



HELMHOLTZ CENTRE POTSDAM

GFZ GERMAN RESEARCH CENTRE FOR GEOSCIENCES

The Helmholtz Centre Potsdam – GFZ German Research Centre for Geosciences is the national research centre for Earth sciences in Germany. With approx. 1280 employees, the GFZ is conducting interdisciplinary research on the "System Earth" and the influence of humans on the planet. As a member of the Helmholtz Association, it is part of Germany's largest science organization.

For the group "Early warning and Impact Forecasting", Section 2.6 / Department 2 "Geophysics" we invite applications for a

PostDoc (m/f)

Job Vacancy No. 0512

The CATENA project, supported by the German Federal Ministry of Education and Research (BMBF), sets out to develop dynamic large-scale modeling schemes for landslide susceptibility, as well as consistent estimates of their potential impact on the exposed communities, within the context of Central Asia.

This project will benefit from a unique working environment:

- The hosting team (GFZ section 2.6) has a strong expertise with the development of exposure model, risk modelling and multi-hazard assessment.
- The hosting team is also developing new Ground-Motion models adapted to Landslides triggering models.
- The tools and methods already developed at GFZ and the University of Potsdam allow a robust identification and mapping of landslides.
- The recruited researcher will also be integrated and will benefit from training activities organized by the NatRisk Change DFG training group (https://www.uni-potsdam.de/natriskchange/).

Your responsibilities:

- collecting and developing a database of landslide events in several test areas within Central Asia
- analysing these datasets with geo-statistical and machine-learning approaches
- developing a dynamic susceptibility model
- integrating downscaled atmospheric and weather-related data (temperature, precipitation, humidity, snow-fall/melt, etc.) and near-real-time probabilistic ground shaking prediction related to earthquakes
- The susceptibility model will be combined with an exposure and vulnerability model for the considered region in order to obtain a wide-scale dynamic landslide risk model to be communicated and discussed with local endusers and stakeholders.

Your qualifications:

- Master's degree (or equivalent) in geography or a related discipline in geosciences
- a PhD or equivalent in Geography, Geophysics, or similar discipline
- strong experience in geostatistics and GIS-based spatial modelling
- Experience with relational databases (e.g., PostgreSQL), statistical learning, remote sensing and advanced python programming is also desired.

Starting date: 1st March 2018 **Fixed term:** 22 months

Working hours: full-time (currently 39 h/week)

The position is, in principle, suitable for part-time employment.

Salary: The pay scale grouping will be into pay group 13 TVöD-Bund

(Tarifgebiet Ost) provided that all tariff related and personal

requirements are met.

Location: Potsdam

You can expect a very diverse and challenging job in an international work environment that is characterized by exciting research projects. The compatibility of work and family life is of particular concern to the GFZ. Therefore, it offers the opportunity for flexible working time and workplaces. Moreover, there is a kindergarten located on the research campus.

The GFZ is a partner with Geo.X (www.geo-x.net), and as such it is well connected with other geoscience institutions in Potsdam und Berlin.

Please submit your application by **25**th **February 2018** quoting the reference no. **0512** via email to **applications@gfz-potsdam.de**. Please combine your application documents (letter of motivation, CV and certificates) into a single PDF file with a size of up to 3 megabytes.

Equal opportunity is an inherent part of our personnel policy. Therefore we are particularly welcoming applications from qualified women. Severely disabled persons will be given preferential treatment in the case of equal qualification.

We will retain your application documents for at least three months, even if the application is not successful.

If you have any questions regarding this job offer, please feel free to call Ms Buge at +49 (0) 331-288-28878.