

Job posting (DIR 01/2025)

The Leibniz Institute for Baltic Sea Research Warnemünde (IOW) has a temporary vacancy starting **01.07.2025** for a

Postdoctoral position with the topic "seagrass management and spatial distribution"

in the Research Unit Coastal Seas and Society until the **30.11.2027** and a percentage of 100% (40h/week), subject to the funding of the project.

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. The position can also be filled on a flexible part-time basis with at least 30h/week. The position is preferably to be filled as a PostDoc position, but is generally also suitable as a project or PhD position.

About SEAGUARD

This position is embedded in the **SEAGUARD** project (Seagrass Growth and Adaptation Using AI Research & Development), which focuses on assessing the **CO₂ storage potential of seagrass meadows** and identifying **climate-resilient restoration sites** in the **Baltic Sea**.

The project integrates regional climate modeling, AI-driven simulations, and biogeochemical modeling to predict seagrass distribution under various climate and nutrient scenarios. SEAGUARD aims to provide science-based recommendations for nature-based climate mitigation and marine biodiversity conservation.

SEAGUARD is a joint effort of the IOW, the informatics department of the University of Kiel, and the remote sensing company EOMAP GmbH & Co. KG.

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 five departments Physical Oceanography, Marine Chemistry, Biological Oceanography, Marine Geology and Marine Observations work on an interdisciplinary basis in a joint research



program. The Research Unit Coastal Seas and Society covers a wide spectrum of applied and interdisciplinary research.

What will be your tasks?

The position focuses on co-design and co-evaluation of recommendations for seagrass management and seagrass restoration on the basis of spatial analyses of its potential distribution in the German Baltic Sea. Your tasks will include:

- Compilation of existing monitoring data on seagrass occurrence and coverage, density and composition today and in the past along the German Baltic Sea coast
- Analysis of changes in locations and coverage during the last decades as well as the controlling factors
- Hydrodynamic model-based assessments of the drivers of changes in seagrass locations and losses, such as extreme events
- Spatial analysis of areas where seagrass should be able to growth under present and future conditions (including different nutrient and climate scenarios) and site selection for reintroduction
- Analysis and evaluation of suitable measures to enable seagrass reestablishment/spread, taking into account policy framework conditions and nature protection demands (EU WFD, EU MSFD, and EU Nature Restoration Law)
- Assessment of the local acceptance, enabling conditions for seagrass reestablishment and societal benefits
- Co-design and co-evaluation of recommendations for seagrass management, its restoration, and the integration into current water quality legislation and management, which includes the organization of discussion for with stakeholders, the entire project consortium and parallel seagrass projects

What do we expect from you?

You have a researcher personality, and your desire to understand our environment is driven by scientific curiosity. Applicants must have a university degree (master/diploma with at least a good degree) in coastal or marine environmental sciences or a related discipline. A completed PhD in the above fields is not a prerequisite, but is highly desired. Evidence of very good English language skills is required. Good German language skills (at least level B1) are of advantage. The ability to work scientifically independently in an interdisciplinary team and the willingness to carry out science related to the novel IOW research programme 2024-2033 are mandatory. In particular, you will work with Research Area 2.2.4.



Important selection criteria are:

- (1) Good knowledge of European marine ecosystems as well as European coastal and marine policies (especially EU-MSFD and EU-WFD) and ecosystem services
- (2) A good international publication record (relative to the professional career) in relevant topics
- (3) Interdisciplinary and transdisciplinary research experience in European coastal and marine systems, the ability to work independently as well as scientific writing and reporting skills
- (4) Experience in spatial data analysis using geographic information systems (GIS) and programming languages (R, Python) as well as experience in numerical model applications and multivariate data analysis
- (5) Knowledge of seagrass and the factors controlling its spatial distribution

The preferred starting date is July 1, 2025.

What does the IOW offer?

The IOW offers you a varied workplace in the immediate vicinity of the Baltic Sea (<u>Work at sea</u>) with flexible working arrangements, e.g. the possibility of working from home or remotely and qualification opportunities for the English/German language. 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 (<u>plan for the equal opportunities committee at the IOW</u>) and has repeatedly been awarded the Total E-Quality award for its commitment (<u>website TOTAL E-QUALITY e. V.</u>) You can find an overview of our measures for equal opportunities and for improving the compatibility of work and family on our <u>website</u>.

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 a cover letter, including description of relevant activities and experiences, CV, copies of your transcripts, as well as certificates or references.

We look forward to receiving your application, quoting the keyword: **DIR 01/2025 until 20. April 2025**

to:

bewerbung@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 in week 19.

Unfortunately, we cannot cover your application and travel costs. Online participation in the job interview is possible.

For further information please contact:

Dr. Miriam von Thenen, <u>miriam.thenen@io-warnemuende.de</u>

Dr. René Friedland, rene.friedland@io-warnemuende.de

or visit our website: www.io-warnemuende.de