Alan James Mur
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5002 Friendship Ave.
Pittsburgh, Pa 15224

Education:

Current Graduate Student:
University of Pittsburgh
Department of Geology and Planetary Science
PhD Studies in Geophysics and Geochemistry related to carbon sequestration
Graduate Student Research grant from Department of Energy/National Energy Technology Laboratory
Advisor: Dr. William Harbert
harbert@pitt.edu
DOE Sponsor: Yee Soong
yee.soong@netl.doe.gov

Undergraduate:
University of Pittsburgh 2008
Department of Geology and Planetary Science
Bachelor of Science in Geology and Planetary Science
English Writing Department
Bachelor of Arts in English Writing
South Dakota School of Mines & Technology
Geology Field Camp in Turkey

Pertinent Coursework:

Graduate: Exploration Geophysics, Water Geochemistry (CMU graduate course), Topics in Paleolimnology (graduate level course), Advanced GIS, Topics in Geochemistry, Plate Tectonics, Ordinary Differential Equations.
Undergraduate: Geology Field Camp, Geology Laboratory, Paleoclimatology, Historical Geology, Sedimentology and Stratigraphy, Mineralogy, Structural Geology, Igneous and Metamorphic Petrology, Undergraduate Research, Undergraduate Teaching Assistant, General Chemistry I-II, Physics I-II, Calculus I-III.

Publications:

Abstracts

Mur, Alan J, Purcell, Chris C, Harbert, William P., Soong, Yee, Kutchko, Barbara G, Kennedy, Stephen, McIntryre, Dustin, 2009, Furthering Chemical and Geophysical Computations: Analysis of SACROC SEM and CT images to obtain pore percentage, size, and connectivity data, Fall Meeting, American Geophysical Union.

Purcell, Chris C, Harbert, William P, Mur, Alan J, Soong, Yee, McLendon, T. Robert, Haljasmaa, Igor, 2009, 4D seismic survey of a CO2 sequestration flood: Integrating velocity measurements in reservoir rock samples from the SACROC unit, Fall Meeting, American Geophysical Union.

Harbert, William, Purcell, Christopher, Mur, Alan J, 2009, Post and Pre-Stack Seismic Reflection Data Processing of a 3D Reflection Seismic Survey over a CO2 Injection, Fall Meeting, American Geophysical Union.

Skills:
ArcGIS, SMT Kingdom Suite, RSI ENVI, VolView, ImageJ

Research and Teaching Experience:
2010
Teaching Assistant. University of Pittsburgh Department of Geology and Planetary Science. Geology (GEOL 0800)
Quantitative analysis of porosity using SEM, CT, NMR and optical methods: Examples of sandstone and carbonate lithologies relevent to EOR and CO2 sequestration

2008-2009
Investigating effects of supercritical CO2 on limestone samples to determine porosity and permeability change. Using modified Biot/Gassmann equations to investigate the changes in saturated rock velocities related to the fluid compositions of CO2 enriched waters and brines in rock.

2007
Undergraduate Research. Late Holocene Paleoenvironmental Reconstruction Using Lake Cores from North Washington State. Under PhD student Byron Steinman, and Dr. Mark Abbott, Associate Professor, Department of Geology and Planetary Science, University of Pittsburgh.
Teaching Assistant. University of Pittsburgh Department of Geology and Planetary Science. University Honors College Ecology Summer Field Course in Yellowstone (BIOSC 0740)
Teaching Assistant. University of Pittsburgh. University Honors College Paleontology dig in Wyoming seeking sauropod and small mammal fossils in the Morrison Formation.

2006
Undergraduate research. Learning lab processes involved in processing lake sediments. Working with sediment from Pumacocha: a South American Lake
Teaching Assistant. University of Pittsburgh Department of Geology and Planetary Science. University Honors College Ecology Summer Field Course in Yellowstone (BIOSC 0740)

Activities:
Pitt Geology Club, 2006-present
Graduate Student Representative, 2009-present