MARUM - Center for Marine Environmental Sciences

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

MARUM is offering a PhD position in the project "Land-ocean interaction and climate variability in low latitudes" within the MARUM research area "Ocean and Climate".

Deep convection over the Indo-Pacific Warm Pool (IPWP) is a fundamental driver of Earth's atmospheric circulation with far reaching climate impacts. On longer timescales, changes in insolation, land-sea, zonal, and meridional temperature gradients, sea level, and the intensity of the Atlantic Meridional Overturning Circulation are supposed to influence the IPWP hydroclimate. Yet the interaction between different forcings and the extent to which the IPWP climate feedbacks were involved in past abrupt climate events remain unclear owing to scant spatial and temporal coverage of the hitherto available reconstructions. In this project several geochemical parameters recorded in rapidly accumulating sediments from the eastern and western IPWP will be analyzed in order to assess past zonal and meridional gradients in temperature and precipitation, and to isolate the relative influence of different potential forcings for different scenarios. Results from this research project will advance our knowledge on the climate sensitivity of the IPWP and enable more reliable projections of low latitude climate.

We are searching highly motivated and skilled candidates with the following requirements:

•A completed academic degree (M.Sc. or equivalent), preferentially in Earth Sciences or Climate Sciences with a strong background in chemistry, sedimentology and geophysics

·Excellent English language skills

•The ability and willingness to communicate across disciplines and perform collaborative, interdisciplinary research

·Experience in geochemical laboratory methods is advantageous

Please address enquiries to Dr. Mahyar Mohtadi (<u>mmohtadi@marum.de</u>, Tel. 49-421-218-65660).

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 statement describing research interests, the applicant's research and technical background as they relate to the position, and letter of reference/contact information for three referees.

More information on research and technology at the MARUM is available at <u>www.marum.de</u>

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.

The University of Bremen expressly invites persons with migration background to apply.

Initial deadline for the application is \*July 15, 2014\*. The position will remain open until filled. Applications should preferably be directed electronically as \_a single PDF file\_ with the reference number A108/14 to Dr. Mahyar Mohtadi (<u>mmohtadi@marum.de</u> <mailto:<u>mmohtadi@marum.de</u>>) or by mail to

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