

What's happening in the

BASIN & RESERVOIR LAB



Basin & Reservoir Lab

Professor Grant Wach & Dr. Ricardo Silva

August 2015

Seacology by Kayak: Granite & Glaciers



Co-op Research Assistant Philip Sedore



The group examining the South Mountain Batholith granites in Lower Prospect, NS

On August 4th, 2015, Prof. Grant Wach led "Seacology by Kayak", a two hour kayaking tour leaving from East Coast Outfitters, only 30 minutes South of Halifax. Prof. Wach shared the history and geology of the coastline as the group paddled along the bays of Lower Prospect. He highlighted rock formations along the route, as well as the history of the ancient volcanoes and giant fields of ice that once covered the area.

The group learned about what caused the large granite formations and boulders scattered along the coast of the southern shore of Nova Scotia. Over time, the erosion slowly removed 15 km of solid rock, revealing the granite called South Mountain Batholith that we see today. Prof. Wach explained that nearly 20,000 year ago, nearly 1km high glaciers covered the area. As the glaciers melted, they would continuously move, thaw, and freeze again.

Meet Visiting Professor, Dr. Driss Sadki— "Dr. Jurassic"



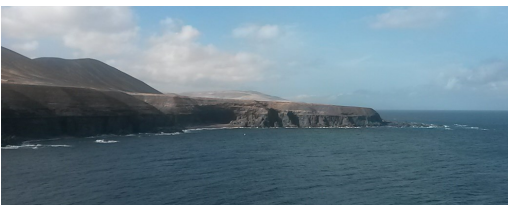
This September, Dr. Driss Sadki will visit the Lab from the Moulay Ismail University of Meknes (Morocco), where he is a Professor of Paleontology & Stratigraphy and Director of the "Geodynamics Basins & Natural Resources" research unit. Dr. Sadki is to give a lecture on the Jurassic of Morocco here at Dalhousie this fall. He received his Ph.D. at the University of Marrakech in 1992, after obtaining his doctorate (Stratigraphy and Paleontology) in 1984 at the University of Claude Bernard (Lyon, France) and his Post-Graduate Diploma (Applied Geology) in 1982 at the University of Franche Comté (Besançon, France). Dr. Sadki's research interests include:

- Dynamics of the sedimentary basins
- Jurassic Basin analysis in the Moroccan Atlas.
- Regional correlation studies, Biostratigraphy, Palaeontology, Ammonites
- Reconstruction of paleoclimate and paleoenvironment during the Jurassic
- The Jurassic events of the Maghreb margin of the Tethys



Field work in the Canary Islands

After attending the Goldschmidt 2015 conference in Prague, Dr. Ricardo Silva traveled to the Canary Islands off the coast of Morocco, to conduct additional field work for the Source Rock & Geochemistry of the Central Atlantic Margins Project.



Please join us in wishing Adjunct Professor, Dr. Yawooz Kettanah, safe travels back to Iraq and the utmost gratitude as he finishes his summer term here in the Basin & Reservoir Lab!

Prof. Wach & Dr. Silva attend Goldschmidt 2015

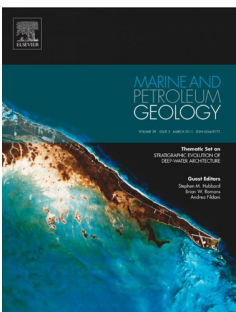
25 Gt Goldschmidt (2015)

PRAGUE, CZ
AUGUST 16 - 21
2015

Prof. Wach and Dr. Ricardo Silva traveled to Prague, CZ to attend the 25th Goldschmidt conference. The conference focused on the 25 greatest advances in Geochemistry over the past quarter century. Three papers from lab members were presented at the conference, including:

- ◆ Preliminary evaluation of the compositional sedimentary variation of the Jurassic Iroquois and Mohican formations of the Scotian Basin (Ricardo L. Silva, Philip Sedore, Naomi Plummer, Grant Wach).
- ◆ Evidence of Pliensbachian climatic hot snaps and organic matter production and preservation in the Lusitanian Basin (Portugal) (Ricardo L. Silva, L.V. Duarte).
- ◆ Pyrite framboid analysis from the Sinemurian–Pliensbachian Água de Madeiros Formation (Lusitanian, Basin, Portugal) (Ricardo L. Silva, M.P. Jorge, L.V. Duarte, Philip Sedore, Grant Wach).

RESEARCH NEWS



- Congratulations to Ms. Taylor Campbell, Dalhousie University M.Sc. Candidate whose article, "Interpretation of the Penobscot 3D Seismic Volume Using Constrained Sparse Spike Inversion, Sable sub-Basin, Offshore Nova Scotia", has been accepted for publication in the journal "Marine and Petroleum Geology". Taylor has just completed an internship with Talisman / Repsol in Calgary this summer.
- We are grateful to ION (GX Technology Corporation) for their generous contribution to the Source Rock and Geochemistry of the Central Atlantic Margins Project via their donation of the NovaSPAN Wide Offset Seismic data. The NovaSPAN data provides a regional 2D seismic framework that spans the area from Georges Bank through Sable Island to the western edge of the Laurentian Channel.



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