ZMT LEIBNIZ-ZENTRUM für Marine Tropenforschung

The Leibniz Centre for Tropical Marine Research (ZMT) GmbH (www.leibniz-zmt.de) is an independent research and teaching institute that provides scientific knowledge for the protection and sustainable use of tropical coastal ecosystems. To this end, we work in an inter- and transdisciplinary manner with our partners in the tropics. The ZMT is a member of the Leibniz Association.

The ZMT has five interdisciplinary Programme Areas (PAs) which work collaboratively towards achieving ZMT's mission. This position will be located in and contributing to PA2 - Global Change Impacts and Adaptation, which addresses the urgent challenges of safeguarding tropical marine ecosystems under accelerating global change. Our research improves regional climate predictions and reduces uncertainties about the future of tropical marine ecosystem services, with a strong focus on the cycling of water and key elements such as carbon, nitrogen, and phosphorus. As of January 2025, the strategic institute extension 'Modelling socio-economic dimensions across Tropical Coastal Ecosystems and the Earth System - TropEcS' has been implemented at ZMT. With this extension (Sondertatbestand), ZMT is strengthening its modelling capacities and adding predictive aspects to its existing research programmes. Building on the ocean dynamics and ecological modelling established through TropEcS, we are now seeking to establish an ocean biogeochemistry modelling component that links physical and ecological processes and further enhances ZMT's interdisciplinary research on ecosystem and socio-economic dynamics. Therefore (subject to release of funds), we are looking to fill the position of:

Senior Scientist (gn) - Biogeochemical modelling

(Reference: 4-BioGeoMod)

The successful candidate is expected to contribute to the integration of an ocean biogeochemistry model within ZMTs evolving modelling framework. The position will work in close connection with the ecological models developed through TropEcS. For this, applicants should have experience in numerical modelling of marine biogeochemical processes. While this position will mainly focus on model development and integration, experience in the laboratory and on expeditions is welcome, since our aim is to strengthen laboratory and field work alongside modelling to improve the assessment of effects of climate drivers such as warming, acidification, and oxygen depletion on ecosystem function, the carbon cycle, and the climate, based on experimentally collected data, and to reconcile these findings with modelling approaches.

Your tasks:

- Setting up an interdisciplinary working group on biogeochemical modelling, integrating empirical data with process-based mechanistic models.
- Investigate the role of microbial transformations and their coupling to the carbon and oxygen cycles.
- Collaborate within PA2 and with other ZMT Programme Areas and international partners, contributing to cross-disciplinary projects.
- Integrate the developed bio-geochemical modelling framework into the TropEcS modelling system.
- Publish in leading international journals, secure competitive external funding, and represent ZMT in relevant scientific forums.

Requirements:

- Doctoral degree in mathematics, physics, or equivalent numerical disciplines.
- Postdoctoral experience and a strong track record in developing differential equation-based models with applications in marine plankton ecosystems, nitrogen cycle and relevant microbial and biogeochemical processes.
- Excellent peer-reviewed publication record in high-impact journals on topics related to the modelling of ocean biogeochemical processes such as nitrogen fixation, primary production, or nutrient cycling in marine environments.
- Proven ability to lead interdisciplinary teams, manage complex projects, and supervise students.
- Demonstrated success in acquiring competitive third-party funding.
- Commitment to collaborative research with in-house teams and tropical partners.
- Excellent communication skills in English.

Further information:
For questions, please contact Prof. Dr. Nils Brüggemann, email: nils.brueggemann@leibniz-zmt.de or PD Dr.Tim Rixen email: tim.rixen@leibniz-zmt.de

Details of position:
Salary will be paid according to the German TV-L (EG 13). The position is available for full-time employment, with the possibility of part-time employment at not less than 75% of a full position. The anticipated start date is as soon as possible. The position will be filled on a fixed-term contract. In accordance with§ 2 (1) WissZeitVG, only applicants who still have the relevant qualification periods available can be considered. The fixed term is based on the remaining qualification periods available under the WissZeitVG. The longest fixed term possible is until December 31, 2028. At least 18 months of qualification period should be available for the position. During the contract period, a formal assessment will take place after 12 months and, if necessary, a second assessment after 18 months. If the assessment is positive, the position will be converted into a permanent position and a promotion to group leader and TV-L EG 14 is possible.

ZMT is an equal opportunity employer. Applicants with a migration background are welcome. Persons with severe disabilities are given special consideration if they have the same professional and personal qualifications. The ZMT values its diverse workforce and pursues the goal of providing equal opportunity, which incorporates gender neutrality (gn). We will be happy to accept your documents without a photo.

We offer:

- A challenging and varied job in an international, dynamic and interdisciplinary research environment
- A motivated and committed team from different countries and cultures
- An open and cooperative working atmosphere
- Opportunities for personal and professional development
- Interesting, varied and challenging tasks and family-friendly working conditions
- Company pension plan (VBL)
- Company health promotion and the opportunity to participate in company fitness with EGYM Wellpass

Submission of application:
Please submit a cover letter with your motivation, CV, the names of two referees; letters of recommendation are also welcome. Please submit your application **by 13.03.2026 as a single pdf file** with the reference number "**4-BioGeoMod**" to Ms. Lena de Carné-Oehlmann, email: bewerbung@leibniz-zmt.de.

Leibniz Centre for Tropical Marine Research, Fahrenheitstraße 6, D-28359 Bremen.

Leibniz Gemeinschaft

Zertifikat seit 2018
audit berufundfamilie