
MARUM – Center for Marine Environmental Sciences at the University of Bremen is offering – under the condition of job release and official approval of funding by the Federal Ministry of Education and Science (BMBF) – a position for one

Postdoctoral Researcher in Ice-Sheet Modelling

in the project

PalMod - From the Last Interglacial to the Anthropocene

The position is open now and the successful candidate should start as soon as possible. Irrespective of the start date, the position will end on December 31, 2026.

Salary corresponds to 100% TV-L E13. The employment is governed by the Act of Academic Fixed-Term Contract (Wissenschaftszeitvertragsgesetz – WissZeitVG).

The goal of PalMod is to understand climate system dynamics and variability during the last glacial cycle. PalMod aims at simulating key periods of the last glacial cycle in transient mode with comprehensive Earth System Models that include interactive ice sheets. PalMod addresses climate variability during the last glacial cycle on a large range of time scales, from interannual to multi-millennial, and attempts to quantify the relative contributions of external forcing and processes internal to the Earth system. In order to achieve a higher level of understanding of natural climate variability at time scales of millennia, its governing processes and implications for the future climate, PalMod brings together three different research communities: the Earth system modelling community, the proxy data community and the computational science community.

We invite energetic and creative applicants with a strong research background in ice-sheet modelling. As successful applicant, you will work in an interdisciplinary team of Earth System modellers in the Geosystem Modelling group at MARUM (www.marum.de). Within this team, you will contribute to the continuous improvement of the coupled Earth System model (CESM-PISM) with a special focus on the ice-sheet component (PISM) and its coupling to the atmosphere and ocean. You will further carry out model simulations of the last glacial and deglaciation in a supercomputing environment. In particular, you will explore the role of ice-sheet dynamics in millennial-scale climate variability (e.g. Heinrich events) and publish your scientific results in international journals.

Your profile

- PhD in Glaciology, Geosciences, Climate Science, Physics, Applied Mathematics or any related field
- Experience in ice-sheet modelling (PISM would be a particular advantage)
- Good skills in scientific computation (e.g. Linux shell scripting, programming in Python, FORTRAN, or MATLAB) and visualization

- Experience with climate models would be advantageous
- Proficient English language and scientific writing skills
- Strong motivation and ability to carry out research both independently and as part of a team in an international environment

MARUM and the University of Bremen are strongly committed to equal opportunity and offer several measures to support their staff, such as free German courses, dedicated training and courses, and possibility to work part-time and remotely up to two days a week. The University of Bremen is certified as a family-friendly university with diverse assistance measures (www.uni-bremen.de/en/familie).

The University of Bremen follows a diversity strategy. It strives to increase the number of women in the academy and strongly encourages applications from female candidates. International applications and applications from candidates with a migration background are explicitly welcome. Severely disabled applicants will be given priority if their professional and personal qualifications are essentially the same.

Your application should include a cover letter, CV, copies of your MSc and PhD certificates, publication list, and contact information of at least two referees. The cover letter should include your research interests, motivation, and anticipated career plans. Optionally, you can also submit a life-impact statement that describes any significant life circumstance that has impacted productivity, trajectory, or performance.

Please submit your application documents electronically as a single PDF file to Dr. Matthias Prange (mprange@marum.de). The deadline for applications is 15 August 2023. Enquiries regarding the position can be directed to the same e-mail address.

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