

# Supercritical Carbon Dioxide and Material Interactions

March 21-23, 2011

Brookhaven National Laboratory

## Workshop Objectives

Establish a bridge between sc-CO<sub>2</sub> based energy technologies and advances in material characterization in particular synchrotron-based x-ray methods.

Explore the potential of unique X-ray beam parameters such as unprecedented brightness and improved energy, spatial and temporal resolution offered by NSLS-II for the development of sc-CO<sub>2</sub> energy technologies

## Main Topics

- Application of sc-CO<sub>2</sub> to energy systems
- sc-CO<sub>2</sub> properties and material interactions
- Characterization methods in sc-CO<sub>2</sub> and material interactions
- Multi-scale issues in sc-CO<sub>2</sub> and material interactions



Carbonation profile of granite by optical microscope

## Scientific Committee

Daniel Bour, AltaRock Energy, LLC  
Antonio Lanzirotti, University of Chicago  
Catherine Peters, Princeton University  
Michael Z. Podowski, Rensselaer Polytechnic Institute  
Martin A.A. Schoonen, Stony Brook University  
Don J. Weidner, Stony Brook University

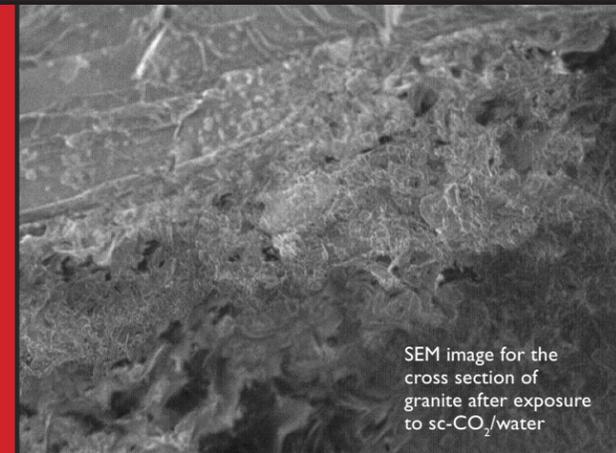
## Organizing Committee

Tom Butcher, Brookhaven National Laboratory  
Lynne Ecker, Brookhaven National Laboratory  
Lars Ehm, Brookhaven National Laboratory/  
Stony Brook University  
Jeffrey Fitts, Brookhaven National Laboratory/  
Stony Brook University  
Simerjeet K. Gill, Brookhaven National Laboratory  
Patrick Looney, Brookhaven National Laboratory  
Toshifumi Sugama, Brookhaven National Laboratory

For more information  
and to register, please visit:

[www.bnl.gov/scco2/](http://www.bnl.gov/scco2/)

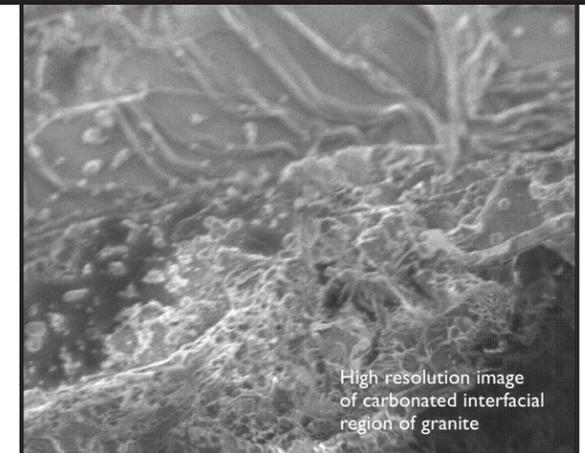
Workshop Registration  
Deadline:  
March 4, 2011



SEM image for the cross section of granite after exposure to sc-CO<sub>2</sub>/water

## Contact information:

Simerjeet K. Gill, EST, BNL  
Event Coordinator  
Bus: 631-344-5633  
Fax: 631-344-3729  
Email: [gills@bnl.gov](mailto:gills@bnl.gov)



High resolution image of carbonated interfacial region of granite

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Directorates of Brookhaven National Laboratory.



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