Yves Gélinas

Associate Professor

BSc UQAM
PhD UQAM
Postdoctorate: University of Massachusetts at Amherst and University of Washington at Seattle

ygelinas@alcor.concordia.ca

Biogeochemistry and Analytical Organic Geochemistry

Research Interests

The central theme of our current research focuses on organic matter in all natural environments. Organic matter is a fundamental constituent of the biosphere and the most important chemical source of reducing power that fuels all biogeochemical processes on Earth. We are trying to understand the factors that control the formation, composition, and preservation of organic matter, which is central to comprehending the global geochemical cycles of life forming elements, the controls on atmospheric CO_2 concentrations, the generation of atmospheric O_2, and to elucidating the history of life on Earth.

Selected Publications

R.J. Panetta, M. Ibrahim and Y. Gélinas (2007) Measuring δ13C of DOC in marine and freshwater by high-temperature catalytic oxidation-IRMS, submitted to Anal. Chem.

A. Ouellet, D. Catana, J.-B. Plouhinec, M. Lucotte, Y. Gélinas (2007) Field assessment of the performance of a portable reverse osmosis system for sampling dissolved organic matter: Carbon and δ13C mass balances, submitted to ES&T.

M. Mouradian, A. de Vernal and Y. Gélinas (2007) Dinosterol to estimate the dinoflagellate contribution to sedimentary organic matter, Limnol. Oceanogr. 52, 2569.

P.R. Haberstroh, J.A. Brandes, Y. Gélinas, A.F. Dickens, S. Wirick and G. Cody (2006) Chemical composition of the graphitic black carbon fraction in riverine and marine sediments at sub-micron scales using Carbon X-ray Spectromicroscopy, GCA 70, 1483.

A.F. Dickens, J.A. Baldock, R.J. Smernik, S.G. Wakeham, Y. Gélinas and J.I. Hedges (2006) Preservation mechanisms of organic carbon in marine sediments: Glimpses from 13C NMR analysis of size and density fractions, GCA 70, 666.