

Thursday, March 22, 2018
POSTER SESSION II: MATERIAL ANALOGS III: MARS
6:00 p.m. Town Center Exhibit Area

[R631]

Peterson L. D. Velbel M. A. **POSTER LOCATION #472**
[*A Comparison of Sand-Grain Surface Features on Two Mars Analogs from Mauna Kea, Hawai'i*](#) [#2541]

Past environments / Warm and wet or cold and dry? / Sand surfaces show.

Velbel M. A. Rapp J. R. Brugman B. L. Wade B. D. Hill E. E. et al. **POSTER LOCATION #473**
[*Grain Shape and Size Analysis of Sand- and Silt-Size Sediment in a Terrestrial Periglacial Landscape: A Possible Process Analog for Sand and Silt Imaged by the Phoenix Optical Microscope at the Phoenix Mars Lander Landing Site - II*](#) [#2768]

Mars periglacial / Polygonal patterned ground / Same sand in troughs, tops?

Cousins C. R. Mann P. Cloutis E. Cherry J. Allender E. et al. **POSTER LOCATION #474**
[*Basaltic Fluvial and Lacustrine Sediments from Iceland as an Analogue for Mars*](#) [#2292]

We present a spectroscopic and mineralogical study of geochemically immature basaltic sediments in Iceland as an analog to sediments on Mars.

Scudder N. A. Horgan B. Rampe E. B. Bamber E. R. Rutledge A. M. **POSTER LOCATION #475**
[*Sediment Mixing and Amorphous Weathering Products in a Glaciated Mars-Analog System*](#) [#2913]

Where's all this junk from? / Glaciers make amorphous stuff. / Maybe on Mars, too?

Bamber E. R. Rampe E. B. Horgan B. Smith R. J. Scudder N. A. et al. **POSTER LOCATION #476**
[*Sediment Transport and Aqueous Alteration in a Mars-Analog Glacial System*](#) [#2485]

Examination of Glacial alteration and transport of Mars-analog volcanic rocks, exploring the potential expression of cold climate conditions on Mars.

Salvatore M. Truitt K. Roszell K. Lanza N. Rampe E. et al. **POSTER LOCATION #477**
[*Constraints on the Mode and Extent of Sedimentary Rock Alteration in Hyper-Arid and Hypo-Thermal Environments*](#) [#1265]

Alteration of sedimentary rocks throughout the Transantarctic Mountains exhibit a diversity of alteration signatures, suggesting numerous processes are at work.

Ramkisson N. K. Schwenzer S. P. Pearson V. K. Olsson-Francis K. **POSTER LOCATION #478**
[*Simulating the Martian Chemical Environment*](#) [#1934]

To support astrobiology experiments, we have developed new martian simulants. We will present their chemical composition and associated fluid chemistries.

Yoldi Z. Pommerol A. Poch O. Thomas N. **POSTER LOCATION #479**
[*Laboratory Hyperspectral Study of Ice and Mars Soil Simulant Associations. Comparison with CRISM Observations of Icy Surfaces.*](#) [#2158]

We have characterized the spectro-photometric signatures of various ice and Mars soil simulant associations, and compared them with CRISM observations.

Ye C. Glotch T. D. Sklute E. C. **POSTER LOCATION #480**
[*VNIR Optical Constants of Hydrous Ca-Sulfates: Gypsum and Bassanite*](#) [#1329]

This abstract presents the preliminary results of optical constants of commonly known hydrous Ca-sulfates using radiative transfer theory.

Cunje A. B. Ghent R. R. Boivin A. Tsai C-A. Hickson D. **POSTER LOCATION #481**
[*Dielectric Properties of Martian Regolith Analogs and Smectite Clays*](#) [#1805]

The dielectric properties of two martian regolith analogs and five smectite clays are characterized for a range of temperature and moisture conditions.

Adcock C. T. Udry A. Hausrath E. M. Tschauer O.

POSTER LOCATION #482

[Craters of the Moon National Monument Basalts as Analogs for Martian Rocks and Meteorites](#) [#2397]

We investigate Craters of the Moon National Monument in Idaho as a compositional and chemical weathering planetary analog for martian rocks and meteorites.

Davis K. N. Fries M. D. Lewis E. K. Burton A. S. Ross A. J. et al.

POSTER LOCATION #483

[Durability of Space Suit Materials Under Martian Conditions](#) [#1476]

To understand how space suit materials degrade on Mars *in-situ*, JSC has included space suit materials on the calibration target for the SHERLOC instrument.