
GEOMAR Helmholtz Centre for Ocean Research Kiel is a foundation under public law jointly financed by the Federal Republic of Germany (90%) and the State of Schleswig-Holstein (10%). It is one of the internationally leading institutions in the field of marine research.

Through our research and our commitment to the transfer of knowledge and technology, we contribute significantly to the preservation of the function and protection of the ocean for future generations.

The group of the ERC CoG project “HighBorG” of the research unit in Paleoceanography and Research division 1: Ocean Circulation and Climate Dynamics is offering a

Post Doctoral position (m/f/d) in isotope geochemistry and paleoclimatology

starting in early 2025 (starting date negotiable).

Job Description

The ERC CoG HighBorG focuses on climate-carbon dynamic reconstructions of past warm periods in our Geologic record within the Paleogene and Neogene, in search of tipping elements and climate analogues among different climate states, and further exploration of Earth system response through Earth System modelling. As such, a strongly interdisciplinary and collaborative group will aim at millennial scale reconstructions of seawater pH and atmospheric CO₂, seawater temperature and ice sheet dynamics, as well as aspects of the marine carbon cycle. To achieve this, both established methods and new analytical techniques will be developed. The successful candidate will be generating records of seawater pH/atmospheric CO₂ with the boron isotope proxy on foraminifera and fossil corals, and will constrain seawater temperature, sea level and marine carbon cycle with a combination of stable isotopes and elemental ratios. The post doc will obtain training on Paleogene and Neogene foraminifera taxonomy, and will be given the opportunity to contribute to the development of new analytical methods for isotope geochemistry. Responsibilities also include clean lab analytical chemistry (inorganic), processing of sediment cores and foraminifera picking with the team’s student support. The post doc will be preparing and analyzing marine carbonates (corals and foraminifera) for isotopes and trace elements using the state of the art analytical laboratories at GEOMAR, organizing and data archiving work, statistical processing, interpreting and publishing in peer reviewed journals, and disseminating results in meetings and conferences. The post doc will have assistance by the team’s PI and technical support and will oversee the student helpers who assist in sediment core processing and foraminifera picking.

Qualification

Essential:

- PhD in Earth Sciences, Chemical/or paleo-oceanography, Geosciences, or similar
- Experience in a clean lab and inorganic chemistry, including work with mass spectrometers
- Knowledge of Paleogene/Neogene climate and key carbon cycle questions
- Expertise in data processing, evaluation of data quality and basic statistics
- Excellent writing and spoken English
- Publication and presentation record as per career level

Desirable:

- Previous experience in foraminifera geochemistry, boron isotopes and trace elements

- Detailed understanding of data reduction strategies in isotope and elemental geochemistry
- Ability to operate Thermo Neptune and Thermo Element largely independently
- Programming with Python, R, Matlab or similar
- Being able to demonstrate creative and critical thinking skills, decision making and problem solving skills, self motivation and curiosity

What we offer

The Paleoceanography Research Unit offers a dynamic, international and innovative research environment with excellent infrastructure and a strongly collaborative working culture. Our research unit has state-of-the-art analytical-chemical laboratory equipment, and a network of German and international collaborations. GEOMAR offers support with childcare (holiday programmes) and a discounted subscription to local public transport. We offer among other things the possibility of individual working time arrangements and support services for professional and personal life situations. GEOMAR is an exciting work environment within which one can develop highly marketable skills, and utilize career building opportunities. Working at GEOMAR, and especially in the field of marine and climate research contributes to forward-looking solutions with social significance. GEOMAR offers 30 vacation days plus additional time off at Christmas Eve and New Year's Eve, a company pension plan and capital-forming benefits.

The position is available for a funding period of 2 years. The salary depends on qualification and responsibilities and could be up to class 13 TVöD-Bund of the German tariff for public employees. This is a full-time position. Flexible working time models are generally possible. The fixed-term contract shall comply with Section 2 Paragraph 1 of The Act of Academic Fixed-Term Contract (German WissZeitVG).

GEOMAR Helmholtz Centre for Ocean Research Kiel seeks to increase the proportion of female scientists and explicitly encourages qualified female academics to apply. GEOMAR is an equal opportunity employer and encourages scientists with disabilities to apply. Qualified disabled applicants will receive preference in the application process.

Please send your application (including cover letter or letter of motivation, CV, certificates, research statement, 2-3 reference letters) for this post **not later than September 1st, 2024** under the following link:

[Online application](#)

As soon as the selection procedure has finished, all your application data will be removed according to data protection regulation.

For further information regarding the position and research unit please contact Eleni Anagnostou (eanagnostou@geomar.de).

However, we will answer all your questions if you send us an e-mail to bewerbung@geomar.de. In doing so, please refer to the keyword "HighBorG_Postdoc".

For further information on GEOMAR Helmholtz Centre for Ocean Research Kiel or the Helmholtz Association, please visit www.geomar.de or www.helmholtz.de.

GEOMAR is committed to an objective and non-discriminatory personnel selection. Our job advertisements address all people. We expressly renounce the submission of application

photos.



The TOTAL E-QUALITY award is presented to GEOMAR for efforts in terms of human resource management aimed at providing equal opportunity.