



## The Ocean in the Earth System

MARUM - Center for Marine Environmental Sciences

The Research Center / Cluster of Excellence "The Ocean in the Earth System" (MARUM) at the University of Bremen, Germany, has the overarching scientific goal to achieve a better understanding of key processes in the marine environment. The research themes are: Ocean and Climate, Geosphere-Biosphere Interactions and Sediment Dynamics.

MARUM is offering a **PhD position** in the area of isotope geochemistry in the framework of the MARUM project GB4: From element and energy fluxes to vent ecosystems.

The PhD project will combine radiogenic and stable isotopes to identify the source and pathways of hydrothermal vent fluids and to determine the energy and elemental flow. Specifically, boron and lithium isotopes in hydrothermal fluids, oceanic crust and precipitates will be analysed to identify the full range of fluid composition, pathway and sources beneath hydrothermal vents and to reconstruct the associated energy and elemental flow from lithosphere to hydrosphere and biosphere. Parallel investigations of strontium isotopes offer the potential to reconstruct mixing processes between hydrothermal fluids and seawater, and to assess heat-flow migration and chemical mass balances. We are searching for an enthusiastic and dynamic young researcher with a strong interest in analytical chemistry. The PhD student will be part of the research groups "Isotope Geochemistry" and "Petrology of the Ocean Crust" at MARUM and the Faculty of Geosciences, University of Bremen.

### Requirements:

- Completed MSc degree or equivalent in geosciences
- Background knowledge in geochemistry and basic knowledge in petrology 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.

Please address enquiries to Prof. Dr. Simone Kasemann (skasemann@marum.de).

The position is available under the condition of job release and is limited to a term of 3 years and funded by the German Science Foundation (DFG). Salary and benefits are commensurate with the federal German employee scale TV-L 13 (66.6%). Applications should include a CV, a list of publications, a statement describing research interests, the applicant's research and technical background as they relate to the position, and contact information for three referees. More information on research and technology at the MARUM is available at [www.marum.de](http://www.marum.de)

As the University of Bremen intends to increase the proportion of female employees in science, women are particularly encouraged to apply. In case of equal personal aptitudes and qualification priority will be given to disabled persons. Applicants with a migratory background and international applications are highly welcome.

Deadline for the application is **December 12th, 2013**. Applications should preferably be directed electronically with the reference number A275/15 to Prof. Dr. Simone Kasemann (skasemann@marum.de)

### MARUM

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