Max Planck Institute for Biogeochemistry

Zertifikat seit 2006 audit berufundfamilie

Emmy Noether-Programm

DFG Deutsche Forschungsgemeinschaft

PostDoc opportunity at MPI-Biogeochemistry Jena/Germany; starting spring 2018

Supporting water resources management in a changing climate

Land surface hydrology acts at the interface between soil, vegetation, and atmosphere, and therefore impacts food production, water availability, and extreme events such as droughts and floods. The interactions between land hydrology, vegetation, and society are not entirely understood - in particular, it is unclear how these are affected by global warming and societal developments.

In the context of this Emmy Noether project **we seek a motivated PostDoc to analyze hydrological impacts on vegetation and society to derive guidance to agricultural and water resources management.** Specifically, the research goals comprise (1) to test how hydrological forecasts can improve irrigation management, (2) to analyze hydrological long-term trends in past and present time periods to guide long-term adaptation measures, and (3) to investigate magnitude-frequency patterns of extreme events such as droughts and floods and to relate them to actual observed (monetary) damages. Further, the significance of climate and societal changes for these topics will be analyzed. While the PostDoc should contribute to the project there is some flexibility in terms of topics and approaches; he/she is expected to contribute own ideas.

The successful candidate will work with Dr. Rene Orth within the **new research group on hydrology-climate-biosphere interactions**. The group is embedded in the Department of Biogeochemical Integration at the Max Planck Institute for Biogeochemistry in Jena with its vibrant research environment which encompasses experimental and theoretical work on the role of the biogeochemical cycles of carbon, nutrients and water in the Earth system. The PostDoc will collaborate with national and international partners, and attend workshops and conferences.

The ideal candidate should be well-motivated and have

- a PhD in climate science (or related)
- Experience in statistical analysis and climate modelling (using R, Phyton, Fortran, etc.)
- Strong written and oral communication skills (demonstrated through peer-reviewed publications, conference talks, etc.)

This position is initially for **2 years (with the possibility of extension) with a gross annual salary of at least €50'000 based on a full-time employment (TVöD E14)**. The position is expected to start in spring 2018. Part-time employment with 80% workload is possible.

Please send your application to *rene.orth@bgc-jena.mpg.de* It should contain *(1) your CV, (2) publication list, (3) statement of motivation and research interests including how these would fit within the project (2 pages max), and (4) names and contact details of three referee persons*.

Review of applications will start on 12 February; good applications may also be considered after that date if the position is not yet filled. In the case of any questions, do not hesitate to contact *rene.orth@bgc-jena.mpg.de*

The Max Planck Society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals. The Max Planck Society seeks to increase the number of women in those areas where they are underrepresented and therefore explicitly encourages women to apply.