We are seeking a Ph.D. student in Environmental Management with an interest in studying the dynamics of a retreating ice sheet using sediment cores retrieved during IODP Exp. 347 Baltic Sea Paleoenvironment. The exact mechanisms, rates, and effects of ice-sheet retreat in general are poorly known. The objective of the project is to use the sedimentology and geochemistry of varved glacial clays to gain an understanding of the role of episodic meltwater discharge and ice streaming during glacial terminations. Due to the high-resolution chronology of the varved sediments on annual to millennial timescales, results can potentially be used to inform environmental policy by setting boundary conditions for ice mass loss and sea level rise. Accelerated sea level rise threatens human and ecological systems along the world’s coastlines and the development of local policy tools for coastal management practices requires accurate predictions of globally distributed sea level rise.

On a competitive basis, the Ph.D. program awards an $18,000, 10-month stipend (Sept.-June) plus tuition waiver to incoming Ph.D. students. Additional opportunities exist for summer pay (July-August).

Minimum requirements:

- combined math and verbal GRE scores higher than 1100 (old scale); foreign students need TOEFL test
- M.S./M.A. degree in Earth or Environmental Science
- GPA higher than 3.3.

Application deadline: April 15, 2014

For questions regarding the project and research details, please contact Dr. Sandra Passchier, contact details at http://www.montclair.edu/profilepages/view_profile.php?username=passchiers

Details on the Ph.D. program in Environmental Management and the application process can be obtained from http://www.montclair.edu/csam/environmental-management-phd/ or contact the program director Dr. Dibyendu Sarkar at sarkard@mail.montclair.edu