

Tuesday, March 18, 2014  
**POSTER SESSION: LUNAR DATA CALIBRATION  
 AND LABORATORY GROUNDTRUTHING**  
 6:00 p.m. Town Center Exhibit Area

[T619]

Ling Z. C. Zhang J. Wu Z. C. Li B. Liu J. Z. **POSTER LOCATION #253**  
[\*The Spectral Calibration of Chang'e-1 IIM Dataset\*](#) [#1831]

We present a new spectral calibration method to correct the sample-direction nonuniform of the Chang'e-1 Imaging Interferometer (IIM) dataset.

Nefian A. V. Coltin B. Fong T. **POSTER LOCATION #254**  
[\*Apollo Metric Imagery Registration to Lunar Orbiter Laser Altimetry\*](#) [#1679]

We address the registration of images from the Apollo metric camera to altimetry data from the Lunar Reconnaissance Orbiter's Lunar Orbiter Laser Altimeter.

Barker M. K. Mazarico E. Neumann G. A. Smith D. E. Zuber M. T. et al. **POSTER LOCATION #255**  
[\*Merging Digital Elevation Models from the Lunar Orbiter Laser Altimeter and Kaguya Terrain Camera\*](#) [#1635]

We have registered the TC DEM to the LOLA geodetic framework with RMS elevation residuals as low as a few meters.

Edmundson K. L. Alexandrov O. Archinal B. A. Becker T. L. Moratto Z. M. et al. **POSTER LOCATION #256**  
[\*Photogrammetric Control of Oblique Apollo 15 Metric Camera Images\*](#) [#1915]

We address the photogrammetric control of oblique metric camera images acquired by the photogrammetric mapping system flown onboard Apollo 15.

Shirley K. A. Glotch T. D. **POSTER LOCATION #257**  
[\*A Correction to the Thermal Bands for the Diviner Lunar Radiometer Experiment\*](#) [#2399]

We develop a correction to Diviner data in the long wavelength thermal bands and evaluate its usefulness in compositional analyses of the lunar surface.

Nagihara S. Nakamura Y. Kiefer W. S. Hager M. A. Williams D. R. et al. **POSTER LOCATION #258**  
[\*Recovery of ALSEP Raw Instrument Data and Metadata\*](#) [#1153]

We report our recent progress in extracting raw instrument data from 450 ALSEP data archival tapes we recently found and digitally cataloging ALSEP metadata.

Jackson C. R. M. Cheek L. C. Williams K. B. Donaldson Hanna K. Pieters C. M. et al. **POSTER LOCATION #259**  
[\*Visible to Near-Infrared Spectra of Iron-Bearing Spinel with Application to Sinus Aestuum and Lunar Spinel Anorthosite\*](#) [#1561]

V-NIR spectra of Fe-bearing, synthetic spinel are discussed in the context of remote sensing observations of Sinus Aestuum and lunar spinel anorthosite.

Isaacson P. J. Gillis-Davis J. J. Jackson C. Prissell T. C. Parman S. et al. **POSTER LOCATION #260**  
[\*Experimental Space Weathering of Synthetic Spinel\*](#) [#1612]

Lunar analog spinels are space weathered with laser irradiation. The results have important implications for remote analyses of lunar spinel-rich deposits.

Moriarty D. P. III Pieters C. M. **POSTER LOCATION #261**  
[\*LSCC Samples as Ground Truth: Using Spectral Parameters Developed for M<sup>3</sup> Data to Assess Composition and Maturity\*](#) [#2532]

New parabola fits to mafic bands are consistent with existing MGM analyses. Correlations (or lack thereof) between npFe and spectral properties are discussed.

Warren T. J. Thomas I. R. Bowles N. E.

**POSTER LOCATION #262**

[The Oxford Space Environment Goniometer](#) [#1874]

Initial results from the Oxford Space Environment Goniometer, designed to support thermal infrared remote sensing measurements of airless bodies.

Mann P. Cloutis E. A. Greenberger R. N. Millikin R. E. Hiroi T. et al.

**POSTER LOCATION #263**

[An Interlaboratory UV/VIS/NIR Wavelength Calibration Study](#) [#2392]

Here we report our results of circulating a set of wavelength calibration standards to multiple facilities to assess the accuracy of ASD spectrophotometers.

Hibbitts C. A. Dyar M. D. Greenspon A. S.

**POSTER LOCATION #264**

[Ultraviolet Reflectance Spectra of Material Relevant to Airless Bodies](#) [#2611]

Vacuum ultraviolet to visible wavelength reflectance spectra can be used to estimate total iron abundance.

Izawa M. R. M. Applin D. M. Cloutis E. A. Cuddy M. Mann P.

**POSTER LOCATION #265**

[Spectroscopic Studies of Pristine Lunar Regolith Under H<sub>2</sub>O, O<sub>2</sub>, and CO<sub>2</sub> Controlled Conditions](#) [#1526]

Reflectance spectra of pristine lunar regolith samples were studied in an inert atmosphere. Hydration features similar to spacecraft observations were detected.