PhD Scholarship of up to 3 or 4 years
at the Chair of Hydrology and Climatology, University of Potsdam, Germany

In October 2015, the DFG Research Training Group "Natural Hazards and Risks in a Changing World" (http://natriskchange.de) was established at the University of Potsdam, in cooperation with the Freie Universität of Berlin, the German Research Centre for Geosciences GFZ and the Potsdam Institute for Climate Impact Research (PIK). NatRiskChange aims to develop methods that improve hazard and risk analyses and quantifications based on the transient, non-stationary nature of hazards and risks in response to changing natural and anthropogenically altered components of the earth system. Key scientific aims are the development, testing and pilot application of studies on the identification, quantification and prediction of transient natural hazards and associated risks. Earthquakes, floods, and mass movements are of major research interest.

Funded by the **Graduate School Scholarship Programme (GSSP)** of the **German Academic Exchange Service (DAAD)**, the **NatRiskChange Research Training Group** now offers a **full DAAD PhD scholarship** at the Institute of Earth and Environmental Sciences of University of Potsdam, Germany for a **period of three years (or up to four years for candidates from developing countries).** The related PhD project is entitled **"Forecasting of Urban Flash Floods Based on Rainfall Radar Image Analysis and Urban Hydrological Modelling"**. Further subject-specific information can be obtained from Prof. Axel Bronstert (axelbron@uni-potsdam.de)

The scholarship includes

- a monthly rate of 1200 Euro
- travel support and potential support for studies and research
- combined insurance (health, accident, liability)
- potential support for rent, or family allowance
- full funding for a German language course in Germany of up to 6 months, preceding the scholarship

The selected candidate will be fully integrated in the activities and the teaching curriculum of the NatRiskChange Research Training Group, and enjoy the vibrant international research environment in the Institute of Earth and Environmental Science at the University of Potsdam. The schedule and length of the language course will be determined after consultation with the selected candidates.

The candidates are required to have

- an excellent Master's degree in hydrology, geoecology, meteorology or closely related fields
- a proven background in data processing, GIS-technology, hydro modelling, rainfall radar analysis
- good programming skills, e.g. in Python, R or Matlab, and ideally in Fortran and C++
- experience with hydrological and hazard modelling and if possible urban systems
- good English language skills

Application

Applications should include the following components: a detailed CV, a letter of motivation, a brief research concept (ca. 2 pages) for the PhD project (focussing on a plan on how to improve urban flash flood forecasts by using radar-rainfall data), a record of studies, master and bachelor certificates including a transcript of records, an English synopsis of the Master thesis, a list of publications, oral and/or poster presentations at conferences, and two letters of recommendation. Applications can only be submitted through https://www.geo-x.net/daad-gssp/. Deadline for applications is **15th October 2018**.

Based on the applications, the University of Potsdam will, in a first stage, nominate two to four candidates. These candidates will be required to submit a full application to the DAAD which will then, in a second stage, be evaluated by DAAD. Candidates will be informed in detail about the second stage in case they are nominated after the first stage. The actual scholarship and the related PhD study are envisaged to start in April 2019.

Handicapped applicants will be given preference in case of equal suitability. The NatRiskChange consortium strives to increase the proportion of women in research and specifically encourages females to apply for these positions.

DAAD