

## **Job posting** (Geo 01/2024)

The Leibniz Institute for Baltic Sea Research Warnemünde (IOW) has a temporary

### **PhD position in the department Marine Geology**

starting from 01.06.2024 for a period of three years and a percentage of 75% (30h/week). Remuneration is paid in accordance with the Tarifvertrag für den öffentlichen Dienst der Länder (TV-L, Public Sector Collective Agreement on Länder) salary scale at level 13.

#### **Who are we?**

The IOW is an independent research institute of the Leibniz Association for which equal opportunities, family friendliness and work-life balance are very important. Our research focus is on the coastal and marginal seas, especially the Baltic Sea. The staff of the four sections Physical Oceanography and Instrumentation, Marine Chemistry, Biological Oceanography and Marine Geology works interdisciplinary within a joint research programme.

The doctoral position will be housed in the Marine Geophysics working group. The team with expertise in geology, geophysics and computer science works, among other things, on the mapping of marine habitats using remote sensing and the optimisation of measurement and evaluation methods. The work is carried out in an international context as well as in co-operation with German federal authorities. One focus is the mapping of hard substrates for the identification of geogenic reefs.

#### **What will be your tasks?**

The delineation of geogenic reefs is becoming increasingly important in marine biotope mapping. The high ecosystem relevance of reefs has prompted the European Union to place them under protection and to regularly monitor their state. The aim of the PhD is to improve the mapping of geogenic reefs and place their occurrence in a geological context. The delineation of these reefs as habitats worthy of protection is currently carried out manually on the basis of a fixed number of boulders per area, which are identified in backscatter mosaics. By detecting individual objects using automatic evaluation routines, the distribution densities of boulders are to be taken into account in future reef mapping. The consideration of object sizes and the geological subsurface, which have not yet been used in reef assessment, should be used to better classify the reefs and their ecological function. Appropriate approaches are to be developed and the results evaluated in interdisciplinary cooperation with biological and geological backgrounds from research and environmental authorities. The working area is

the coastal area of the Baltic Sea. Multibeam echo sounder, side-scan sonar and sediment echo sounder data are available over a large area. The data sets can be supplemented and validated using the IOW's own vessels. The research work is not assigned to a third-party funded project and therefore offers the flexibility to include own research activities. The new research results are to be presented in international journals and conferences as part of the doctorate.

### **What do we expect from you?**

The prerequisite for the doctoral position is a university degree in geosciences or a related subject, ideally with a specialisation in geophysics and excellent English language skills. A doctorate requires a high degree of curiosity, perseverance and independent problem solving. Experience in hydroacoustic measurement methods (side-scan sonar, multibeam echo sounder, sediment echo sounder) and the corresponding data processing and interpretation is desirable. Basic knowledge of sedimentology, Baltic Sea geology, programming and experience with machine learning are advantageous. We expect an interest in seagoing work and independent data acquisition in the coastal zone of the Baltic Sea.

### **What does the IOW offer?**

The IOW offers you a varied workplace in the immediate vicinity of the Baltic Sea ([Work at sea](#)) with flexible working arrangements, e.g. the possibility of working from home or remotely and a company health management. A very good infrastructure with modern laboratory and office equipment, including on our own research vessel, form the framework for the best working conditions.

### **How do we promote equal opportunities ?**

Our job offers are aimed at all people regardless of their gender. Research benefits from a diverse working environment, which is why we have signed the Diversity Charter.

IOW aims to specifically promote women in areas where they are underrepresented. For this purpose, the institute has given itself a plan to promote equality ([plan for the equal opportunities committee at the IOW](#)) and has repeatedly been awarded the Total E-Quality award for its commitment ([website TOTAL E-QUALITY e. V.](#)) Female applicants are given preference in the case of equal qualifications and suitability, as the position belongs to a working group in which women are underrepresented. You can find an overview of our measures for equal opportunities and for improving the compatibility of work and family on our [website](#).

We give preference to applications from disabled persons with equal professional and personal suitability. Please mention the disability or equality in your letter of application and enclose a copy of the relevant certificate.

### **How to apply?**

Please send us your application documents with cover letter, CV, copies of your certificates, description of relevant activities and experiences as well as references.

We look forward to receiving your application, quoting the

**keyword: Geo 01/2024**

**by 02.04.2024**

to:

[bewerbung.geologie@io-warnemuende.de](mailto:bewerbung.geologie@io-warnemuende.de)

or

Leibniz Institute for Baltic Sea Research Warnemünde

Human Resources Department

Seestraße 15

18119 Rostock

Germany

The interviews are expected to take place on April 26<sup>th</sup> 2024

Unfortunately, we cannot cover your application and travel costs.

For further information, please contact:

Svenja Papenmeier: [Svenja.papenmeier@io-warnemuende.de](mailto:Svenja.papenmeier@io-warnemuende.de)