

GEOMAR Helmholtz Centre for Ocean Research Kiel is a foundation of public law jointly financed by the Federal Republic of Germany (90%) and the state of Schleswig-Holstein (10%) and is one of the internationally leading institutions in the field of marine sciences. Currently GEOMAR disposes over an annual budget of approx. 72 million Euro and has approx. 950 employees.

The research unit "Maritime Meteorology" of the research division "Ocean Circulation and Climate Dynamics" is offering a

PhD position

in the newly founded working group "Ocean-Atmosphere Chemistry-Climate Interactions" starting in June 2016 with the possibility to attain a doctoral degree in natural sciences.

The position is within the Emmy Noether group "AVeSH – A new Threat to the Stratospheric Ozone Layer from Anthropogenic very short-lived Halocarbons (VSLH)". This DFG project will assess current and future emissions of man-made oceanic VSLH, their multisided impact on atmospheric chemistry and physics, and in particular their potential to prolong stratospheric ozone depletion.

Job Description

The PhD position will focus on the release of VSLH from tropical seaweed farming. Quantifying the first anthropogenic VSLH emission estimates from such activities will be the main outcome of the following work packages.

- Investigation of seaweed farming activities in collaboration with the research unit "Chemical Oceanography" (literature studies and data collection)
- Development of a "VSLH Seaweed farming production atlas" based on laboratory-determined emission rates of tropical macroalgae species
- Simulations of VSLH transport and degradation in coastal and marine water with a global ocean model in collaboration with the research unit "Theory and Modelling"
- Development of interactive sea-to-air flux module

Qualification

- Diploma or Master in natural sciences, e.g. Environmental Science, Climate Physics, Chemistry
- Knowledge of the dynamics and chemistry of the ocean and atmosphere



- Preferable experience within the areas of air/sea exchange, surface ocean biogeochemical cycling, trace gas analysis technique and ocean modelling
- Very good programming skills (Fortran, Matlab, IDL, Unix/Linux)
- Ability to work in an interdisciplinary team
- Fluent English

The position is available for a funding period of 3 years. The salary will be class 13 TVöD of the German salary scale for public employees. This is a part-time position according to 75 % of a full-time equivalent. The position cannot be split.

GEOMAR Helmholtz Centre for Ocean Research Kiel seeks to increase the proportion of female scientists and explicitly encourages qualified female academics to apply.

GEOMAR is an equal opportunity employer and encourages scientists with disabilities to apply. Qualified disabled applicants will receive preference in the application process.

Please mention the keyword on the envelope and on the application. Please send your application for this post (letter of motivation, CV), including two names for possible references, until **30 April 2016** with the code word "**Doktorand/AVeSH**" via email in a single pdf-file (jstadil(at)geomar.de).

For further information regarding the position and research unit please contact Dr. Susann Tegtmeier (stegtmeier@geomar.de).

GEOMAR is a member of the Helmholtz Association and the German Marine Research Consortium (KDM). For further information please visit <u>www.geomar.de</u> or <u>www.helmholtz.de</u>.