

Job announcement (PHY 05/2021)

The Department Physical Oceanography and Instrumentation of the Leibniz Institute for Baltic Sea Research Warnemünde (IOW) is seeking two highly motivated

Postdoctoral Research Scientists

in full-time (40 hours/week), working on the analysis and modeling of the climate in the Baltic Sea region. The position announced here will be filled as soon as possible after 01.12.2021 (subject to financing). Remuneration is paid depending on the individual qualification and in accordance with the TV-L salary scale at level EG 13.

The position is limited to a term of 3 years and may also be covered in part-time with at least 30 working hours per week.

The activity is integrated into the joint project of the German Alliance for Marine Research (DAM) "CoastalFutures - Scenarios to Promote Sustainable Futures of Contested Marine Areas" in sub-project B "Scenarios for Ecosystem Services". In the event of a positive assessment by the third-party funder, an extension for a further 3 years is possible.

The IOW is an independent institute of the Leibniz Association, engaged in system analysis of coastal and marginal seas, with special focus on the Baltic Sea. The scientists of the four departments (Physical Oceanography and Instrumentation, Marine Chemistry, Biological Oceanography and Marine Geology) cooperate within the framework of a joint research program.

Job description

The position holders will work closely with other scientists inside and outside the IOW to develop a regional earth system model for the Baltic Sea region and use it for long-term studies.

In particular, the aim is to investigate how climate change, in combination with different management strategies, will affect the physical and biogeochemical basic variables of the Baltic Sea by the end of the century. The main question is how coastal and marginal seas react to climate change and other human influences such as over-fertilization with nutrients (attribution). Furthermore, it will be investigated how extreme climatic events such as heat waves and extreme precipitation events affect the ecosystem of the Baltic Sea and how they will change in the future.

The job holders should contribute to the development of the regional climate model at the IOW and run and evaluate model runs independently. The focus is on the analysis of climate-relevant processes in combination with different management strategies for the Baltic Sea region and their importance for the regional climate system and the biogeochemical state variables of the Baltic Sea. Furthermore, the influence of the large-scale circulation of the atmosphere on the stratification and circulation of the Baltic Sea is to be studied and analyzes of climate variability in the Baltic Sea region are to be carried out. In addition, ensemble studies are to be carried out to assess the uncertainty of projections with coupled models.

Qualification

Applicants must have a PhD (at least magna or summa cum laude) in meteorology, oceanography or a related natural or geoscientific discipline with pronounced physical-mathematical components. Independent scientific work, an appropriate number of publications, experience in the application and development of numerical global or regional climate models, good knowledge about the global climate system and physical processes in the ocean, the atmosphere and in the sea ice, about the variability of the climate in the Baltic Sea region, and regional and global climate projections are required. In addition, knowledge of biogeochemical cycles on global and regional scales is desirable.

Experience in the application of super computers, Linux / Unix, and Fortran and in the visualization and scientific evaluation of large amounts of data (e.g. with software such as Matlab, IDL, Python, R) are required.

The ability to work in a team as well as good to very good knowledge of the English language is essential for the cooperation with international partners.

Applicants are kindly asked to send their complete and detailed applications (Cover letter, CV, copies of certificates, descriptions of expertise and professional activities, list of publications, and at least two references) quoting the code **PHY-05/2021** until **15 October 2021** to

bewerbung.physik@io-warnemuende.de

or

Leibniz Institute for Baltic Sea Research Warnemuende
Dept. Human Resources
Seestrasse 15
18119 Rostock
Germany

The interviews are expected to be on 28 or 29 October 2021 online.

Applications of disabled persons with same professional and personal qualification will be treated preferentially. Please indicate a handicap in the cover letter and enclose the relevant certificate.

The job advertisement is aimed at all persons regardless of their gender. The IOW promotes equal opportunities and was awarded the Total Equality Award (TEQ) in 2013 and 2016. An overview of our measures to equal opportunities and to improve the compatibility of work and family can be found at <http://www.io-warnemuende.de/gleichstellung.html>. Our family office, equipped with computer workstation and toys, offers parents the opportunity to take children to the IOW



for shorter time periods. Applications of female candidates are particularly encouraged and will be treated preferentially in case of equal qualifications and suitability, as the post to be filled belongs to a structural unit in which women are underrepresented.

The Leibniz Institute for Baltic Sea Research offers a varied work in the immediate vicinity of the Baltic Sea. Interdisciplinary research topics on the Baltic Sea ecosystem, broad in-house expertise in physical, chemical and biological oceanography, and marine geology, state-of-the-art-laboratory equipment and infrastructure together with modern facilities provide an excellent framework for best research conditions.

Application costs cannot be reimbursed unfortunately.

For further information please contact:

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or

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