



Department of Geology Seminar Series
Presents

Dr. Owen Sherwood

Department of Earth Sciences
Dalhousie University

Flaming Tapwater: The science behind the occurrence of methane in groundwaters overlying oil, gas and coalfields of North America

FRIDAY, MARCH 15 - 10:30am

Science 411

Everyone is welcome to attend!



GEOLOGY
FACULTY OF SCIENCE

Dr. Owen Sherwood, Department of Earth Sciences, Dalhousie University



Title: *“Flaming Tapwater: The science behind the occurrence of methane in groundwaters overlying oil, gas and coalfields of North America”*

Abstract: Horizontal drilling combined with hydraulic fracturing has revolutionized the onshore oil and gas industry. However, it has also raised serious concerns about the environmental impacts of oil and gas industry operations, especially with respect to groundwater quality. This seminar will cover the origins of microbial and thermogenic methane, which is the main component of combustible gas in flammable tap water; the occurrence of natural/in situ versus migrated/stray gas in groundwater; some examples of groundwater contamination in unconventional oil and gas fields; as well as some information about the ongoing Gas Seepage Project (GaSP) in the Maritimes.

Biography: Owen Sherwood is an Assistant Professor of Earth Sciences at Dalhousie University in Halifax. He specializes in stable isotope geochemistry as a tool to solve problems including marine biogeochemistry, greenhouse gas emissions, petroleum geochemistry, and environmental impacts of oil and gas development.