



Physical & Environmental Sciences
UNIVERSITY OF TORONTO

SCARBOROUGH

**Postdoctoral Fellowship in Organic Matter Biogeochemistry in Clays at the University of Toronto
Scarborough**

A 2 year postdoctoral research position (with possibility for renewal for 1 additional year) in Natural Organic Matter Biogeochemistry in Clay Deposits is available in the research group of [Professor Myrna Simpson](#) at the University of Toronto (Scarborough Campus). The successful candidate will participate in molecular-level studies of natural organic matter composition in clay deposits in collaboration with the Nuclear Waste Management Organization. The focus of the project will be to determine changes in natural organic matter chemistry in bentonite clays under various conditions and with incubation as well as other variables. Background information on the project can be found in Marshall et al. (2015), *Applied Geochemistry*, 54: 43-53 (<http://dx.doi.org/10.1016/j.apgeochem.2014.12.013>). The candidate will also participate in mechanistic studies pertaining to natural organic matter – mineral interactions and how these processes may control natural organic matter bioavailability.

Applicants should have a strong publication record and a PhD in Geochemistry, Environmental Chemistry or Soil Chemistry or a closely related field. The successful applicant will be responsible for report writing and giving oral presentations to collaborators as well as supervising undergraduate students. Excellent communications skills are essential. Applicants with previous experience in natural organic matter biomarker analysis by gas chromatography-mass spectrometry (GC-MS) will be given preference. Previous NMR experience is also beneficial but not essential as candidates will receive full training. Successful candidates will have access to state-of-the-art NMR and MS equipment in the [Environmental NMR Centre](#) which houses three unique, hyphenated 500MHz NMR spectrometers specially designed for environmental applications. Prof. Simpson's research laboratory houses a fully automated LC, GC-MS, GC with preparative fraction collector, and a LC-MS/MS as well as other support equipment. More information about the Myrna Simpson research group can be found at: www.utsc.utoronto.ca/~msimpson.

Interested applicants should send a: cover letter, CV, and the name of 3 referees to: Prof. Myrna Simpson (<mailto:myrna.simpson@utoronto.ca>). The position is available as of October 1, 2018 and will remain open until filled.