Max-Planck-Institut für Meteorologie

The Max Planck Institute for Meteorology (MPI-M) is an internationally renowned center for climate research located in Hamburg, Germany. The MPI-M provides a vibrant international and interdisciplinary environment for conducting scientific research as well as access to state-of-the-art scientific facilities. The institute is located in the heart of one of Europe's most livable cities, and is embedded in an environment known worldwide for its breadth of climate research.

Within the research group *Ocean Biogeochemistry* in the department *The Ocean in the Earth System* and as part of a collaboration with the Max Planck Institute for Marine Microbiology (MPI-MM), we are looking for a

Postdoctoral Scientist (m/f, Ref. MPIM-W007)

in the area of ocean biogeochemical modeling. The successful applicant will work on the development of a new parameterization of sinking velocity and remineralization of marine aggregates. This work will focus on producing a model scheme that relates particle properties to settling velocities, environmental conditions, and microbial remineralization rate estimates. The latter will be obtained using observational data and results of small-scale modeling of marine aggregates, delivered by the MPI-MM. The successful applicant's research will make a major contribution to the MPI-M's ongoing model development efforts aimed at improved representation of carbon and nutrient sequestration in the ocean.

Responsibilities

- Design and implement a new particle settling and remineralization scheme into the ocean biogeochemistry model HAMOCC.
- Develop and perform simulations with HAMOCC in the framework of the MPI-ESM.
- Contribute to project coordination.
- Disseminate the results through publications in peer-reviewed journals and presentations at conferences.

Qualifications / Experience

- A PhD in oceanography, geoscience, environmental sciences, or a related field is required for this position.
- Compelling understanding of ocean biogeochemical dynamics, in particular regarding its role in Earth's climate.
- Experience with ocean carbon cycle models, skill in model development.
- Strong programming skills in Fortran, post-processing and visualization software (e.g., NCL, CDO, FERRET, MATLAB), as well as experience in handling large data sets.
- Strong communication and organizational skills and an ability to effectively communicate scientific understanding are also very much desired.

Employment conditions

- The position is offered for three years, with a starting date between October 2015 and January 2016.
- Payment will be in accordance with German public service positions (TVoeD E14), including extensive social security plans. The conditions of employment, including upgrades and duration, follow the rules of the Max Planck Society for the Advancement of Sciences and those of the German civil service.
- The Max Planck Institute for Meteorology seeks to increase the number of female scientist and encourages them to apply. Handicapped persons with comparable qualifications receive preferential status.

Selection criteria

Candidates will be evaluated based on their qualifications and ability to fulfill the responsibilities as outlined for this project.

How to submit your application for this post

Please submit:

1) A cover letter
2) A detailed curriculum vitae
3) The names, addresses, and telephone numbers of two referees by uploading the documents in our online application system:

https://s-lotus.gwdg.de/mpg/mhmt/perso/mpim_w007.nsf/application

Deadline for applying

This vacancy has been opened **21 July 2015.** A first cut-off date for the collection of the applications is foreseen on **5 September 2015**. If the position is not filled, this vacancy announcement will be re-published indicating a second cut-off date.

Further information on this position

For further information, please contact Dr. Tatiana Ilyina at tatiana.ilyina(at)mpimet.mpg.de.

Do not forward your application to this email address, the applications need to be submitted through the online application system (see link above).