International Research Training Group ArcTrain: Processes and impacts of climate change in the North Atlantic Ocean and the Canadian Arctic

The DFG-funded International Research Training Group ArcTrain, a collaborative project between the University of Bremen, the Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, and a consortium of eight Canadian universities invites applications for a

PhD position

in the area of physical oceanography in the framework of project HB-07: *Impacts of cross-shelf oceanic exchange in the subpolar North Atlantic on melting of the Greenland Ice Sheet.*

The Arctic and subarctic regions are vulnerable to global warming and in consequence to an accelerated loss of mass from the Greenland Ice Sheet. A quarter of the presently observed global sea-level rise is attributed to this mass loss and the associated freshwater input into the ocean. The Labrador and Irminger Seas receive heat and freshwater via the boundary current system, both impacting on the local water mass formation processes. On the other hand, warming waters increasingly penetrate Greenland's fjord systems and contribute to the glacial melt. The aim of the project is to address the present day oceanic exchange between the ocean interior and the shelf and vice versa on the eastern and western sides of Greenland based on large-scale observations and a comparison to high-resolution models and to assess its impact on freshwater distribution patterns as well as on melting of the Greenland Ice.

We are searching for an enthusiastic and committed researcher with an interest in ocean circulation, horizontal exchange processes, and filament/eddy formation. The PhD student will be part of the Physical Oceanography group of the University of Bremen, working under the supervision of Dr. Dagmar Kieke. A research stay is envisaged at the University of Edmonton, Alberta, Canada.

Requirements:
- MSc or equivalent qualification in physical oceanography, climate physics, meteorology or related fields
- Experience in analysing large-scale physical oceanographic data sets from observations and/or models
- Expertise in scientific computation and visualization using MatLab and/or Python in a Linux/Unix environment
- Prior knowledge in physical processes related to the North Atlantic is advantageous
- Applicants should be proficient in English, have excellent skills in scientific writing, and enjoy working in an international and interdisciplinary team.

The position is for a fixed term of 3 years. It is funded by the German Science Foundation (DFG). The position must be filled by 1st October 2019. Salary corresponds to 2/3 TV-L E13.

Applicants should submit under the reference number **A108/19 (HB-07/3)** their letter of motivation, a CV including copies of certificates, a publication list if applicable, and contact information of two referees. Documents should be submitted electronically as a PDF file (maximum size 2 MB) to arctrain@marum.de. The call is open until the position is filled. The review of applications will commence on May 24th 2019.

The University of Bremen has received a number of awards for its gender and diversity policies and is particularly aiming to increase the number of female researchers. Applications from female candidates, international applications and applications of academics with a migration background are explicitly welcome. Disabled persons with the same professional and personal qualifications will be given preference.

For further information, please contact **Dr. Dagmar Kieke** (dkieke@uni-bremen.de).