

Thursday, March 22, 2018 [R630]  
**POSTER SESSION II: MATERIAL ANALOGS II: PLANETARY SIMULANTS**  
 6:00 p.m. Town Center Exhibit Area

Manick K. Gill S-J. Najorka J. Smith C. L. Duvet L. **POSTER LOCATION #461**  
[\*Fundamental Properties Characterisation of Lunar Regolith Simulants at the European Space Agency \(ESA\) Sample Analogue Curation Facility\*](#) [#1411]

Preliminary grain size and morphology results by SEM for three lunar regolith simulants from the ESA Exploration Sample Analogue Collection (ESA<sup>2</sup>C).

Yu W. Li X. Y. Wang S. J. **POSTER LOCATION #462**  
[\*Thermal Conductivity Measurement of Lunar Soil Simulants\*](#) [#1375]

Lunar soil simulants are measured for their thermal conductivities under various vacuum degree and temperature conditions.

Metzger P. T. Britt D. T. Cannon K. M. Schultz C. D. Landsman Z. et al. **POSTER LOCATION #463**  
[\*Measuring the Fidelity of Asteroid Regolith Simulants\*](#) [#2926]

We report a method to grade asteroid regolith simulants adapted from NASA's method developed for lunar soil simulants.

Landsman Z. L. Metzger P. T. Rivkin A. S. Britt D. T. Cannon K. M. et al. **POSTER LOCATION #464**  
[\*A Spectroscopic Study of High-Fidelity Simulated Primitive Asteroid Regolith\*](#) [#2297]

We are spectroscopically characterizing primitive asteroid regolith simulant to investigate the 3- $\mu$ m hydration feature in asteroid spectra.

Schultz C. D. Britt D. T. **POSTER LOCATION #465**  
[\*Mechanical Properties of CI Carbonaceous Asteroid Regolith Simulant\*](#) [#1366]

By experimenting on CI carbonaceous asteroid simulant, we've approximated some of the physical properties of the regolith from these primitive bodies.

Cannon K. M. Britt D. T. Metzger P. T. Landsman Z. A. Covey S. D. et al. **POSTER LOCATION #466**  
[\*New High Fidelity Martian and Phobos Regolith Simulants: Enabling Tools for Exploring the Mars System and ISRU Development\*](#) [#2086]

We describe new high fidelity mineralogy-based regolith simulants for Mars and Phobos.

Britt D. T. Cannon K. M. Schultz C. D. Landsman Z. Metzger P. et al. **POSTER LOCATION #467**  
[\*Exploring the Physical Properties of High Fidelity Martian and Phobos Regolith Simulants: Support for Mission Development and Hardware Design\*](#) [#1943]

The physical properties of high fidelity simulants provide insight into expected conditions for Phobos sample return and support mission development.

Archer P. D. Jr. Hogancamp J. V. Gruener J. E. Ming D. W. **POSTER LOCATION #468**  
[\*Augmenting the Mojave Mars Simulant to More Closely Match the Volatile Content of Global Martian Soils Based on Mars Science Laboratory Results\*](#) [#2806]

We have developed an augmented Mojave Mars Simulant to better match the volatile content of global Mars soils based on analysis of the Rocknest sample by MSL.

Fackrell L. E.

**POSTER LOCATION #469**

[Development of Martian Regolith Simulants for Exploration of In Situ Resource Availability and Potential](#) [#2742]

Development of martian regolith simulants for use in studies examining fertility and toxicity of martian regolith.

Battler M. M. Cross M. Safdar M. McIsaac K. Faragalli M.

**POSTER LOCATION #470**

[Development of Martian Regolith Duricrust Simulants for Use in Rover Hazard Detection and Avoidance Experiments](#) [#3012]

We produced analogue Mars duricrusts, and classified them using non-contact instruments for eventual use by rover-based automated soil assessment software.