

GEOMAR Helmholtz Centre for Ocean Research Kiel is a foundation under public law jointly financed by the Federal Republic of Germany (90%) and the State of Schleswig-Holstein (10%). It is one of the internationally leading institutions in the field of marine research.

Through our research and our commitment to the transfer of knowledge and technology, we contribute significantly to the preservation of the function and protection of the ocean for future generations.

The research unit *Marine Evolutionary Ecology* of the research division **Marine Ecology** (PI Prof. Dr. Thorsten Reusch) is offering a

## **Postdoctoral scientist position (m/f/d) on the ecosystem modelling of climate and MPA effects on fish**

The employment is for 36 months. Starting date is flexible, but preferred May 1, 2026.

### **Background and Project Description**

The position is embedded in the German Bundesamt für Naturschutz (BfN) funded project SCHUFI – Supporting the development of monitoring and protection concepts for Fish. The successful candidate will work in a consortium in collaboration with the University of Hamburg and the University of Rostock, as well as several researchers at GEOMAR. The goal of SCHUFI is to enhance our understanding of the status of non-commercial fish species in the German Exclusive Economic Zone (EEZ) and to evaluate the role of marine protected areas (MPAs) and environmental variability in shaping biodiversity and ecosystem functioning.

The advertised position will be dedicated to the development and application of ecosystem models to characterize the interplay between environmental conditions (e.g., temperature and oxygen concentration), MPAs, and fisheries, and their effects on non-commercial fish species. Model development will enable exploring the influence of climate factors, such as temperature, on individual bioenergetics and species' spatial distribution. The role of MPAs will be assessed with respect to their effects on populations (i.e., abundance, size structure, and biomass), spatial distribution, and overall ecosystem state. Key management questions, such as the potential of MPAs to increase ecosystem resilience to climate change and the identification of the most effective spatial configurations to achieve these goals, will be explored. The target areas are the southern North Sea and the western Baltic Sea, for which existing models will be harnessed and improved through the integration of novel monitoring data generated within the framework of SCHUFI (e.g., fish movement, and stable isotopes).

### **Qualifikation**

#### **Required:**

- A diploma/M.Sc. and a Ph.D. (or equivalent) in ecology, ecosystem/ecological modelling, biology, marine biology, or a related field
- Publications (published or in preparation) on topics related to ecosystem modelling.
- Programming proficiency (e.g., R, Python, or Java)
- Excellent written and spoken English

#### **Desirable:**

- Prior experience modeling one of the following systems: the southern North Sea and/or the western Baltic Sea ecosystems

- Previous expertise in the development and application of spatial-explicit, individual-based ecosystem models
- Integration of bioenergetics and evolutionary aspects in ecosystem modelling
- Skills in managing and adapting oceanographic and environmental data in different formats (e.g., netCDF files)
- Expertise in RCP and SSP scenarios and their use to drive future simulations of ecological and fisheries interactions

**At a workplace, directly on the Kiel Fjord with many leisure and recreational opportunities, we offer you:**

- Good conditions for work-life balance: We offer, among other things, the possibility of mobile working and individual working time arrangements, vacation courses for the children of our employees, and good support in finding a place in a daycare center at the Kiel site
- Support services for professional and personal life situations
- An exciting work environment with the opportunity to provide important impetus for the development of sustainable solutions
- Exciting topics in an international environment
- Work in the field of marine and climate research, a forward-looking area with social significance
- 30 vacation days + additional time off at Christmas Eve and New Year's Eve
- Company pension plan and capital-forming benefits

The position is available for a funding period of 36 months. The salary depends on qualification and could be up to the class E13 TVöD-Bund of the German tariff for public employees. This is a full-time position. The position can be split in principle.

GEOMAR Helmholtz Centre for Ocean Research Kiel seeks to increase the proportion of female scientists and explicitly encourages qualified female academics to apply. GEOMAR is an equal opportunity employer and encourages scientists with disabilities to apply. Qualified disabled applicants will receive preference in the application process.

Please send your application for this post, including a motivation letter and a curriculum vitae (CV) **not later than February 22<sup>nd</sup>, 2026** under the following link:

**[Online application](#)**

As soon as the selection procedure has finished, all your application data will be removed according to data protection regulation.

For further information regarding the position and research unit please contact Prof. Dr. Thorsten Reusch ([treusch@geomar.de](mailto:treusch@geomar.de)) and Dr. Marco Scotti ([mscotti@geomar.de](mailto:mscotti@geomar.de)).

We will answer all your questions if you send us an e-mail to [bewerbung@geomar.de](mailto:bewerbung@geomar.de). In doing so, please refer to the keyword "**SCHUFI – Modelling**".

For further information on GEOMAR Helmholtz Centre for Ocean Research Kiel or the Helmholtz Association, please visit [www.geomar.de](http://www.geomar.de) or [www.helmholtz.de](http://www.helmholtz.de).

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The TOTAL E-QUALITY award is presented to GEOMAR for efforts in terms of human resource management aimed at providing equal opportunity.