

A PhD position is available for 3 years in the working group of PD Dr. Alexander Wacker, Ecology and Ecosystem Modelling at the University of Potsdam. The project is funded by the German Research Foundation and will address the following theme:

### **Phytoplankton biodiversity and food quality effects in herbivore zooplankton**

The project shall significantly contribute to a better understanding if and how food webs respond to changes in biodiversity in their producer species. We are particularly interested how biodiversity responds to environmental factors (climate change, e.g. light and temperature), and how such response alters the utilization of essential mineral and biochemical nutrients by aquatic consumers. This knowledge will improve our understanding of the response of consumers to changing environmental conditions and accompanied losses in species richness. The work comprises mainly laboratory experiments with phytoplankton communities and *Daphnia* as a consumer, <sup>14</sup>C-radio-labelling and chemical and biochemical analyses of nutrients and essential lipids.

Candidates should hold an above average Master's degree in Ecology and should have a strong background and interest in conceptual plankton ecology and statistics. Additional experience in culturing of daphnids and/or phytoplankton, phytoplankton taxonomy, chemical analyses and statistical computing (e.g. R) are highly welcomed as well.

Our working group provides an active and stimulating research environment that is leading in the recognition of basic regularities in food webs and a mechanistic understanding of the function of food webs and their communities, with an expertise in nutritional ecology and co-limitation. The successful candidate is invited to actively participate in the Potsdam Graduate School UPGrade which offers e.g. an education program on ecological modelling and on different ecological and evolutionary aspects of the response of populations, species, and communities to global climate change. Potsdam is an attractive town of about 170,000 inhabitants. It is UNESCO world heritage and together with Berlin close-by covers a broad spectrum of all kinds of cultural activities.

Applications in electronic form, preferably in pdf-format, should be send as soon as possible and should include a cover letter, a detailed curriculum vitae stating the pre-knowledge in the relevant fields, copies of degree certificates, and names and contact information of two references to [alexander.wacker@uni-potsdam.de](mailto:alexander.wacker@uni-potsdam.de). Review of applications will begin February 3<sup>rd</sup> 2014 and will continue until position is filled. For more specific information see also the web pages//publications:

<http://www.uni-potsdam.de/ibb/arbeitsgruppen/juniorprofessuren/theoretische-aquatische-oekologie.html>