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 isotope geochemistry in the framework of project HB-12: **Impact of melt water controlled material flux on the sedimentation in the western Baffin Bay and the circum-Greenland marginal seas**

Meltwater discharge is the carrier of continental detritus, and the dispersion and deposition of detritus by ocean currents traces the spatially focused addition of freshwater in the oceans. Baffin Bay is one of the major pathways of meltwater from the Arctic into the area of North Atlantic Deep Water formation. The currently connected material transport paths in Baffin Bay merges material transported from the Arctic Archipelago and Greenland continental sources. While directions of material transport, i.e the ocean currents are well known, there is little known about the sources of the material and its variation over time. The project will focus on the radiogenic (e.g. Sr, Nd, Pb) isotope signature of continental detritus and authigenic minerals from marine sediment cores around Greenland and western Baffin Bay to reconstruct the spatial and temporal variation of meltwater discharge and material transport from the Arctic Archipelago and Greenland into Baffin Bay, Labrador Sea and Greenland Sea under changing conditions of deglaciation.

We are searching for an enthusiastic and committed researcher with a strong interest in analytical chemistry. The PhD student will be part of the Isotope Geochemistry group at the Faculty of Geosciences and MARUM, University of Bremen, working under the supervision of Prof. Simone Kasemann. A research stay is envisaged at the Université du Québec à Montréal.

Requirements:

- MSc or equivalent qualification in geosciences
- Background knowledge in geochemistry and basic knowledge in sedimentology and mineralogy
- Operational experience in multicollector mass spectrometry and clean laboratory techniques will be of advantage
- 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-12/3)** 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. Simone Kasemann** (skasemann@marum.de).