

23 PhD/Postdoc Positions offered in Germany
EarthShape: Earth Surface Shaping by Biota.
A German-Chilean Priority Program in the Chilean Coastal Range
(DFG) – Phase II



“EarthShape – Earth Surface Shaping by Biota” explores how biologic processes form soil, influence topography, and thereby shape the Earth surface. The 15 interdisciplinary projects that encompass the fields Geology, Ecology, Soil Sciences, Geography, Microbiology, Geophysics, and Geochemistry conduct research at **four study sites within in the Chilean Coastal Range**. It is a natural laboratory to study how biology and topography interact. In a network between German universities and research centers you will be trained in interdisciplinary methods and conduct joint field work and training workshops.

Interested applicants should contact the supervisors (SV) at the potential host institutions (see list below, these will also handle your applications). Projects will begin between January and March 2019 and are funded for three years. Additional information about each position is provided at the project’s webpage www.earthshape.net. The available PhD positions, work locations, and supervisors are as follows:

- Post-doc Project 1a: Fire-Induced Redistribution and Losses of Elements in the Weathering Zone (FIRE);** BAM, Berlin; SV: Gorbushina, co-SV: Dippold
- PhD Project 1b: Fire-Induced Redistribution and Losses of Elements in the Weathering Zone FIRE;** Univ. Göttingen; SV: Dippold, co-SV: Gorbushina
- PhD Project 2a: Connecting the green and the grey world: an experimental approach to separating climate, vegetation, and geochemical effects on nutrient cycling along a climate gradient;** Univ. Tübingen; SV: Oelmann, co-SV: Neidhardt, Tielbörger
- Post-doc Project 2b: Connecting the green and the grey world: an experimental approach to separating climate, vegetation, and geochemical effects on nutrient cycling along a climate gradient;** Univ. Tübingen; SV: Tielbörger, co-SV: Oelmann
- PhD Project 3a: Soil structure formation and organic matter cycling driven by microorganisms, biocrusts and vegetation;** SV: Mueller
- PhD Project 3b: Soil formation and soil erosion driven by microorganisms, biocrusts and vegetation;** SV: Scholten, co-SV: Kühn
- PhD Project 4a: Burrowing-animal communities and their role as bioturbators along a climate gradient;** Univ. Marburg; SV: Farwig, co-SVs: Brandl, Bendix
- PhD Project 4b: Separating climate, and burrowing-animal mediated effects on vegetation patterns along a climate gradient;** Univ. Marburg; SV: Brandl, co-SVs: Farwig, Bendix
- PhD Project 5a mSECCO: Quantifying modern links between vegetation, hydrology and Earth surface processes from inorganic and organic geochemical proxies in Chilean modern river sediment;** GFZ, Potsdam; SV: Wittmann-Oelze, co-SVs: Sachse, Frings, Bernhardt
- PhD Project 5b pSECCO: Reconstruction of changes in paleohydrology, vegetation and earth surface processes from inorganic and organic geochemical proxies in marine sediment from the Last Glacial Maximum to present;** Freie Univ. Berlin SV: Bernhardt, co-SVs: Sachse, Frings, Wittmann-Oelze
- PhD Project 6: Sediment transport and connectivity under changing biogeomorphic feedbacks.** BfG Koblenz & KIT, Karlsruhe; SV: Hoffmann, co-SVs: Schmidlein, Schrott
- PhD Project 7: Biota, fractures, thresholds: Emergent self-organization in landscape evolution?;** GFZ, Potsdam; SV: Scherler, co-SV: Braun
- PhD Project 8: possible position in Graz, Austria;** SV: Stüwe
- PhD or Post-doc Project 9a: Bridging timescales of climate and vegetation change effects on denudation: A coupled modeling approach;** Univ. Tübingen; SVs: Ehlers, Hickler
- Post-doc Project 9b: Bridging timescales of climate and vegetation change effects on denudation: A coupled modeling approach;** Senckenberg, Frankfurt; SVs: Hickler, Ehlers
- PhD Project 10: Vegetation control on long-term to short-term landscape evolution from thermochronology and remote sensing;** Univ. Tübingen; SV: Glotzbach, Co-SV: Bendix
- PhD Project 11 DeepEarthshape Weathering: Using innovative isotope geochemical weathering to explore deep up to 80m rock weathering;** GFZ, Potsdam; SV: von Blanckenburg
- PhD Project 12 DeepEarthshape Biogeochemistry: Microbial element cycling as a driver of soil formation;** Univ. Bayreuth; SV: Spohn
- PhD Project 13a DeepEarthshape Geophysics: Geophysical Imaging of weathering fronts with seismic and electromagnetic methods;** GFZ, Potsdam; SV: Krawczyk, Weckmann
- Post-doc Project 13b DeepEarthshape Geophysics : starting 2019** GFZ, Potsdam SV: Krawczyk, Weckmann
- Post-doc Project 14 DeepEarthshape Microbiology: Diversity and functional traits of microbial communities in the terrestrial subsurface along a climate gradient;** Univ. Göttingen; SVs: Friedl, Wagner
- PhD Project 15a DeepEarthshape Geomicrobiology: Abundance and distribution of Fe-metabolizing bacteria during silicate weathering;** Univ. Tübingen; SVs: Bryce, Kappler
- PhD Project 15b DeepEarthshape Geomicrobiology: Mineralogical consequences of silicate weathering by Fe-metabolizing bacteria;** Tech. Univ. Berlin; SV: Neumann