



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 sedimentology/paleoceanography in the framework of project HB-08: **Impacts of ocean-ice interactions on the Holocene sedimentary system in the western Baffin Bay.**

Depending on the overall climate setting, very different water and sediment routing systems may have affected sedimentation in the Arctic Baffin Bay that partly serves as a major gateway for fresh water, ice and sediment transport from the Arctic to the North Atlantic. Understanding the interplay between Baffin Bay paleoceanography, the connectivity to the Arctic Ocean, and the surrounding ice sheets through the Holocene will be crucial in gaining urgently needed process understanding about the controls on sediment input to and bypassing through the Baffin Bay. As high-resolution sedimentary records from the Baffin Bay are scarce and exist up to now almost exclusively from its eastern part. The mutual impacts of shrinking ice sheets and changing paleoceanography on sedimentation in Baffin Bay, especially during the Early Holocene, are up to now at best poorly constrained. This project will apply a suite of sedimentological, geochemical, stratigraphical and micropaleontological methods to decipher the impacts of ocean-ice interactions on the Holocene sedimentary system in the western Baffin Bay based on newly obtained sediment cores.

We are searching for an enthusiastic and committed researcher with interest in paleoceanography and a strong background in sedimentology. The PhD student will be part of the Marine Sedimentology group at MARUM, University of Bremen, working under the supervision of Prof. Dierk Hebbeln. A research stay is envisaged at Dalhousie University, Halifax, or the Université du Québec à Rimouski.

Requirements:

- MSc or equivalent qualification in geosciences, physical geography, environmental sciences or related fields
- Knowledge of sedimentology, geochemistry, and paleoceanography
- Prior experience in marine science and oceanography 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-08/3)** 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 **Prof. Dr. Dierk Hebbeln** (dhebbeln@marum.de).