Spatial and Temporal Variability of Carbon Dioxide and Methane Fluxes from a Temperate Ombrotrophic Peatland **Prof. Derrick Lai**

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Date: 3 November 2014 (Monday)

Time: 3:45 pm

Venue: Rm. 330, Science Centre North Block

Registration: Click Here

Abstract

Peatlands in the temperate and sub-arctic regions contain about one-third of the world's soil carbon and thus play an important role in the global carbon cycle. While northern peatlands are generally long-term sinks of atmospheric carbon dioxide (CO2), they are also one of the major global sources of methane (CH4), a very potent greenhouse gas, owing to the presence of anaerobic conditions.

In this talk, I will present results obtained from high temporal resolution measurements of CO2 and CH4 fluxes by automatic chambers in a temperate ombrotrophic peatland near Ottawa, Canada. The functional similarity among peatland vascular plant communities will be examined with respect to the response of gas fluxes to changing environmental conditions. The challenge of simulating peatland greenhouse gas exchange across space and time will also be discussed.



