

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

Three 3-year PhD positions
German pay scale: E13 TV-L 50%

The Atmospheric Chemistry and Physics branch of IUP (headed by Prof. John P. Burrows) has a long standing experience in the fields of satellite remote sensing of atmospheric trace gases. In preparation of new satellite missions (ESA Sentinel 5 Precursor) and in continuation of already existing data sets from GOME-1 (1995-2011), SCIAMACHY (2002-2012), and GOME-2 aboard Metop-A (2007-present) and Metop-B (2012-present), the main tasks are the development of new data analysis schemes to derive tropospheric ozone, ozone profiles as well as water vapour distributions. Apart from advancing the data analysis methods as applied to existing sensors, adaptations of our retrieval algorithm to new satellite missions like Sentinel 5P (launch in 2017), and Sentinels 4 and 5 (launch in ~2020) are targeted. The new data sets will be validated w.r.t. other satellite data and direct atmospheric measurements. The goal is to combine the various satellite data sets to obtain a consistent long-term dataset for research on long term trends and climate interactions.

Prerequisites for this position are:

- A 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: astrophysics, satellite remote sensing, radiation transfer, inversion theory, and computer science
- good programming skills in at least one high level programming language
- good command of English in writing and speaking (level B2)

The Institute of Environmental Physics provides a stimulating work environment that is very well connected within the international research community. The opportunity of scientific qualification and graduation are given.

As a winner of the Total-E-Quality Science Award the University of Bremen strives for increasing the number of females in science, therefore women are explicitly encouraged to apply. Applicants with a migratory background are highly welcome.

Disabled candidates will receive preferred consideration over mainly equally qualified contenders.

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

Please indicate in your application which research theme you are interested in (trop. ozone, ozone profiling, water vapour) and send your application (cover letter, cv, and copy of your degree certificates) until 02.12.2016 by indicating the job id **A270/16** to:

Secretary of Prof. J.P. Burrows
Mrs S. Drath
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Questions concerning *trop. ozone*:

Dr. Annette Ladstätter-Weißmayer, Tel. +49 421 218 62105
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Questions concerning ozone:

Dr. Mark Weber, Tel. +49 421 218 62080
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Questions concerning water vapour:

Dr. Stefan Noël, Tel. +49 421 218 62090
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Electronic applications (possibly in a single PDF file) are preferred.

Paper-based applications are only required as a copy (no folders); they will be destroyed after closure of the application procedure.