

SEMINAR
DEPARTMENT OF EARTH SCIENCES
DALHOUSIE UNIVERSITY

Grant Wach
Earth Sciences
Dalhousie University

“Petroleum Systems and Source Rocks of Atlantic Canada”

Thursday, March 14, 2019

11:30 a.m.

Milligan Room, 8th Floor Biology-Earth Sciences Wing, Life
Sciences Centre, Dalhousie University

COFFEE AND DOUGHNUTS WILL BE AVAILABLE IN THE MILLIGAN
ROOM BEFORE THE SEMINAR

**Dr. Grant Wach, Dalhousie University, Professor of Petroleum Geoscience;
Director, Basin and Reservoir Lab; 2018 CSPG Stanley Slipper Gold Medal
Recipient**



Title: “Petroleum Systems and Source Rocks of Atlantic Canada”

Abstract: The research conducted at the Basin and Reservoir Lab at Dalhousie University focuses on understanding Petroleum Systems through analyses of the sequence stratigraphy, depositional environments, tectonics, geo-pressure conditions, basin modeling and the provenance of sediment in basins. Source rock is a fundamental component of petroleum systems; coupled with reservoir distribution they are the two key risk elements of the Atlantic Canada margin. Previous studies (Beicip-Franlab, 201; CNSOPB 2013) proposed a model with a regional Lower Jurassic source rock extending beyond the Sable Subbasin, with an increased potential for new oil and gas discoveries.

Our team investigated source rocks in Atlantic Canada offshore within the Triassic-Jurassic time interval. We re-evaluated existing organic geochemistry datasets and completed new analyses of selected cores and cuttings and integrated these with time-equivalent source rock outcrops in Canada and conjugate margins of Morocco, Portugal, Spain and Ireland. Our investigations of known, probable and possible source rocks in the eastern Canada offshore shelf and deepwater offshore regions and knowing how these organic-rich intervals developed and evolved through time, will contribute to mitigating drilling and production risks and may aid to identify new exploration opportunities in the Scotian Basin and conjugate margins.

Biography

Dr. Grant Wach was appointed Professor of Petroleum Geoscience at Dalhousie University in 2002. A specialist in Reservoir Characterization and Stratigraphy, his interest in complex oil reservoirs began at Syncrude, in the oil sands of Alberta. Prior to Dalhousie he was with Exxon (now ExxonMobil) and was Geoscience Research Associate at Texaco (now Chevron) involved with exploration and commercialization with business units around the globe.

He has conducted research on, and led field schools and courses in exploration, development and reservoir characterization in several countries. At Texaco he was named "Outstanding Instructor" for his contributions to training. In 2012 he was the first recipient of "Professor of the Year" award from the AAPG Foundation.

Dr. Wach is the recipient of the 2018 CSPG Stanley Slipper Gold Medal which is one of the highest honours awarded by the CSPG. This career achievement award recognizes outstanding contributions to petroleum exploration and development. He will be presented the medal GeoConvention 2019 in May.

He has been Visiting Professor at the University of West Indies (Petroleum Geoscience programme) and the University of Adelaide's Australia School of Petroleum (Co-operative Research Centre for Greenhouse Gas Technologies), and at the universities of Lisbon and Coimbra in Portugal. Dr. Wach has an Honours B.A. (Geography/Geology) from the University of Western Ontario, a M.Sc. (Geology) from South Carolina, and a D.Phil. (Geology) from the University of Oxford