

## Job announcement (Phy-01/2017)

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

### **Postdoc position in Physical Oceanography (Numerical modelling of glacier-fjord interactions)**

Remuneration is paid in accordance with the TV-L salary scale at level EG 13 (40 working hours/week). The employment is temporary for 3 years. Part-time employment is possible. Starting date is 01 May 2017.

IOW is an independent institute of the Leibniz Association, engaged in system analysis of coastal and marginal seas, with a 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

Within the collaborative project cluster GREENland ice sheet / OCEan Interaction (GROCE), funded by the German Ministry of Research and Education (BMBF), processes at the ice-ocean interface of the marine-terminating 79° outlet glacier are investigated by applying a local coastal ocean hydrodynamic model. Focus will be the quantification of the glacier melt rate and its variability in dependence of fjord water properties, subglacial discharge and other environmental parameters. A specific scientific challenge is the large ice shelf which the glacier forms at its seaward terminus, which is supposed to drive a shelf pump bringing warm and salty North Atlantic waters to the ice-water interface, a process leading to accelerated melting.

Close collaboration is expected with observational oceanographers within the project cluster, carrying out in-situ measurements of melt rates and melt water pathways, with large scale numerical modellers providing the remote forcing for the local model, as well as with ice shield modellers to estimate rates of subglacial discharge. Final goal of the interdisciplinary project cluster will be the process-based quantification of the contribution of the 79° glacier on global sea level rise, to better understand the global climate effect of the increasing Greenland ice shield melting.

The position is integrated into the working group „Estuarine and Coastal Ocean Processes“, coordinated by Prof. Hans Burchard and Dr. Ulf Gräwe.

### Qualifications

Applicants are required to have a PhD in Physics, Applied Mathematics, Physical Oceanography, Atmospheric Sciences or a related scientific discipline. We expect very good English language skills, very good academic achievements, and a strong interest in interdisciplinary fundamental research. A background in numerical modelling of geophysical fluid mechanics is required. Specific experience in ocean modeling is advantageous.

Applications of disabled persons will be considered preferentially if professional and personal qualifications are comparable. Please indicate your disability in your application documents, and enclose a copy of your disability certificate.

IOW promotes equal opportunities for men and women, and received in 2013 and 2016 the Total Equality (TEQ) rating for these activities. Applications of female candidates are especially encouraged, and will be considered preferentially in the case of equivalent qualification. An overview over our equal-opportunity actions may be found at:

<http://www.io-warnemuende.de/equal-opportunity.html>

The Leibniz-Institute for Baltic Sea Research offers an attractive working environment in the immediate vicinity of the Baltic Sea. The institute has a broad scientific and technical expertise in all areas of marine research, and provides ideal working conditions through state-of-the-art technical infrastructure and equipment.

Applicants should send their complete application documents (including cover letter, CV, certificates, references, and publication list) no later than **27 March 2017** to the following address:

Leibniz-Institute for Baltic Sea Research Warnemünde (IOW)

Human Resources Department

Seestraße 15, D-18119 Warnemünde, Germany

Keyword: Phy-01/2017

Applications may also be sent electronically **as a single PDF** to:

[bewerbung.physik@io-warnemuende.de](mailto:bewerbung.physik@io-warnemuende.de)

Subject: Phy-01/2017

Please note that application and travel expenses cannot be covered.

For further information, please contact:

Prof. H. Burchard, [hans.burchard@io-warnemuende.de](mailto:hans.burchard@io-warnemuende.de), Tel. +49-(0)381-5197-140

General information about your future place of work may be found at:

<http://www.io-warnemuende.de>