

The Sedimentology research group at the Institute of Geosciences, Goethe University Frankfurt, Germany, invites applications for a

PhD position in Paleoclimatology (m/f/d)

(E13 TV-G-U, 75%)

for 36 months available on 1st November 2020 or soon thereafter. The salary and social security benefits are according to the German standard and follows the Goethe University pay structure (TV-G-U).

The research project funded by the German Research Foundation (DFG) aims at reconstructing the temperature-dependent intensity of silicate weathering as sink for atmospheric CO₂ during mid-Cretaceous greenhouse climate (120-90 Ma). The lithium isotopic composition of marine carbonates records secular changes in seawater $\delta^7\text{Li}$ and thus reflects relative changes in the weathering of continental and oceanic silicates as well as the isotopic fractionation during the formation of clay minerals. The PhD candidate will analyze the archives of sediments and pristine biogenic calcites ($\delta^7\text{Li}$, $^{87/86}\text{Sr}$, $\Delta 47$, Mg/Ca, Sr/Ca) to assess carbonate preservation and taxon-specific vital effects. Further, he/she will develop conceptual models to obtain information about the mid-Cretaceous seawater $\delta^7\text{Li}$ evolution relative to OAEs towards a quantitative assessment of the geodynamic and climatic coupling. The project is associated to the LOEWE priority program VeWA.

Requirements for applicants are completion of a MSc degree in geosciences (or equivalent) or a closely related field (e.g., environmental science), a strong motivation for research, and written and spoken fluency in English. The successful candidate should have a background in geochemistry and paleoclimatology. Interest in geological fieldwork and analytical experience are highly appreciated. The Institute of Geosciences provides excellent working conditions, an international multi-disciplinary working environment, and access to a wide range of research infrastructure, including state-of-the-art geochemistry laboratories.

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 CV, statement of research interests, and the names and addresses of three references) should be sent as a single PDF file to **Prof. Dr. Silke Voigt** (s.voigt@em.uni-frankfurt.de), Institute of Geosciences, Altenhöferallee 1, 60439 Frankfurt, Germany. The closing date for applications is **15th September 2020**. For additional information please contact Prof. Dr. Silke Voigt. See also: www.uni-frankfurt.de/69718561/Homepage-Voigt, and <https://sites.google.com/view/vewa-project/home>.