Job announcement (Phy 03/2022)

The Department Physical Oceanography and Instrumentation of the Leibniz Institute for Baltic Sea Research Warnemünde (IOW) is offering (subject to funding of the project) a part time (30 hrs/week)

PhD position

starting on January 1st, 2023. Remuneration is paid in accordance with the TV-L salary scale at level EG 13. The employment is temporary for 3 years.

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 PhD student will investigate salt intrusions into the Weser Estuary in Germany and their dependence on weather and climate forcing, including the impacts of dredging and narrowing for safer navigation and coastal protection. The work will be carried out by numerical modelling using the General Estuarine Transport Model (GETM). Various existing analysis methods will be used for the model results and new methods will be developed by the PhD student. Machine Learning techniques will be applied to develop a predictive tool for salt intrusions. The work is funded by the Federal Waterways Engineering and Research Institute (BAW) and will be carried out in close collaboration with BAW.

Qualification

Applicants are expected to have a master degree (at least grade “good” or comparable) in Physical Oceanography, Physics, Mathematics or a related field. A strong background in Coastal Oceanography, numerical modeling and numerical methods for partial differential equations is expected. Some experiences in methods of Machine Learning are desirable.
Candidates are asked to send their complete applications (letter of motivation, CV, copies of certificates, references) quoting the

Code: **Phy 03/2022**
Until **17.11.2022** to:
bewerbung.physik@io-warnemuende.de
or
Leibniz Institute for Baltic Sea Research Warnemünde
Dept. Human Resources
Seestraße 15
D-18119 Rostock
Germany

The interviews are expected to take place on 47th or 48th calendar week.

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) regularly since 2013. An overview of our measures to equal opportunities and to improve the compatibility of work and family can be found at [https://www.io-warnemuende.de/equal-opportunity.html](https://www.io-warnemuende.de/equal-opportunity.html). 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 and travel costs cannot be reimbursed.

For further Information please contact:
Prof. Dr. Hans Burchard ([hans.burchard@io-warnemuende.de](mailto:hans.burchard@io-warnemuende.de)) or visit our website: [www.io-warnemuende.de](http://www.io-warnemuende.de)