

What's happening in the

BASIN & RESERVOIR LAB



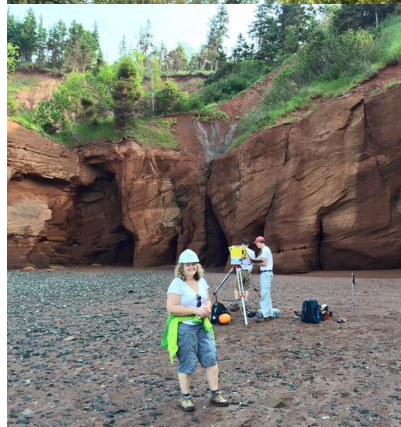
Basin & Reservoir Lab

Professor Grant Wach & Dr. Ricardo Silva

July 2015

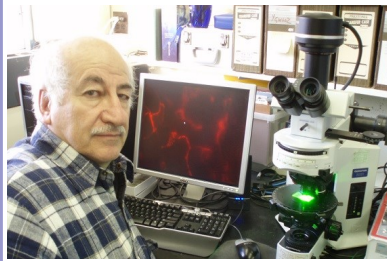
Red Head Point Field Work

On July 5th, 2015, members from the Lab travelled to Five Islands Provincial Park, Nova Scotia, in order to give a geologic overview of **Mesozoic synrift sedimentation** within the park and to collect field data from aeolian deposits at Red Head Point. The park lies along the border fault of a failed rift system which formed during breakup of the Pangean supercontinent. Now, synrift deposits clearly visible along coastal cliffs show an upward fining from alluvial and fluvial to aeolian and lacustrine redbed units, capped by a layer of black basaltic rock marking the breakup unconformity. Using tools such as LiDAR, scintillometer, permeameter, and photography, the team was able to gather 3D, permeability, and radioactivity rock property data, which was used to recognize and describe heterogeneities in sediment distribution, to assign and understand the geological processes which formed these heterogenetic deposits, to create 3D fluid flow (aquifer or reservoir) models, and to recognize relationships among synrift units from within the Fundy Basin and Nova Scotia eastern margin.



M.Sc. Candidate Hargreaves, Trevor Kelly with LiDAR

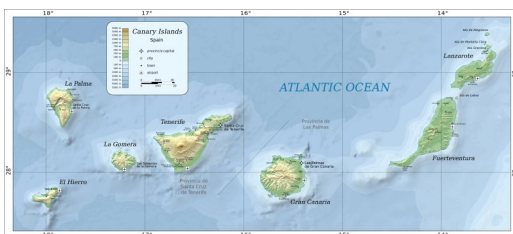
The Basin & Reservoir Lab is happy to welcome **Dr. Yawooz Kettanah** back to the lab for the summer. Dr. Kettanah will continue his research on the provenance and characterization of Paleozoic and Mesozoic sediment.



Group photo at Red Head Point amphitheater

RESEARCH NEWS

- We are pleased to welcome **Hess Corp.** to the **Source Rock and Geochemistry of the Central Atlantic Margins Consortium**. This will bring the consortia to a total of 6 industry partners allowing ongoing collaboration between industry professionals and Dalhousie University.
- Our software contract with Schlumberger has been renewed, providing Dalhousie geoscience students with the continued use of over 100 million dollars worth of software, enhancing and furthering their research.



- On August 13th, Prof. Grant Wach and Dr. Ricardo Silva will travel to Prague, Czech Republic, to present several papers at the **2015 Goldschmidt Conference**, August 16th-21st.
- After the conference, Dr. Silva will travel to the Canary Islands off the coast of Spain to conduct field work in the region of Ajuy, Fuerteventura.



SUPERNOVA
at Dalhousie University
"Glaciers & Gold"

On Monday, July 27th, Prof. Wach spent the day with campers (gr. 5 & 6) from Dalhousie's SuperNova summer science camps. Prof. Wach, and **Nathan Pidduck** (a Dal geology student) led the campers in and around Point Pleasant Park in the South End of Halifax, sharing with them the history and geology of Nova Scotia's coast, as well as how to navigate using a compass.

Join Prof. Wach for Seacology by Kayak : "Volcanoes & Ice"

On August 4th, Prof. Wach will lead Seacology by Kayak departing from East Coast Outfitters, in Lower Prospect. The Seacology by Kayak is a series of guided sea kayak tours Prof. Wach will share the history and geology of the coastline as the group paddles along the bays of Nova Scotia between Lower Prospect and Peggy's Cove. He will highlight and discuss rock formations along the route, as well as the ancient volcanoes and giant fields of ice that once covered the area.



Dalhousie Field School made the cover of the Aug. edition of the AAGP's Explorer, highlighting a photo by Leigh Vandrecht in California. In this edition, Prof. Wach was interviewed by Heather Saucier for the article, "[Between Rocks and the Hard Sciences](#)".

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