The Helmholtz Centre Potsdam – GFZ German Research Centre for Geosciences is the national research centre for Earth sciences in Germany. With approx. 1260 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 research group "Magnetotellurics" within Section 2.7 "Near-surface Geophysics" we invite applications for a

**PostDoc position (f/m)**

**Job Vacancy No. 1538**

**DeepEarthshape - Geophysical Imaging:** Imaging weathering fronts in deep regolith with seismic and electromagnetic methods [GIDES] - this project is part of the interdisciplinary DeepEarthshape package.

At our study sites in Chile, the weathering zone was found to be much deeper than expected such that unweathered rock was never encountered in our soil pits. With electromagnetic methods we would like to study a) the depth of weathering; b) the biotic, geochemical and geophysical processes advancing the weathering front and c) whether this zone constitutes a habitat and interacts with the surface biosphere. The requested PostDoc will be in charge of Radio-Magnetotellurics (RMT) data acquisition, processing and finally interpretation of the entire RMT data sets. The PostDoc will be supported by both working groups "Magnetotellurics" and "Geo-Electromagnetics" at GFZ in all aspects of the work.

**Your responsibilities:**
- preparation of and participation in the field experiment at all four study sites
- processing of the acquired RMT data using the EMERALD processing suite
- data analysis and evaluation
- interpretation of RMT data using 2D and 3D modelling and inversion
- interpretation of the MT data with particular focus on correlating with borehole information
- presentation of results at international conferences and workshops
- publication of results in internationally reviewed journals

**Your qualifications:**
- Master’s degree (or equivalent) in Geophysics, Physics or Geosciences
- PhD in Geophysics, Physics or Geosciences is mandatory
- advanced experience in planning and conducting RMT field experiments
- advanced experience in analysis of RMT data
- very good command in programming languages C/C++, Fortran and/or Matlab
- advanced experience in 2D and 3D interpretation, modelling and inversion
- very good English language skills
- willingness to interdisciplinary exchange with colleagues in the priority program

**Starting date:** 1st September 2019
**Fixed term:** 12 month
**Salary:**
**Working hours:** full-time (currently 39 h/week); The position is, in principle, suitable for part-time employment.
**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. Geo.X forms the largest regional cluster of geoscientific expertise in Europe and offers excellent opportunities for cooperation and development.

Please submit your application by **21.05.2019**.

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.