15 Open PhD-Positions in the Cluster of Excellence TERRA

The newly funded Cluster of Excellence TERRA "Terrestrial Geo-Biosphere Interactions in a Changing World" is an interdisciplinary research initiative of geoscientists, biologists, and computer scientists at the Universities of Tübingen and Hohenheim and the Senckenberg Society for Nature Research in Frankfurt, investigating how the interactions between the living and non-living worlds shape global change from single microorganisms to the globe, in the geological past, at present, and in the future. It starts on January 1, 2026. We seek for 15 doctoral researchers in five coordinated Focus Unit Projects (FUNs) starting on April 1, 2026, lasting for 3.5 years. The positions are located either at the University of Tübingen, the University of Hohenheim, or at Senckenberg in Frankfurt. We invite applications for the following PhD-Positions:

FynFUN – Geosphere-Biosphere Interactions in a Global Biodiversity Hotspot

FUN01_1: Doctoral Researcher (m/f/d; E 13 TV-L, 65%)

starting 1.4.2026 until 31.9.2029

Effects of geodiversity and geostability on plant genetic diversity | contact: Oliver Bossdorf (oliver.bossdorf@uni-tuebingen.de) | University of Tübingen | Candidates should have a background in evolutionary biology or population genetics/genomics, and a strong interest in studying genetic biodiversity. Experience with molecular lab work is a must, additional skills in bioinformatics and/or statistics are a bonus. There will be extensive field work in South Africa.

FUN01_2: Doctoral Researcher (m/f/d; E 13 TV-L, 65%)

starting 1.4.2026 until 31.9.2029

Impacts of plant functional diversity on hydrology and soil nutrients | contact: Yvonne Oelmann (yvonne.oelmann@uni-tuebingen.de) | University of Tübingen | Candidates should have expertise in plant/soil science and experience in biogeochemical methods. Extensive field work in South Africa is planned.

FUN01_3: Doctoral Researcher (m/f/d; E 13 TV-L, 65%)

starting 1.4.2026 until 31.9. 2029

Modelling geo-biosphere interactions across a global biodiversity hotspot | contact: Frank Schurr (frank.schurr@uni-hohenheim.de) | University of Hohenheim | Candidates should have expertise with quantitative modelling in the bio- or geosciences (ideally with models for ecological or evolutionary dynamics)

Greenhouse Gas Emissions from Alpine Peatlands - GAP

FUN02_1: Doctoral Researcher (m/f/d; E 13 TV-L, 75%)

starting 1.4.2026 until 31.9.2029

Hydrology and geophysics of alpine peatlands | contact: Olaf Cirpka (olaf.cirpka@uni-tuebingen.de) | University of Tübingen | Candidates should have expertise in hydrogeological, soil-physical, or geophysical field methods for characterizing the near sub-surface. The project entails fieldwork, quantitative data analysis and modeling.

FUN02_2: Doctoral Researcher (m/f/d; E 13 TV-L, 75%)

starting 1.4.2026 until 31.9.2029

Soil-plant interactions in alpine peatlands | contact: Marie Muehe (eva-marie.muehe@uni-tuebingen.de) | University of Tübingen | Candidates should have expertise in plant physiology/ biogeochemistry/ rhizosphere processes. The ideal candidate brings experience with field work and greenhouse gas analysis.

FUN02_3: Doctoral Researcher (m/f/d; E 13 TV-L, 75%)

starting 1.4.2026 until 31.9.2029

Geomicrobiology of alpine peatland soils | contact: Andreas Kappler (andreas.kappler@uni-tuebingen.de) | University of Tübingen | Candidates should have expertise in geomicrobiology/environmental microbiology/biogeochemistry (and have expertise (and/or interst) in molecular analyses of microbial communities, wet-chemical analysis of geochemical parameters in soils, field work, greenhouse gas analyses)

HAM-FUN - Disentangling Hydroclimate And Enigmatic Biodiversity Dynamics over Million Year to Seasonal Timescales

FUN03_1: Doctoral / Postdoctoral Researcher (m/f/d; E 13 TV-L, 75% / 100%)

starting 1.4.2026 until 31.9.2029

Long-term geostability | contact: Andreas Mulch (andreas.mulch@senckenberg.de) | Frankfurt Senckenberg | Candidate with skills in organic and/or inorganic geochemistry and isotope geochemistry, ideally a MSc in geochemistry

FUN03_2: Doctoral Researcher (m/f/d; E 13 TV-L, 75%)

starting 1.4.2026 until 31.9.2029

Short-term geostability of the Hammerschmiede - from geochronological and geochemical proxies | contact: Christoph Glotzbach (christoph.glotzbach@uni-tuebingen.de) | University of Tübingen | Candidates with experience in in-situ (laser) geochemistry and dating methods, such as geo- and thermochronological methods, ideally a MSc in Geology/Mineralogy

