

Job announcement for a tenure track scientist position in regional climate system modelling

(Phy-2/2016)

The Department Physical Oceanography and Instrumentation of the Leibniz Institute for Baltic Sea Research Warnemünde (IOW) is seeking a highly motivated postdoctoral research scientist working on regional climate system modeling. The position announced here will be filled as soon as possible. Remuneration is paid in accordance with the TV-L salary scale at level EG 13 monthly gross salary. For the first three years the employment is temporary. After successful evaluation there is the option of permanent employment.

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 close collaboration with other scientists and scientific programmers at the department a regional climate system model for the Baltic Sea region will be developed and applied for long-term simulations. The objective is to examine how the physical and biogeochemical processes have changed in coastal and marginal seas like the Baltic Sea in the course of decades to millennia. The information about past long-term changes from long-term observations and model simulations will be used to develop plausible scenario simulations for the future of the marine ecosystem in the Baltic Sea and other coastal seas. Especially the question how coastal and marginal seas may react on anthropogenic climate change and other human influences such as eutrophication shall be addressed.

Since the influence of the atmosphere is of very great importance for the changes in relatively shallow coastal and marginal seas like the Baltic Sea, the jobholder will develop and evaluate a coupled atmosphere – sea ice – ocean – land surface model and investigate the influence of changes in the large-scale atmospheric circulation on the Baltic Sea region. In particular, the volume, energy, momentum

and material fluxes between the atmosphere, sea ice and ocean will be studied. Further, studies on changes in extreme events, ensemble studies estimating uncertainties in projections with coupled models and climate impact research on the marine ecosystem (including lower and higher trophic levels) in coastal and marginal seas like the Baltic Sea will be carried out.

Qualification

Applicants must have a PhD in meteorology (preferred), oceanography or a related natural or geoscientific discipline with pronounced physical-mathematical components. Good knowledge of dynamic meteorology and physical oceanography, as well as experience in the application and development of numerical models of the atmosphere and / or the ocean, data processing and analysis of environmental data are expected. Furthermore, experiences in the use of supercomputers, Linux / Unix, Fortran, and graphical analysis programs such as Matlab, Python, IDL are required. Good to very good English language skills are essential for the collaboration with international partners.

In addition, extended experience in the statistical analysis of geophysical observations and model data, experience in the use and / or development of climate models in particular climate system models, knowledge of the climate system in general, advanced knowledge of ocean-ice-atmosphere interactions, and experience in the application of coupling tools for system modelling are desirable.

Applicants are kindly asked to send their complete and detailed applications (Cover letter, CV, copies of certificates, descriptions of expertise, professional activities and possible scientific perspectives, list of publications, and at least three references) quoting the code **Phy-2/2016** until **07. Februar 2016** to

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 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:

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

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