

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](#).

Following the successful launch of ZMT's strategic extension into modelling ([TropEcS](#)) and the panel on socio-economics at the [symposium](#) in Sep 2025 the opportunity is to advance a country module of existing macro-economic models (E3ME, UCL ENGAGE) to explore socio-economic impacts of global environmental changes in ZMT's key partner country Indonesia – said to be a maritime continent – and model the impacts of blue-green sustainability pathways. Advancement includes retrieving data from the Global Ocean Accounts Partnership and other data and make it fit for the modelling frame. Training on both models and country contacts can be arranged. The novelty is in the first country model of such scope within the broader framework of a world-leading environmentally-extended macro-economic model - being acknowledged in policy realms and broader ESM-Modelling. A model comparison (E3ME, UCL ENGAGE) could be feasible. Proposed qualifications: MSc with distinction in environmental macro-economic modelling with experience in MRIO (Multiregional Input-Output Tables), preferably with knowledge on CGE (Computable General Equilibrium) modelling or a comparable approach.

As soon as possible subject to release of funds, so we are looking for a motivated

Doctoral candidate (gn)

(Reference: 16-STB-PB2-PhD2)

on the topic of Blue-Green Macroeconomic Modelling

Proposed focus region is Indonesia. The specific PhD project will be further developed with the successful candidate, taking into account their interests and skills, and done in collaboration with University of Bremen (Faculty of Business Studies and Economics, Torben Klarl).

Your tasks:

- Development of a country-specific macro module (Indonesia) within an existing macroeconomic modelling framework with environmental extensions
- Integration and harmonization of economic and environmental datasets (including MRIO, environmental, and ocean data) for consistent embedding into the model
- Modelling and analysis of socioeconomic impacts of global environmental changes, as well as development and evaluation of blue-green sustainability scenarios
- Conducting scenario analyses and policy impact assessments in the context of climate, biodiversity, and resource policies
- Methodological advancement and, where appropriate, comparison of different modeling approaches (e.g., macro-econometric and CGE-based approaches) to ensure robust results
- Participation in conferences, scientific publications, presentation of results, and close collaboration with national and international research partners
- Conducting research leading to a doctoral dissertation, in collaboration with University of Bremen (Torben Klarl) and others (Alvaro Calzadilla, UCL)
- Contribute to ZMT's earth system modelling of tropical coastal ecosystems (TropECS) and related research

Requirements:

- MSc with distinction, preferably in economics
- Strong expertise in environmental macroeconomic modelling
- Experience with MRIO analyses (multi-regional input-output tables)
- Knowledge of CGE modelling (Computable General Equilibrium) or comparable modelling approaches
- Experience in handling large economic and environmental datasets and harmonizing them for modelling applications
- Programming skills (e.g., Python, R, GAMS, or comparable tools)
- Strong analytical and conceptual skills, with ability to find novel pathways and solutions
- Independent, structured, and detail-oriented working style with a results-oriented approach
- Ability to work in interdisciplinary teams at the interface of modelling, natural sciences, and social sciences
- High motivation for academic and scientific development
- Excellent written and spoken English

Further information:

For questions, please contact Prof. Dr. Raimund Bleischwitz, email: direktor@leibniz-zmt.de, on procedural issues Gustavo Castellanos, email: gustavo.castellanos@leibniz-zmt.de, on TropEcS Alexandra Klemme, email alexandra.klemme@leibniz-zmt.de

Details of position:

Salary will be paid according to the German TV-L (EG 13). The position is available for part-time (2/3 of a full-time position) employment starting as soon as possible for 36 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:

- 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, including conference participation and visitor exchange
- 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), a letter of motivation, and an outline of the PhD project as a research plan **by 13.05.2026 as a single pdf file** with the reference number "16-STB-PB2-PhD2" to Ms. Lena de Carné-Oehlmann, email: bewerbung@leibniz-zmt.de.

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