Universität Potsdam
Institut für Erd- und Umweltwissenschaften

Applications are invited for one position (funded by the German Ministry for Education and Research BMBF) at the Institute for Earth and Environmental Sciences, University of Potsdam:

Academic Staff Member (Research scientist - PhD candidate): Requ. No: 108/2017

The position is for 30 hours of work per week (75%) Salary scale**:** TVL 13-Ost)

The contract is limited to 3 years, in accordance with Academic Fixed-Term Contract Law (WissZeitVG). and will commence at (or later, by agreement):

March 15, 2017

The position is embedded in the BMBF-funded research consortium

Seasonal Water Resources Management in Semiarid Regions: Application-oriented Transfer of Regionalized Global Information (SaWaM)

The overall goal is to develop and analyze methods and tools for application-oriented water management in data-sparse semi-arid regions. Seven German scientific partners and two companies are employing a regional focus on dryland regions, such as Sudan, Iran, Brazil, Ecuador/Peru, and West Africa. Our temporal scale covers past decades until today and for an operational forecast mode it will address the upcoming 1-12 months. SaWaM employs models for seasonal forecasting, water availability, sedimentation processes, and ecosystem states. Models are complemented by satellite-borne methods.

The main working tasks for the PhD candidate at University of Potsdam are:

- Adaptation of a hydro-sedimentological modeling-system for the upper meso-scale and its extension regarding processes and measures of water management. This includes water transfer, specific management of reservoirs, and water abstraction and various scales;
- Basin-wide simulation of hydro-sedimentological processes for selected regions, and further applications for seasonal predictions and different options for water management strategies.

Required qualifications:

- Master's degree in geoecology, hydrology, water management, engineering or similar;
- Experience and commitment to engage in activities of the above mentioned methods, including participation in close co-operation with international partners;
- Solid programming skills, preferably Fortran or C and R;
- Experience with hydrological models, erosion approaches and hydro-climatol. data-analysis;
- Good command of English and German languages, willingness to travel and/or stays abroad;
- Willingness to work in an interdisciplinary team, including co-operations with international universities, hydro-environmental consultant, governmental and non-governmental agencies.

The University of Potsdam strives to maintain gender balance among its staff. Severely disabled applicants shall receive preference in case of equal qualifications. Full applications should be sent, **preferably by Email, by 05.03.2017** at the latest, to:

Universität Potsdam, Institut für Erd- und Umweltwissenschaften
Karl-Liebknecht-Straße 24-25, 14476 Potsdam, Germany
att. Prof. A. Bronstert (*Email: axelbron@uni-potsdam.de*)

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Bundesministerium für Bildung und Forschung

Potsdam, 16 February 2017