

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.

With Earth warming at an unprecedented pace, major ecosystems are expected to change profoundly by the end of this century. Located at the warmest and most biodiverse region of the planet, tropical ecosystems face a variety of pressures. Mangrove forests, seagrass beds, and coral reefs, which are caught at the intersection between climate change and human coastal development, are particularly vulnerable. In three tropical oceans of the world – the Atlantic, the Indian, and the Pacific Ocean – the Horizon Europe project SEASTRONG aims to investigate the multidirectional pathways connecting mangrove forests, seagrass beds, and coral reefs to understand how ecosystem functioning and service provision can be sustained at seascape scales under different climate-change scenarios. We are seeking a highly motivated PhD candidate to join SEASTRONG, focusing on ecological connectivity across mangrove forests, seagrass beds, and coral reefs in Belize. The PhD will investigate how coastal habitat mosaics support reef fish communities and sustain key ecosystem functions, including trophic connectivity, nutrient cycling, and biomass production. The work will combine underwater field surveys, biological and environmental sampling, stable isotope analyses and quantitative modelling. The candidate will contribute to fish and habitat surveys across mangrove–seagrass–reef corridors, fish sampling, and the integration of multiple datasets to quantify functional links among habitats. The candidate will be based at ZMT in Bremen, Germany, within an international research environment dedicated to coral reef ecology and quantitative marine science. The project will include extended fieldwork in Belize, where a local collaboration framework will be established with Belizean partners. The PhD will benefit from the European SEASTRONG network, including partners working on tropical seascape connectivity, ecological functions, biogeochemistry and marine conservation.

The working group Reef Systems is seeking to fill an opening for a doctoral candidate (subject to release of funds).

Doctoral candidate (gn)

(Reference: 28-SeaStrong-PhD2)

Your tasks:

- Collection (in Belize) to identify connectivity pathways between mangrove forests, seagrass beds, and coral reefs.
- Collaboration with researchers from the SEASTRONG consortium to optimise protocols for field data collection.
- Developing code to manage and analyse data collected in the field in a fully reproducible format, and conducting analyses of the data collected during field campaigns.
- Oversee the preparation and submission of scientific manuscripts based on data collected and analysed in the field, and contribute to manuscripts by other researchers within the SEASTRONG consortium as needed.
- Presentation of the work carried out as part of SEASTRONG in the form of scientific presentations at internal SEASTRONG workshops and at scientific conferences.

Requirements:

- Applicants must hold a Master degree in Marine Biology, Marine Ecology, or a related discipline and are thus expected to have a strong background in marine ecology, functional ecology, community ecology, biogeochemistry or quantitative ecology.
- A strong quantitative mindset is essential, including skills in data handling and analysis using R or Python.
- Experience with trophic ecology and Bayesian approaches would be an advantage.
- Because the project involves underwater ecological surveys, previous scuba-diving experience is required. Experience in scientific diving, underwater visual censuses, benthic surveys or fish identification will be highly valued.
- A German scientific diving certification would be a strong plus, although not mandatory at recruitment stage.
- The ideal candidate will be scientifically curious, rigorous, autonomous, comfortable working in an international and interdisciplinary context, and have excellent communication and scientific writing competences.
- They should be motivated by tropical field ecology, quantitative approaches and the challenge of linking biodiversity, habitat connectivity and ecosystem functioning in coral reef seascapes.

Further information:

For questions, please contact Dr. Sonia Bejarano, email: sonia.bejarano@leibniz-zmt.de

Details of position:

Remuneration is based on Pay Group 13 of the Collective Agreement for the Public Service of the Federal States (TV-L). The gross monthly salary is determined in accordance with the provisions of the TV-L and currently ranges from 4759.37 EUR to 6764.69 EUR employees gross salary per month, depending on the candidate's recognized relevant professional experience. The gross salary listed here applies to a full-time position. For part-time employment, this amount should be adjusted proportionally. Further details regarding remuneration are governed by the TV-L and the TV-L Pay Scale Regulations (Entgeltordnung zum TV-L).

The position is available for part-time (2/3 of a full-time position) employment starting as soon as possible for 48 months. The fixed term is for academic qualification according to § 2 (1) WissZeitVG (Wissenschaftszeitvertragsgesetz). Accordingly, only applicants who still have the relevant qualification periods according to § 2 (1) WissZeitVG can be considered. The position is intended to provide further academic qualification with the aim of obtaining a doctorate.

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:

- An international, dynamic, and interdisciplinary scientific 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 your complete application documents (cover letter, resume, references, job references, certificates and attestations) and a letter of motivation **by 15.10.2026 as a single pdf file** with the reference number **"28-SeaStrong-PhD2"** to Ms. Wiebke Harms-Krusemeyer, email: bewerbung@leibniz-zmt.de.

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