

Postdoctoral opportunity: Global ocean climate modeling at University of Pennsylvania

We invite applications for a post-doctoral research position to work on expanding our understanding of the impact of climate driven ocean ventilation changes on the ocean carbon sink. The researcher would have the opportunity to (a) develop, run, and analyze a suite of new global circulation model simulations, (b) explore changes in mode, intermediate, and deep water formation under global warming scenarios and the impact of these changes on marine biogeochemistry, and (c) expand upon and improve the existing theoretical framework for the mechanisms that control the oceanic sink for atmospheric CO₂. A second possible scientific research area will combine theoretical ecology with global climate model analysis to understand the impact of climate change on nutrient supply, ocean plankton distribution and phytoplankton competition. The postdoc will run the GFDL ocean only model (MOM4) and the GFDL coupled climate model (CM2) on the new state-of-the-art computer cluster we have recently acquired at UPenn. A Ph.D. in oceanography, biogeochemistry, ecology or atmospheric sciences is preferred. Strong quantitative skills and programming experience, especially programming in Fortran, Matlab or Python, is highly desirable. Experience running large climate models ideal.

The successful applicant will work with Dr. Irina Marinov in the Earth Science Dept at UPenn (<http://www.sas.upenn.edu/earth/marinov.html>) and will collaborate with Dr. Jaime Palter in the Atmospheric Oceanic Sciences Program at Princeton University. Applicants are asked to send a curriculum vitae, a statement of research experience and interests, and the names and contact information (phone, e-mail and address) of at least three references to Irina Marinov (imarinov@sas.upenn.edu), Dept of Earth & Environmental Science, Univ of Pennsylvania, 240 S. 33rd Street -Hayden Hall 153, Philadelphia, PA 19104.

We will begin reviewing applications immediately, and continue until the position is filled. Competitive salary commensurate with experience.