

Philipps



Universität
Marburg

The Faculty of Geography, Department of Hydrology and Soil Science, is offering

One Doctoral Stipend

commencing as soon as possible. The stipend, which is financed by resources from the internationalization fund of the University of Marburg, is aimed at providing young foreign scientists with an opportunity to carry out research and continue their education in Germany. The initial duration is for one year, extension is contingent on satisfactory performance and availability of funding.

Research in **Hydrology and Soil Science** at the Faculty of Geography seeks to deepen the interactions between basic and applied research in various thematic directions. Junior researchers applying for the stipend should be interested in one of the three following research fields: **1) Lake Catchments Interaction**, **2) Soil Degradation and Desertification**, or **3) Environmental Effects of Dust Deposition**.

Prof. Opp's team is interested in detection and analyses of key algorithms to characterize **lake catchment interactions (1)** both in general and in lakes and lake catchments within semi-arid areas. Lake desiccations caused by climate change and/or anthropogenic activities are of special importance due to their numerous ecological and socio-economic consequences. Until now the regional research focus has been located in the semiarid and arid areas in Asia. In recent years lake catchment research projects have been carried out in Central Asia, Northwest China and Iran. Applicants with experience in remote sensing techniques and data access to governmental and non-governmental authorities are especially encouraged to apply.

Soil degradation and desertification (2) caused by natural disposition and land use practices in Central Asia and Mongolia are another research focus of Prof. Opp's team. New PhD studies could be located in that region, but also in other research areas. Among the soil degradation processes, soil contamination by heavy metals and/or soil salinization are the focus of research. Applicants should have experience both in field and laboratory analyses. In our research team we use traditional soil analyses for determining soil standard data as well as MS-ICP analyses to determine elemental concentrations.

Based on the analysis of the spatial and temporal differentiation of dust deposition it is designated to study the **environmental effects of dust depositions (3)** in semi-arid and arid areas in this third, optional PhD research project. Environmental effects can also include effects on human health. It is possible to continue last year's research projects in Central Asia or ongoing dust projects in Iran. Applicants with experience in field and laboratory research and applicants from countries affected by aeolian dust transport will receive highest priority.

Applications should include the following: motivation letter (in English, no longer than one page), curriculum vitae (in English), a summary of your master thesis (in English, no longer than one page), PhD project exposé, including data availability, study area and partner organization in your home country, two recent letters of reference (in English or German) and copies of earned degrees (including copy of higher education entrance qualification, in English or German).

Further information is available at: <https://www.uni-marburg.de/fb19/fachgebiete/bodengeographie/oppc/forschung>

The job profile also involves publishing in international scientific journals and presenting results at international conferences.

We seek applicants with a diploma or a master's degree in Geography, Geosciences, Environmental Studies or a related field with a strong background in Physical Geography. For Prof. Opp's team, a solid foundation in field and laboratory analyses and strong statistical skills is expected; experience in remote sensing, GIS and data analyses is desirable.

We strongly encourage women to apply, and applicants with children are welcome - the Universität Marburg is certified as a family-friendly university. Sharing a full-time position (§ 8 Abs. 2 Satz 1 HGLG) as well as a reduction of working hours is possible. Applicants with a disability as described in SGB IX (§2 Abs. 2, 3) will receive preferential consideration in the event of equal qualifications.

As the documents will not be returned after end of the selection procedure, please do not send originals. Application and interview costs cannot be refunded

Please submit your application electronically as a single PDF file to mid@uni-marburg.de with "FB19-Stipend" as your subject line. Be sure to include the registration number 01/17. Applications must be received no later than 20th February 2017.