LEIBNIZ-INSTITUT FÜR OSTSEEFORSCHUNG WARNEMÜNDE

Job announcement for a PhD position (Phy-1/2016)

The Department Physical Oceanography and Instrumentation of the Leibniz Institute for Baltic Sea Research Warnemünde (IOW) is seeking a highly motivated PhD candidate for a PhD project on regional climate system modeling. The project announced here should start as soon as possible in spring 2016. Remuneration is paid in accordance with the TV-L salary scale at level EG 13 (75%) monthly gross salary. The employment is temporary for 3 years (30 hrs/week).

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, Marine Chemistry, Biological Oceanography and Marine Geology) cooperate within the framework of a joint research program.

Job description

In recent decades oxygen poor sea bottoms have dramatically spread in the Baltic Sea due to anthropogenically induced nutrient loads from rivers and atmospheric deposition. Additional factors, that determine the oxygen content in the bottom waters of the Baltic Sea significantly, are the physical conditions in the Baltic Sea, like the horizontal and vertical transports of oxygen and the water temperature. The planned study will help to better understand and disentangle the causes for the observed changes in the oxygen content of the bottom waters of the Baltic Sea during the past 150 years. For this purpose an existing, coupled physical-biogeochemical, numerical model of the Baltic Sea will be used to carry out sensitivity studies for the period from 1850 until today. In order to evaluate the results of the model experiments, long-term observations will be analyzed additionally and compared with model results. The evaluation will be performed with the help of statistical methods.

The candidate will work with these objectives and will perform the necessary model calculations and analyses of model results and observational data independently. The extensive background knowledge has to be acquired from literature studies. The PhD student will be responsible for the presentation of research results at workshops and conferences. The job requires a high degree of autonomy and responsibility. The candidate will be part of a larger team. It is expected that the PhD thesis and graduation will be completed within 3 years.

TOTAL E-QUALITY

Qualification

The applicant must have a very good university degree in the discipline meteorology, oceanography, physics, mathematics or a related scientific discipline with pronounced physical-mathematical components. Good to very good knowledge of English, knowledge of scientific programming (e.g. in Fortran) and experience in the use of Linux / Unix and graphical analysis programs such as Matlab, Python, IDL are required. In addition, experiences in the statistical analysis of geophysical observations and model data and knowledge about the climate system and the physical and biogeochemical processes in the sea and in the atmosphere are desirable, but they are not a requirement.

Applicants are kindly asked to send their complete applications (Cover letter, CV, copies of certificates, description of expertise and professional activities, list of publications and at least two references) quoting the code **Phy-1/2016** until **07. Februar 2016** to

bewerbung@io-warnemuende.de / bewerbung.physik@io-warnemuende.de

or

Leibniz Institute for Baltic Sea Research Warnemünde
Dept. Human Resources
Seestraße 15
D-18119 Rostock
Germany

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 IOW promotes equal opportunities and has been awarded the Total Equality Certificate (TEQ) in 2013. Applications of female candidates are expressly encouraged and will be treated preferably in case of equal qualifications and suitability. Our family office, equipped with computer workstation and toys, offers parents the opportunity to take children to the IOW for shorter time periods.

The Leibniz Insitute 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 unfortunately.

For further information please contact:

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Or: Dr. Thomas Neumann, email: thomas.neumann@io-warnemuende.de

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