

Job posting (OBS 03/2025)

The Leibniz Institute for Baltic Sea Research Warnemünde (IOW) has a temporary vacancy starting **01.08.2025** for a

Postdoctoral position with the topic “Changing Marine Lightscapes”

in the Department of Marine Observations for a period of 36 months 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.

About the ISOLUME project

This position is embedded within the **ISOLUME** project. **ISOLUME** (Indicators of Changing Lightscapes in Underwater Marine Ecosystems) focuses on assessing **how marine lightscapes have changed** across European sea basins over decadal timescales, due to coastal darkening (COD) and artificial light at night (ALAN), and will determine **drivers, sources and impacts of these changes** at both large and small scales. The scientific evidence-based knowledge developed in ISOLUME will be used to develop a **roadmap for implementing changing marine lightscapes** as an **indicator** in management policies, monitoring programmes and essential ocean (biodiversity) variables. ISOLUME is a collaborative effort between IOW and 10 European partners and is supported by the JPI Oceans Changing Marine Lightscapes initiative. ISOLUME has been endorsed by the Intergovernmental Oceanographic Commission (IOC) as part of the **UN Ocean Decade of Ocean Science for Sustainable Development 2021-2030**.

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 interdisciplinary within a joint research programme.

What will be your tasks?

The position focuses on the co-design and co-development of a monitoring assessment and policy framework for mitigating changes in marine lightscapes. You will be part of a scientific cohort that builds knowledge on changing marine lightscapes based on scientific evidence. Working closely with ISOLUME partners, the JPI Oceans Changing Marine Lightscapes ALANIS project and the ISOLUME/ALANIS Science Advisory and Stakeholder Panel (SASP), you will develop a roadmap for implementing changes in marine lightscapes as an indicator in policies and monitoring programmes and as an essential ocean (biodiversity) variable to be incorporated into the Global Ocean Observing System Framework. This includes drafting a policy framework for communicating changes in marine lightscapes and introducing spectral quality (the amount and temporal pattern of the underwater light field for pelagic and benthic communities) as a relevant observable for ocean health. The aim of the policy framework is to promote active engagement with HELCOM, OSPAR, the Barcelona Convention, GOOS, GEOBON, and translate empirical evidence into lighting principles, thus, enabling evidence based implementation of nature conservation laws.

Your primary responsibilities will include:

- Transforming scientific evidence developed in ISOLUME into a knowledge base which underpins a monitoring assessment framework for changing marine lightscapes.
- Developing a roadmap for implementing changes in marine lightscapes as an observable of ocean health.
- Providing the ISOLUME project office at IOW with project management support, including establishing and communicating with the Scientific Advisory and Stakeholder Panel (SASP) and maintaining the SASP database.
- Supporting ISOLUME Dissemination, Exploitation, Communication and Outreach (DECO) activities, in close collaboration with the JPI Oceans Knowledge Hub on Changing Marine Lightscapes.

Your work will provide a **structured framework** to assess the effects of **changes in the quality of the underwater light** environment and contribute to new perspectives for **environmental monitoring**. You will be expected to publish your work in relevant peer-reviewed scientific/policy journals.

What do we expect from you?

Applicants must have a university degree (master/diploma) and a PhD in coastal or marine environmental sciences or a related discipline. 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 2.4 and 3.1.

Important selection criteria are:

- Strong interdisciplinary and transdisciplinary analytical skills which bridge science and marine policy, including research experience in European coastal and marine systems.
- Experience in spatial data analysis using geographic information systems (GIS) and programming languages (e.g. Python, Matlab, R) as well as in advanced statistical methods for analyzing complex ecosystem and environmental datasets.
- Good knowledge of European marine ecosystems as well as European coastal and marine policies (especially EU-MSFD and EU-WFD) and ecosystem services.
- A good international publication record (relative to the professional career) in relevant topics.
- Excellent scientific writing and reporting skills.
- Ability and willingness to travel internationally, actively engage in interdisciplinary and transdisciplinary collaborations and work independently and in a team.

The preferred starting date is August 1, 2025.

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 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 ([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 including a 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:

OBS 03/25 by 18 May 2025

to:

bewerbung@io-warnemuende.de

or

Leibniz Institute for Baltic Sea Research Warnemünde
HR Department
Seestraße 15
18119 Rostock
Germany

The interviews are expected to take place on **2 June 2025**.

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

For further information please contact:

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