

PhD position at the Freie Universität Berlin Modelling impacts of plant traits on ecohydrological feedbacks in savannas

We are looking for a highly motivated biologist, ecologist, hydrologist, environmental scientist, system scientist or researcher from a related field for a PhD position in the group Biodiversity and Ecological Modelling at the Freie Universität Berlin.

The project is part of a German-Namibian cooperative research cluster OPTIMASS coordinated by the University of Potsdam that aims to study options for sustainable geo-biosphere feedback management in savanna systems under regional and global change. The objectives of our subproject are to quantify eco-hydrological feedbacks and species-specific vegetation responses to water stress and CO₂ in different Namibian savannas. For this, the PhD student will extent the process-basede, spatially explicity savanna model EcoHyD in close cooperation with empirical researchers. This model extension includes several tasks that are related to plant traits that determine plant responses to their environment and how they change during their life cycle. In addition, the description of ecohydrological feedbacks should be improved and compared to empirical data.

The extended model will then be used to assess the impact of plant composition on ecohydrological processes. This will help us to evaluate the impact different land management strategies on ecosystem functions and services.

For further information please contact Britta Tietjen (britta.tietjen@fu-berlin.de).

Applicants for the PhD position must hold a M.Sc. or equivalent degreee in biology, ecoloy, environmental scienses, hydrology, system science or a related field. The applicant should have sound knowledge in one or more of the following areas:

functional ecology, ecological modelling, dryland ecology or hydrology (the latter with a focus on plant-water-interactions). The applicant should have experience in programming (EcoHyD is written in C++, but knowledge in other programming languages are also helpful) and should be motivated to work in an interdisciplinary field and to travel to Namibia once a year.

The position is scheduled for 3 years with an anticipated starting date in September 2014 or later. Payment is according to the German public tariff (65% TV-L E13). Filling of the position and stating date are still conditional on the formal approval by the funding agency.

Applications should be submitted via email, and preferrably as single pdf-file to Prof. Dr. Britta Tietjen, Biodiversity and Ecological Modelling, Freie Universität Berlin: britta.tietjen@fu-berlin.de). Applications should include a letter of motivation, a CV, transcripts or degree certificates including grades and proofs of special qualifications. The applicant should arrange for one or two letters of reference to be sent to the above email address. The Freie Universität Berlin is an equal opportunity employer and specifically encourages female candidates to apply. Disabled persons will be preferred in case of equal qualification.