



PHD POSITION IN THE FIELD OF EARTH SURFACE
GEOCHEMISTRY



PhD position in the field of Earth Surface Geochemistry (m/f/x)

About us

In the [research group for Sedimentology and Earth Surface Processes](#) at the Ludwig Maximilians University of Munich we develop quantitative constraints on the physical and chemical processes that control the evolution of landscapes, the erosion, transport, and deposition of sediments, and the global fluxes of dissolved solutes and carbon. To this end, we combine field observations, analogue experiments, geochronological methods, and geochemical analyses of sediment, soil, and water. Part of the [Faculty of Geosciences](#), the research group is embedded in an environment with a broad range of expertise from geology and geophysics to paleontology, mineralogy, and physical geography.

Your tasks and responsibilities:

Within the ERC-funded Project “Floodplain Weathering” (FloW), we are looking for a doctoral student that will measure rates of sediment transport and weathering across the Madeira floodplain, using a series of geochemical proxies. The project involves month-long field work in Bolivia and Brazil, the analysis of sediment samples in the laboratory at LMU and at collaborating institutes, the interpretation and modeling of the results, and the communication of the findings in peer-reviewed journals and during international conferences.

Project FloW: Earth’s carbon cycle is influenced by chemical weathering. Whereas studies have explored weathering in eroding landscapes, the role of weathering during sediment storage on floodplains remains overlooked. With FloW, we aim to develop a comprehensive understanding of weathering fluxes associated with sediment transport and storage in floodplains. The doctoral candidate will sample sediments stored along the 1500-km-long floodplain of the Madeira River and analyze timescales of sediment transport and weathering using a number of geochemical and sedimentological techniques.

Your qualifications

- A master degree in Earth Science, Geology, Geochemistry or similar. Candidates with only a Bachelor degree will be considered
- A high level of competence in oral and written English
- Independent, structured, and solution-oriented thinking
- Creativity and motivation to own and drive your research project
- Willingness to travel internationally for several months including carrying out remote field-work in Bolivia and Brazil, completing laboratory work in Potsdam and in Salzburg, and attending conferences in Europe and in the USA

Benefits

- Wide range of stimulating activities in an ambitious and research-oriented team
- Salary at 75% of TV-L E13 and 30 days paid vacation
- Flexible working hours
- A family-friendly working environment in the center of Munich
- Further training opportunities through the [LMU Qualifications program](#)
- Support for international students in relocating to Munich through the [LMU Gateway](#) service

People with disabilities who are equally as qualified as other applicants will receive preferential treatment.

Contact

To apply, please submit the following documents in **English language, compiled into a single PDF file**, to a.bufe@lmu.de. The position remains open until filled.

- Cover letter explaining your motivation to do your PhD as part of the project FloW (~1 page).
- A short CV (1 – 2 pages)
- A writing-sample, such as a masters or bachelor thesis or similar (term paper, published article, etc.)
- Contact information of two references
- Copies of your Bachelor and Master degrees with transcripts. If you have not yet finished your Master degree, you may include the grades of all completed classes in your application. You will need to have obtained a Master degree before you can be employed.