

GEOMAR Helmholtz Centre for Ocean Research Kiel is a foundation of public law jointly financed by the Federal Republic of Germany (90 %) and the state of Schleswig-Holstein (10 %) and is one of the internationally leading institutions in the field of marine sciences. Currently GEOMAR disposes over an annual budget of approx. 80 million Euro and has approx. 1000 employees.

The research unit “Marine Evolutionary Ecology” of the research division “Marine Ecology” is offering a position as

Doctoral researcher (m/f/d)

Pelagic in situ observations, biodiversity and carbon flux

starting on 1. January 2022, the position offers the possibility to obtain a doctoral degree in natural sciences.

Project Description

The eastern Mediterranean Sea is a highly oligotrophic marine ecosystem that is subject to rapid warming. As a result, water column properties and marine communities are changing, potentially impacting ecosystem functioning and carbon cycling. The advertised position is part of the project “The Eastern Mediterranean Sea - An Early-Warning Model-System for our Future Oceans: EMS Future Ocean Research (EMS FORE)”, which is a German-Israeli collaborative program funded as a Helmholtz International Laboratory with GEOMAR Helmholtz Centre for Ocean Research Kiel and the University of Haifa, Israel being the main partners. The goal of EMS FORE is to investigate the eastern Mediterranean ecosystem and carbon cycling from the surface to the seafloor, combining marine physics, chemistry, biology and modelling.

The advertised position will contribute to Work Package 5 “Technology” led by Prof. Achterberg and Dr. Hoving (GEOMAR) and Dr. Treibitz (Haifa). The PhD candidate will be working closely with both institutes but will be based at GEOMAR in the Deep-Sea Biology working group of Dr. Hoving. A close collaboration with other PhD students in the EMS FORE program is expected, as well as with Israeli collaborators.

Tasks

The scientific objectives of the advertised project are to (1) establish a biodiversity baseline of pelagic fauna, in particular gelatinous zooplankton, (2) to quantify the role of selected pelagic fauna in vertical carbon flux and (3) to optimize in situ observations of pelagic fauna.

The candidate will be applying and optimizing in situ observational methodologies (e.g. single and stereo underwater cameras), perform net sampling and molecular genetic analysis to collect data on pelagic faunal diversity, size, abundance and distribution from shallow waters to the deep sea. The required fieldwork in Israel or elsewhere will be at least 1-2 months per year, and will involve shore and/or ship- based expeditions. Laboratory work involves image analysis and optimization (supported by University of Haifa), assistance in technology improvement, faunal identification from samples and genetic laboratory work. Results should be presented on conferences and project meetings and published in peer-reviewed journals, and will be coupled with carbon export work in other EMS FORE work packages.

Qualification

Requirements

- MSc degree or Diploma degree in (marine) biology, biological oceanography or an equivalent study
- Good knowledge in marine ecology, understanding of open ocean pelagic processes
- Proven very good ability to work with statistical packages (e.g. 'R'), and ecological data analyses.
- Willingness and ability to participate in the project expeditions and partner laboratory work visits
- Excellent knowledge of English writing and language

If the required degree is not completed at the time of application, the degree certificate must be handed in before the above start date of the contract and the application must contain plausible evidence that the degree can be finished before that date.

Additional skills and knowledge

- Experience with marine underwater technology or seagoing expeditions is beneficial
- Experience with underwater image collection or analysis is desired
- Experience with biogeochemical flux measurements and calculations is beneficial
- Experience with marine biodiversity analysis (morphological identification or DNA (meta) barcoding) is desired
- Experience with writing or editing of scientific manuscripts is desirable

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 part-time position according to 75 % of a full-time equivalent. The position can not be split. Flexible working time models are generally possible.

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.

To apply please provide a letter of motivation, a CV and a 2-page written statement (excl. references) about the biodiversity and ecological role of gelatinous fauna in the Mediterranean under climate change. Please send your application for this post not later than **October 31st, 2021** in a **single pdf-file** using the keyword "**Pelagic Biodiversity EMS FORE**" in the subject line to the following email address:

bewerbung@geomar.de

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 Dr. H.J.T. Hoving (hoving@geomar.de; +49 431 600-4566).

Please do not contact us by phone about the present state of procedures. However, we will answer all your questions if you send us an e-mail to bewerbung@geomar.de. In doing so, please refer to the keyword.

GEOMAR is a member of the Helmholtz Association and the German Marine Research Consortium (KDM). For further information please visit www.geomar.de or www.helmholtz.de.

GEOMAR is committed to an objective and non-discriminatory personnel selection. Our job advertisements address all people. We expressly renounce the submission of application photos.



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