



PhD scholarship from the DAAD Graduate School Scholarship Programme

Call for applications for a **PhD scholarship** (4 Years) integrated in the Research Training Group R3 at the University of Konstanz.

The **Research Training Group R3 - Resilience of Lake Ecosystems** at the University of Konstanz studies the response of aquatic ecosystems, and their resilience and reversibility to changing abiotic and biotic conditions, using Lake Constance as model system. Lake Constance, one of the best-studied lakes in the world, is perfectly suited for this, as the lake has been affected by a multitude of environmental stressors (e.g. eutrophication, climate change, neobiota) within the last century. Eutrophication, the stressor of main concern during the 1960s to 1980s, has been removed successfully, but its immediate and long-term consequences for the ecosystem, as well as the mechanisms inducing changes, are not well understood. Within the Research Training Group R3, a diverse group of doctoral researchers is investigating the response of community structure, biological interactions and carbon and nutrient flows to changing conditions in Lake Constance.

More information can be found at <https://www.rtg-resilience.uni-konstanz.de>

We invite international applicants to join the Research Training Group R3.
A PhD scholarship funded by the DAAD is available for the following research topic:

Understanding of the regime shift in the phytoplankton community in Lake Constance: Seasonal and inter-annual changes in the traits of the plankton community

Project Description: Trophic change has caused a regime shift in the annual phytoplankton biomass in Lake Constance. During eutrophication between the 1960s and the 1980s and during re-oligotrophication from the 1990s onwards the annual phytoplankton biomass has been rather resilient to changes in nutrient concentrations except for a comparatively short time period of transition between the two alternative states. The project aims at a better understanding of the mechanism responsible for the resilience and the regime shift of the phytoplankton in Lake Constance. We plan to use data analysis, and possibly also numerical modelling, of the phytoplankton community to investigate the consequences of changes in bottom up and top-down effects on the seasonal course of plankton development during eutrophication and re-oligotrophication. The project is integrated in the Research Training Group R3. Highly motivated candidates with a MSc degree in biology, mathematics, oceanography, physics or engineering are welcome to apply. Applicants should have a background in numerical modelling and data analysis, ideally experiences with environmental systems and plankton, and show an enthusiasm for basic research. The successful candidate should be able to communicate effectively with individuals from a wide range of disciplines. Group R3 (www.rtg-resilience.uni-konstanz.de).

Application: Highly motivated candidates with a MSc degree in biology, mathematics, oceanography, physics or engineering are welcome to apply. Applicants should have a background in numerical modelling and data analysis, ideally experiences with environmental systems and plankton, and show an enthusiasm for basic research. The successful candidate should be able to communicate effectively with individuals from a wide range of disciplines.

At the time when DAAD receives the nomination letter, the last final exam (Master Degree or equivalent) must have taken place no longer than six years ago and applicants must not have resided in Germany for more than 15 months prior to the nomination.

For more information on this project contact Prof. Dr. Frank Peeters, Professor for environmental physics (<https://www.limnologie.uni-konstanz.de/en/peeters/>)

Please send the following documents as single PDF file to **Dr. Tina Romer, applicationRTGR3@uni-konstanz.de**, coordinator of the Research Training Group R3:

- a motivation letter detailing how you will fit into the Research Training Group R3
- a one-page exposé of a potential PhD project fitting to the research topic.
- a curriculum vitae
- list of publications, if applicable
- certificates of education
- Names of researchers that can provide recommendations

Details on the DAAD Graduate School Scholarship Programme, the application procedure and eligibility criteria:

<https://www.daad.de/go/en/stipa57034100>

<https://www.daad.de/hochschulen/programme-weltweit/promotionsprogramme/gssp/en/23570-graduate-school-scholarship-programme/>
and

https://www.daad.de/medien/hochschulen/ww/pprogramme/gssp/gssp_2019_guideline_applicants.pdf

RTG R3

