

At GFZ, the German Research Centre for Geosciences in Potsdam and the Freie Universität Berlin we invite applications for a position as

### Doctoral Student in Earth Surface Geochemistry - Job Vacancy No 1506

Research takes place within the DFG priority project "Earthshape – Earth surface shaping by biota" ([earthshape.net](http://earthshape.net)) in which the interaction between biological, geochemical, and geomorphological processes in landscape evolution is explored along a climate gradient in Central Chile. Within this framework, six projects, called "Deep Earthshape", will be investigating the "Critical Zone", the zone where rock meets life, by drilling up to 100m depth. This doctoral project explores how the deep biosphere weathers rock. The student will be based in section 3.3, in which we apply geochemical methods in innovative ways to geological questions.



**Work Place:** GFZ Potsdam, Section 3.3 "[Geochemistry of the Earth's Surface](#)"

**Supervisor:** Prof. [Friedhelm von Blanckenburg](#)

**Associated University:** Freie Universität Berlin



#### Your tasks:

- field work in the Chilean Coastal mountains; including attending a shared a drilling campaign
- close collaboration within an interdisciplinary German-Chilean network of both leading scientists and other doctoral students in Geology, Microbiology, Biogeochemistry, Geophysics
- petrological and bulk geochemical description of drill cores
- option to apply a reactive transport model
- measuring erosion and weathering front advance rates using innovative isotope geochemical methods (cosmogenic nuclide analysis ( $^{10}\text{Be}$ ) in quartz,  $^{10}\text{Be}(\text{meteoric})/^{9}\text{Be}$ , U-series analyses)
- addressing, with network partners, the question: does microbiology or chemistry shape the deep Critical Zone?

#### Your qualifications:

- University degree (master / diploma) in Geosciences
- good communication skills
- willingness for interdisciplinary exchange with colleagues in the priority program
- experience in geological field work
- MSc thesis including either geochemical, mineralogical, or petrographical, and if possible also isotope work
- ability to work independently in geochemical laboratories with acid digestions.

**Starting date:** between 1st January and 1st March 2019

**Fixed term:** 3 years

**Salary:** The pay scale grouping will be into pay group 13 TVÖD-Bund (Tarifgebiet Ost), 75 %

Please apply under the **Job Vacancy No 1506**. Applications of qualified females are particularly welcome. Enclose your CV, Letter of motivation, copies of certificates and two names from which we can request letters of references by **15.11.2018** under this link:

[Official advertisement.](#)

<https://www.gfz-potsdam.de/en/career/job-offers/>

