

PhD Graduate Research Opportunities in "Oceanography and Climate Change"

Department of Earth and Environmental Sciences, University of Pennsylvania,
Philadelphia

<https://climate.sas.upenn.edu>

I am seeking a motivated doctoral student to join my ocean/climate modeling group at UPenn. Possible scientific research directions include:

- The role of the Southern Ocean physics in the global energy and carbon budgets.
- Impact of climate change on ocean physics, biogeochemistry (nutrients, carbon, oxygen) and ecology. How do changes in ocean physics, ecology and chemistry affect the sink for atmospheric CO₂ and how will decadal to millennial changes in that sink affect in turn climate?
- Development of theoretical understanding on what controls the oceanic sink for atmospheric CO₂.
- Including evolutionary concepts and functional traits into ecological models and coupling them to comprehensive global climate models.
- Observing ocean biology from space.

Applicants must be self-motivated and hard working, with good written and verbal communication skills. A strong background in either physics, chemistry, oceanography, or atmospheric science is ideal. Past programming experience under the Linux environment (especially programming in Fortran and Matlab) is highly desirable.

If interested please contact Dr. Irina Marinov at imarinov@sas.upenn.edu

Full applications for the graduate program in the Earth and Environmental Science Department are due in December 2013. Please include in your application a CV, transcripts, general GRE scores, writing samples, and an essay detailing your specific interests in this field, as well as your relevant science and computational experience.