

Gefördert durch

DFG Deutsche
Forschungsgemeinschaft



The **Institute of Geosciences at Goethe University Frankfurt** (Sedimentology Research Group) invites applications for a fixed-term position – available on **1st February 2026 or soon thereafter** – for a

PhD student in Palaeoclimatology and Paleoceanography (m/w/d)

(E13 TV-G-U, 75% part-time)

(36 months tenure).

The research project is funded by the German Research Foundation (DFG) IODP³ Priority Programme and aims at the reconstruction of late Cretaceous ocean's alkalinity and atmospheric CO₂ to assess threshold values for an initial glaciation across the Campanian-Maastrichtian transition. The PhD candidate is expected to perform isotopic and geochemical analyses ($\delta^{11}\text{B}$, $\delta^7\text{Li}$, and Mg/Ca) at benthic foraminifera and marine carbonates to generate new proxy data of weathering intensity, deep-sea temperature and deep Southern Ocean alkalinity. In parallel, project partners will perform experiments with an Earth system model of intermediate complexity including a coupled ice sheet model and an interactive carbon cycle to identify effects of orbital configurations, atmospheric CO₂ and albedo. The candidate will assess the results in close cooperation with project partners from the Universities of Heidelberg and Southampton, the GEOMAR and the Potsdam Institute for Climate Impact Research to develop conceptual models for the possible Maastrichtian glaciation of Antarctica.

Successful candidates should have a completed master's degree (MSc or equivalent) in geosciences or a closely related field (e.g., environmental science) and a background in geochemistry and/or micropaleontology. We expect a highly self-motivated student with excellent communication skills, both written and oral, in English and optional in German. The willingness to travel for several weeks, as well as analytical experience are highly appreciated. Further, we expect the willingness to occasionally work flexible hours, independence and organizational skills. The successful candidate will be trained in the relevant laboratory methods employed and will be part of the doctoral degree program at Goethe University GRADE (Goethe Research Academy for Early Career Researchers). Our department offers excellent working conditions, an international multi-disciplinary working environment and excellent research infrastructure.

Goethe University is committed to equal rights and therefore we particularly encourage applications from female candidates and those from under-represented backgrounds. Equally qualified people with disabilities will be given priority.

Applications including a CV, a motivation statement, a description of research interests and experiences, and names and addresses of three scientific referees, should be sent as a single PDF document by e-mail to Prof. Silke Voigt (s.voigt@em.uni-frankfurt.de), Institute of Geosciences, Goethe University, Altenhöferallee 1, 60438 Frankfurt am Main, Germany, by 30th November 2025. Interviews will be scheduled for December to January 2025/2026.