

**The Faculty 1 / Institute of Environmental Physics (IUP)  
at the University of Bremen offers  
- under the condition of job release - as soon as possible -**

**a 3-year Post-Doctoral position  
German pay scale: E13 TV-L 100%**

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.

The Laboratory for Modeling and Observation of the Earth System (LAMOS, headed by Prof. Mihalis Vrekoussis) is seeking to hire a qualified and motivated post-doctoral researcher to enhance our understanding of the transport and transformation pathways of air pollution.

LAMOS is the most recent branch of the internationally renowned Institute of Environmental Physics (IUP) (<http://www.iup.uni-bremen.de/lamos>, <http://www.iup.uni-bremen.de/eng>) of the University of Bremen (UB). The overarching scientific goal of LAMOS is to improve our understanding of the complex atmospheric processes controlling the atmospheric lifetime and fate of key pollutants, including emission fluxes, transport and transformation mechanisms, and removal pathways.

The successful Post-Doctoral scholar will work on atmospheric dispersion modeling of trace pollutants in the following fields;

- a) Climatology of pollution pathways originating from urban agglomerations;
- b) Greenhouse gas emissions' estimates using state-of-the-art observations and backward in time Lagrangian simulations.

**The field of activities cover:**

**Research:** Design and execution of relevant studies in the two proposed fields of interest with the use of i) the Lagrangian FLEXPART model and ii) the coupled FLEXPART-WRF model. These tools will be additionally used in the interpretation of in-house in situ and remote-based observations.

**Education:** Besides the scientific research work, this post includes educational tasks in the form of lectures and supervision of Master and Ph.D. students.

**Prerequisites:**

- Ph.D. degree in the field of atmospheric computational sciences such as physics, chemistry, mathematics, computer science, or any other relevant field.

- Proven experience in atmospheric dispersion modeling.
- Good/excellent knowledge of programming in Python or R
- Experience in evaluating model output based on observational datasets.
- Strong Linux/Unix knowledge.
- Proven publication record in atmospheric modeling.

**Additional (desired) skills**

- Experience in working with satellite datasets (analysis and visualization).
- Hands-on experience with the WRF model.
- Established international collaborations
- Experience in external fundraising;
- Experience in teaching.

As a winner of the Total-E-Quality Science Award, the University of Bremen strives to increase 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.

**Contact information:****Questions concerning scientific issues:**

Prof. Dr. Mihalis Vrekoussis, [mvrekous@uni-bremen.de](mailto:mvrekous@uni-bremen.de)

Please send your application (cover letter, cv, and copy of your degree certificates) until **15.08.2020** by indicating the job id **A180/20** to:

**University of Bremen / FB1**

**Secretary of Prof. Vrekoussis**

**Mrs. P. Renken (NW1- S 3130)**

**Otto-Hahn-Allee 1**

**D-28359 Bremen**

**Germany**

or by e-mail to Mrs. Renken: [prenken@uni-bremen.de](mailto:prenken@uni-bremen.de)

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 the closure of the application procedure.

**Date of announcement 20.07.2020**