



Leibniz Institute for
Tropospheric Research

PhD student position (m, f, div)

The Leibniz Institute for Tropospheric Research is a research institute of the Leibniz Association and an internationally renowned institute in the field of aerosol and cloud research.

The position is part of the project "A risk index for health effects of mineral dust and associated microbes" (DUSKRISK) lead by TROPOS (<https://www.tropos.de>) and funded for 3 years through the Leibniz Association. The project part related to the PhD position aims at assessing the dust life cycle from the sources in Northern Africa to the Cape Verde Islands. The work will use a complementary approach of modelling and lidar measurements.

Tasks:

- Improvement of the dust emission schema implemented in a coupled aerosol-atmosphere model.
- Run an aerosol lidar during two intensive observational campaigns at Cape Verde.
- Processing and evaluation of the lidar and modelling analysis.
- Using the model data for source apportion and determination of transport pathways, atmospheric processes during transport, and dust optical and mineralogical properties over Cape Verde.
- Using the lidar data for distinguishing between the dust and the non-dust fraction in vertical particle profiles, validating the model output, estimating the downward flux of dust particles, and determining the vertical structure of the planetary boundary layer.

Qualifications:

Applicants must have a University Master degree in atmospheric physics, meteorology, physics or related environmental science disciplines. Experiences in programming, model application, data processing, and experimental work are advantageous. Fluent English in written and oral form is mandatory.

Further questions regarding the project can be emailed to Kerstin Schepanski (schepanski@tropos.de) and Dietrich Althausen (dietrich@tropos.de).

The position will start ideally on **1 May 2020** and is limited to three years **until 30 April 2023**.

We are offering the possibility to work in an interdisciplinary team and a wide range of career and family options as well as flexible working hours and children daycare places. The employment is temporary and includes a part-time position of 26 hours/week. The salary level is according to the German public service regulation (65% TV-L 13) including the attractive social benefits of the public sector. In order to increase the proportion of female employees in scientific and academic positions, we hereby specifically invite female candidates to apply. People with severe disabilities have priority in their recruitment if they have the same aptitude, aptitude and professional qualifications.

If you are interested, please send your complete and meaningful application (including letter of motivation, curriculum vitae, certificates, and contact details of 2 references) by **15 February 2020** exclusively by e-mail in one PDF document:

bewerbung@tropos.de

By submitting the application documents by e-mail, the applicant agrees to the storage/processing of personal data in accordance with Art. 13 DSGVO for the purpose of selecting applicants for this job advertisement. The risks involved in sending documents electronically are hereby pointed out.