



Two PhD Opportunities available at the University of Delaware and McGill University

We are seeking two new graduate students to work on an NSF-funded research project that will investigate how multiple physical, geochemical and microbiological factors interact to affect the transformation of organic carbon in deep subsurface marine sediments. The project will focus on sediment samples collected during IODP Expedition 385 to Guaymas Basin. The unique conditions found in Guaymas Basin will allow us to investigate how temperature, sediment burial depth and microbial capabilities impact the bioavailability of sedimentary organic carbon using ^{13}C and ^{14}C isotope analysis of microbial biomarkers and respiration products.

This research project is part of an international collaboration between the Walter Lab and Mahmoudi Lab. One PhD student will be based at the University of Delaware and the other at McGill University. Students interested in applying should have a BSc or MSc degree in microbiology, oceanography, chemistry, biology, biogeochemistry or other relevant degrees. Previous experience in environmental microbiology, organic geochemistry and/or isotopic biogeochemistry would be valuable assets for this project. The emphasis of the project at McGill will be on microbiology and isotope geochemistry and the emphasis at UD will be on analytical chemistry, biomarker and isotope geochemistry. Domestic or international applicants are eligible to apply, and successful candidates will be provided a stipend.

The anticipated start date would be summer or fall 2021 and the application deadline is January 15, 2021 at both institutions; however serious candidates should express their interest as soon as possible. Applicants are asked to submit a cover letter stating research and career goals, current transcripts, CV and the names and contact information of at least two references.

Members of communities that are underrepresented including racialized persons/visible minorities, women, Indigenous persons, persons with disabilities, and persons of minority sexual orientations and gender identities, are strongly encouraged to apply.

To learn more about the Mahmoudi Lab visit, www.geomicromcgill.com

To learn more about the Walter Lab visit, www.sites.udel.edu/suni