FUN03_3: Doctoral Researcher (m/f/d; E 13 TV-L, 75%)

starting 1.4.2026 until 31.9.2029

Long- and short-term biostability of the Hammerschmiede - from paleonology and palynology | contact: Madelaine Böhme (m.boehme@ifg.uni-tuebingen.de) | University of Tübingen | Candidates with skills in palynology like pollen and non-pollen organics, ideally a MSc in Paleontology/Palynology

INVADERS - INVAsive species enhancing Dynamics in Erosion of RiverbankS

FUN04_1: Doctoral Researcher (m/f/d; E 13 TV-L, 75%)

starting 1.4.2026 until 31.9.2029

Feedbacks between plant invasions and river morphology across scales - from systematic data analysis to model simulations | contact: Christiane Zarfl (christiane.zarfl@uni-tuebingen.de) | University of Tübingen | MSc in (geo-)ecology, environmental sciences or a related field, excellent knowledge of spatial data analysis with GIS and developing and applying process-based models, good programming skills, knowledge in river dynamics and/or plant ecology is an advantage, good English writing skills, willingness to work in an interdisciplinary team.

FUN04_2: Doctoral Researcher (m/f/d; E 13 TV-L, 75%)

starting 1.4. 2026 until 31.9.2029

Feedbacks between plant invasions and river morphology - Sediment tracers of river migration | contact: Sumiko Tsukamoto (sumiko.tsukamoto@uni-tuebingen.de) | University of Tübingen | We seek candidates with a knowledge of sedimentary systems and experience with luminescence dating, quantitative geodesy, and/or geochemistry (ideally applied to soil/sediment systems). As this position will involve extensive time in and around rivers, we seek candidates with an interest in fieldwork.

FUN04_3: Doctoral Researcher (m/f/d; E 13 TV-L, 75%)

starting 1.4.2026 until 31.9.2029

Feedbacks between plant invasions and river morphology - a combined observational and experimental approach | contact: Katja Tielbörger (katja.tielboerger@uni-tuebingen.de) | University of Tübingen | MSc in (geo-)ecology or a related field, excellent knowledge of experimental design and statistics, ability to work in challenging terrain in the field, knowledge of fundamental (plant) ecological concepts, good English writing skills, willingness to work in an interdisciplinary team.

The Past and Future of the C4 Grasslands of the World (C4-P2F-FUN)

FUN05_1: Doctoral / Postdoctoral Researcher (m/f/d; E 13 TV-L, 75% / 100%)

starting 1.4.2026 until 31.9.2029

Vegetation modelling | contact: Thomas Hickler (Thomas.hickler@senckenberg.de) | Frankfurt Senckenberg | Candidates should have a strong interest in plant-physiological ecology and global biome shifts. They must also have substantial experience in basic computer programming, ideally in C++, in which the LPJ-GUESS dynamic global vegetation model is written.

FUN05_2: Doctoral / Postdoctoral Researcher (m/f/d; E 13 TV-L, 75% / 100%)

starting 1.4.2026 until 31.9.2029

Past biome reconstruction: Data-model comparison | contact: Andreas Mulch (andreas.mulch@senckenberg.de) | Frankfurt Senckenberg | Candidate with skills in organic and/or inorganic geochemistry and isotope geochemistry, ideally a MSc in geochemistry. Alternatively, data analytics knowledge with an interest in geochemistry.

FUN05_3: Doctoral Researcher (m/f/d; E 13 TV-L, 75%)

starting 1.4.2026 until 31.9.2029

Modelling of vegetation feedbacks in the Earth System | contact: Kira Rehfeld (kira.rehfeld@uni-tuebingen.de) | Tübingen University| Candidates should have an interest to understand the role of terrestrial vegetation in local to global Earth System Dynamics. They must have experience with computer programming and data analysis in Python or R. Experience with High Performance Computing and FORTRAN is beneficial, but not mandatory.

Candidates should have completed an MSc in natural or computer sciences, or equivalent, depending on the requested position. They also should have a pro-active attitude, work effectively in interdisciplinary teams, and communicate fluently in English (at least B1). German language skills are welcome.

Joining TERRA, you will be member of a pioneering team exploring a new research domain with impact on addressing the multiple crises of global change (www.terra-cluster.org). You will be part of the new Graduate School of Terrestrial Geo-Biosphere Interactions, profiting from the supervision by an interdisciplinary Thesis Advisory Committee (TAC), and receiving tailored training.

For questions concerning the posts contact the persons listed above. The Universities of Tübingen and Hohenheim as well as Senckenberg are committed to equity and diversity and actively promote equal opportunities. Equally qualified candidates with disabilities will be given preference in the hiring process. Your application should comprise a letter of motivation, CV, contact details of two references, and certificates. Please submit a single pdf (max 10 MB) to bewerbung@geo.uni-tuebingen.de under the heading “Application: Your Name [FUNXX_X]”. Multiple applications are possible and encouraged but require separate submission for each application. Only complete applications will be considered. The deadline for applications is January 26, 2026, or until position is filled. With the application you agree that your personal data will be shared among the participating institutions (University of Tübingen, University of Hohenheim, Senckenberg) for the purpose and over the duration of the recruiting procedure.