik.uni-bremen.de (Dr. Alexei Rozanov)

For applicants wishing to send 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 application.

If you have questions concerning this research opportunity please contact Drs. M. Weber (weber@uni-bremen.de) and/or Alexei Rozanov (alex@iup.physik.uni-bremen.de).

Veröffentlichung:

-Uni HP 05.11.2020

Bewerbungsschluss:

09.12.2020

Kopie an:

- K
- FB
- Dez. 2
- PR
- Zentrale Frauenbeauftragte
- Vertrauensfrau d. Schwerbehinderten