

## 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 meltwater events on weathering and detrital fluxes along the coast of western Greenland, Baffin Bay.***

Greenland ice sheet dynamics has a strong effect on the meltwater input to Baffin Bay, potentially impacting on the ecosystem and the oceanic circulation. Melting of continental ice sheets generates an excess of freshwater influx and discharges eroded detritus and nutrients from the continent into the ocean. The dispersion of this detritus by ocean currents is a measure for the spatially focused addition of freshwater into the ocean. The project will investigate the spatial and temporal variation of Greenland meltwater discharge into Baffin Bay and its influence on seawater signatures and circulation during the late Pleistocene to Holocene. This will be done by studying continental detritus, authigenic minerals and biogenic shell material from marine sediment cores along the western coast of Greenland. The methodological focus is on the analysis of radiogenic (e.g. Sr, Nd, Pb) and stable (e.g. B) isotopes used as proxies for source regions of continental detritus and hence transport directions, sea-water sources and advection, and potentially changing freshwater input and weathering through time. We are searching for an enthusiastic and dynamic 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:

- Completed MSc or equivalent 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 have excellent English language skills 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 earliest starting date is October 1<sup>st</sup>, 2016. Salary corresponds to 2/3 TV-L E13.

Applicants should submit under the reference number **A86/16 (HB-12/2)** 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 coordinator, Gabriella Wehr ([gwehr@marum.de](mailto:gwehr@marum.de)). The call is open until the position is filled. The review of applications will commence on June 1<sup>st</sup> 2016.

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.

Further enquiries can be addressed to

Prof. Dr. Simone Kasemann  
MARUM, Universität Bremen  
Leobener Straße  
28359 Bremen  
[skasemann@marum.de](mailto:skasemann@marum.de)

