

The Leibniz Centre for Tropical Marine Research 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.

Plastic pollution is a threat to marine and coastal biodiversity and can also affect ecosystem services and resource use and thus the livelihood of coastal populations. ZMT contributes as an implementing partner to the project Marine Litter Prevention in Ecuador – MARLI thereby carrying out specialized research focusing on plausible ecosystem-wide impacts of marine litter and resources, with a focus on mangrove forests. Mangrove tree growth processes are affected by plastic pollution and ultimately, the impacts can scale up to through the ecosystem, affecting the whole food web including bivalves. These stocks are exploited by hand-pickers, mostly women, and can be a key resource for their economic well-being. ZMT will contribute to the overall project by developing an agent-based model depicting the impact of plastic on key components of the mangrove system as well as representing human actors (harvesters) collecting e.g. bivalves or crabs, and including economic drivers. Furthermore ZMT will contribute to the design of monitoring practices.

Here (subject to release of funds), we seek a researcher with experience in agent-based modelling and working with stakeholders to investigate plastic impact on mangrove systems in Ecuador and implications for resource use in these systems in cooperation with project partners.

We are seeking to fill an opening for an (ABM-) Senior Modeller (subject to release of funds).

(ABM-) Senior Modeller (gn)

(Reference: 12-MarLi)

Your tasks:

- Investigate impact of plastic pollution on mangrove systems in Ecuador and impacts on resource use
- Develop an agent-based model of plastic impacts on mangrove systems, which includes human actors
- Conduct stakeholder workshops in Ecuador to get an overview on resource use practices
- Contribute to the design of monitoring practices and estimate plausible outcomes of plastic pollution reduction in terms of biodiversity and socio-economic processes
- Coordinate relevant activities with project partners

Requirements:

- University degree (MSc or PhD) in a related field (doctoral degree preferred)
- Knowledge on tropical coastal ecosystems, preferable mangroves
- Experience in developing agent-based models as well as knowledge in the programming language JAVA
- Knowledge of management practices related to resource use effects on tropical ecosystems
- Experience in conducting stakeholder workshops
- Willingness for international travel (Ecuador), working experience in tropical countries would be beneficial
- Excellent communication and writing skills in English, Spanish would be an asset

Further information:

For questions please contact PD Dr. Hauke Reuter, email: hauke.reuter@leibniz-zmt.de or Dr. Giovanni Romagnoni, email: giovanni.romagnoni@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 position and will start as soon as possible with a duration until 30th November 2026. 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 your CV including publication list, a brief statement of motivation and the names and contact information of two referees **by 20.06.2024 as a single pdf file** with the reference number "12-MarLi" to Ms. Carina Seemann, email: bewerbung@leibniz-zmt.de.

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