Thursday, March 24, 2016 [R631]
POSTER SESSION II: SPACE WEATHERING: IRRADIATE 'TIL IT HERTZ
6:00 p.m. Town Center Exhibit Area

Stojic A. N. Pavlov S. G. Wirth R. Morlok A. Markus K. et al. ***POSTER LOCATION #431***
Experimental Space Weathering: A Coordinated LIBS, TEM, VIS, and NIR/MIR Study **[#2332]**
We irradiated analog material with a pulsed laser to investigate thermal effects of (micro)meteorite impacts on regolith using VIS/N/MIR spectroscopy and TEM.

Matsuoka M. Nakamura T. Kimura Y. Hiroi T. Nakamura R. et al. ***POSTER LOCATION #432***
Reproducing Space Weathering on C-Type Asteroids with Low-Energy Laser Irradiation Experiments of the Murchison Meteorite **[#1823]**
We perform the lower energy (<5 mJ) laser irradiation experiments to characterize spectral and mineralogical changes of Murchison with laser intensities.

MacLennan E. M. Emery J. P. Lucas M. P. Pinilla-Alonso N. ***POSTER LOCATION #433***
Do Asteroids Exhibit Different Space Weathering Styles? **[#2911]**
Using a large set of spectral data obtained telescopically, we search for and characterize different space weathering styles among silicate-bearing asteroids.

Kohout T. Malina O. Penttilä A. Kröger A. Britt D. et al. ***POSTER LOCATION #434***
Space Weathering Induced Slope Changes in Pyroxene and Howardite Reflectance Spectra **[#2042]**
While reddening with increasing space weathering is observed over 2 µm band, slope reduction is observed at 1 µm band. This can explain Vesta Dawn observations.

Jordan A. P. Stubbs T. J. Wilson J. K. Hayne P. O. Izenberg N. R. et al. ***POSTER LOCATION #435***
Dielectric Breakdown Weathering of Lunar Regolith **[#1272]**
During large solar particle events, the regolith on the Moon's nightside may experience dielectric breakdown weathering.

Shusterman M. L. Izenberg N. R. Hibbitts C. A.
Jordan A. P. Stubbs T. J. et al. ***POSTER LOCATION #436***
Weathering Effects of Dielectric Breakdown in the Lunar Polar Regions **[#2263]**
Examination of grain alteration resulting from dielectric breakdown in lunar soil simulant JSC-1A as an analog for space weathering in PSRs of the Moon.

Noble S. K. Keller L. P. Christoffersen R. Rahman Z. ***POSTER LOCATION #437***
The Microstructure of Lunar Micrometeorite Impact Craters **[#1465]**
TEM analyses of 10–20 µm impact craters in olivine and plagioclase provide insight into the micrometeorite process and ground truth for pulsed laser studies.

Mazrouei S. Ali Lagoa V. Delbo M. Ghent R. R. Wilkerson J. ***POSTER LOCATION #438***
Does Thermal Fatigue Play a Role in Lunar Regolith Formation? **[#1785]**
The study of whether thermal fatigue, diurnal thermal variations, cause enough stress on boulders on the surface of the Moon to break them down or not.

Molaro J. L. Hayne P. O. Byrne S. ***POSTER LOCATION #439***
Thermally Induced Stresses in Boulders on the Moon: Implications for Breakdown **[#2919]**
We model thermally induced stresses within boulders of varying size on the surface of the Moon and other airless bodies.

Kaluna H. M. Bus S. J. Gillis-Davis J. J. Lucey P. G. ***POSTER LOCATION #440***
The Composition and Evolution of Themis and Beagle Asteroids **[#2892]**
A comprehensive look at the Beagle and Themis asteroids using experimental and observational data.

Stockstill-Cahill K. R. Domingue D. L. Cahill J. T. S.
Vilas F. Choo T. et al. ***POSTER LOCATION #441***
Radiative Transfer Modeling of Near-Infrared Reflectance Data of Gaspra **[#2229]**
Hapke modeling / For the asteroid Gaspra / Oh, space weathering!