



Two Graduate Research Assistant Positions

The Department of Earth and Environmental Science and the Center for Energy Research at the University of Pennsylvania seek graduate students interested in any of the following research areas: geomicrobiology, ecology, microbe-microbe and microbe-mineral interactions, biogeochemistry, ecophysiology and bioenergetics. Potential projects include:

- **Microbial remediation of asbestos:** This project provides the opportunity to interrogate microbe-mineral interactions in human-disposed minerals.
- **Bioenergetic principles of energy metabolisms:** This project will focus on the ecophysiology of hydrogenotrophic methanogenesis and/or Fe(III) reduction from marine geothermal environments.
- **Taxonomic classification:** Isolation and characterization of novel chemosynthetic microorganisms from anoxic environments.

The prospective students will be expected to work at the interface between geology, chemistry, and biology.

SKILLS ASSOCIATED WITH THIS RESEARCH PROGRAM: Problem-solving (scientific method) skills, preparation of chemical solutions, microbial culturing, microscopy, molecular phylogenetics, aqueous/gas chemistry quantification, experimental design skills, data-logging, broad scientific literacy and cultural competence.

The successful applicants will be awarded a Ph.D. Fellowship package that includes: tuition, fees, health care and stipend for living expenses. These packages are available starting Fall 2017.

For more information about the Department of Earth and Environmental Science go to: <https://www.sas.upenn.edu/earth/>

APPLY HERE: <https://www.sas.upenn.edu/earth/doctoral-programs/how-apply>

If interested in learning more about this opportunity please contact Ileana Pérez-Rodríguez at: perezrod@usc.edu