Job announcement (Phy 02/2019)

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 modeling for the Baltic Sea region at the earliest convenience in spring 2019. Remuneration is paid in accordance with the TV-L salary scale at level EG 13 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

Since the formation of the Baltic Sea about 10 000 years after the end of the last ice age, there have been major climatic changes in the Baltic Sea region. After all the ice had melted, first the Baltic Sea ice lake was formed, then the Yoldia Sea and the Ancylus Lake and finally the Littorina Sea - the Baltic Sea, as we know it today. The different stages of development of the Baltic Sea are a consequence of the interplay of sea level rise and land uplift, which control the exchange of water between the Baltic Sea and the ocean. With the help of a coupled physical-biogeochemical circulation model of the Baltic Sea, the different stages of development of the Baltic Sea shall be simulated and compared with proxy data. In particular, the causes for the formation of low-oxygen deep water and dead seabed shall be investigated, which was particularly pronounced during the temperature optimum of the post-ice age period, the Holocene, and during the Medieval Warm Period.

The candidate will work with these objectives and will perform the necessary model simulations and analyses of model results and observational data independently. The PhD student will be responsible for the presentation of research results at workshops and conferences. The necessary extensive background knowledge has to be acquired from literature studies. The job requires a high degree of autonomy and responsibility. The candidate will be part of a larger team.
Qualification

The applicant must have a very good university degree in one of the disciplines meteorology, oceanography, physics, mathematics or a related scientific discipline with pronounced physical-mathematical components. Good to very good knowledge of English language, knowledge of scientific programming (preferably in Fortran) and experience with working under Linux / Unix and with graphical data analysis with programs such as R, Matlab, Python are required.

In addition, experiences in high performance computing, parallel programming, 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.

Applicants are kindly asked to send their complete applications (Cover letter, CV, copies of certificates, description of relevant expertise and professional activities, list of publications and at least two references) quoting the code Phy 02/2019 until 28. February 2019 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 19 March 2019.

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 and 2016. 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 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 unfortunately.

For further information please contact:

Prof. Dr. Markus Meier, email: markus.meier@io-warnemuende.de
Or: Dr. Thomas Neumann, email: thomas.neumann@io-warnemuende.de

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