Monday, March 20, 2017
LUNAR VOLCANISM
8:30 a.m. Waterway Ballroom 1

**Chairs:** Kerri Donaldson Hanna
Jessica Barnes

8:30 a.m. Wilson L. * Head J. W.
*Origin of the Enigmatic Ina Mounds: Three-Stage Lunar Shield Volcano Eruption Sequence and Production and Extrusion of Magmatic Foam* [#1288]
The last stage of an initially explosive lunar eruption can generate a very vesicular lava with unusual rheological and crater-retention properties.

8:45 a.m. Qiao L. * Head J. W. Wilson L. Xiao L. Kreslavsky M. et al.
*Ina Pit Crater on the Moon: Extrusion of Waning-Stage Lava Lake Magmatic Foam Results in Extremely Young Crater Retention Ages* [#1126]
The Ina feature is formed through waning-stage lava lake processes >3 Byr ago, geologically recent effusive volcanic or gas venting activity is not required.

9:00 a.m. Stopar J. D. * Robinson M. S. van der Bogert C. H. Hiesinger H. Ostrach L. R. et al.
*Young Lunar Volcanism: Irregular Mare Patches as Drained Lava Ponds and Inflated Flows* [#1792]
IMPs most likely represent the final residual materials associated with a drained lava pond or lake associated with volcanism occurring in the last few 100 myr.

9:15 a.m. Valencia S. N. * Jolliff B. L.
*Surface Properties of the Apennine Bench Formation* [#2826]
We examine the surface properties of the Apennine Bench Formation, such as elevation, chemical composition, and terrain ruggedness index.

*Mg-Spinel Exposures Within Silica Rich Setting on Hansteen Alpha: Probing the Geologic Context* [#2104]
Out of the blue / Mg-spinel in silicic glue / Nobody has a clue / Probing to find if we can know.

9:45 a.m. McBride M. J. * Horgan B. Gaddis L. R.
*Mapping Glass in the Marius Hills Volcanic Complex with Moon Mineralogy Mapper* [#2989]
Glassy cinder cones / Reveal explosive history / Aristarchus like?

10:00 a.m. Elder C. M. * Hayne P. O.
*Thermophysical Properties of Lunar Volcanic Deposits* [#2431]
What can we learn from / The thermal inertia of / Lunar volcanoes?

10:15 a.m. Coman E. O. * Jolliff B. L.
*Detection and Variability of TiO2 Using LROC WAC UVVIS Data at Calibration Sites* [#2566]
TiO2 derived from LROC WAC data are investigated for international science coordination and calibration sites, including Chang’e-3 and Apollo 11 and 17.

10:30 a.m. Barnes J. J. * McCubbin F. M. Boyce J. W. Nguyen A. N. Messenger S.
*Volatiles in High Titanium Basalts from the Moon* [#1727]
High K, high Ti mare basalts may have sampled Cl from a previously unidentified source within the Moon.
10:45 a.m. Rutherford M. J. * Head J. W. Saal A. E. Wilson L. Hauri E.

* A Model for the Ascent and Eruption of Lunar Picritic Magma Based on Experiments and Lunar Sample Data [#1557]

The purpose of this paper is to integrate new data on C-O-H-S volatile solubility in lunar picritic magmas into a revised eruption and dike emplacement model.

11:00 a.m. McIntosh E. C. * Porrachia M. McCubbin F. M. Day J. M.D.

Determination of Trace and Volatile Element Abundance Systematics of Lunar Pyroclastic Glasses 74220 and 15426 Using LA-ICP-MS [#1668]

Moderately volatile element enrichment in lunar glasses 74220 and 15426 compared to mare basalts and possible enrichment of volatile elements on bead surface.

11:15 a.m. Burney D. * Neal C. R.

Moderately Volatile Element Content of Apollo 17 Soil Sample 74220 Orange Glass Beads: Insights into the Moon’s Interior [#2099]

The moderately volatile elements of the orange glass beads have been measured using solution mode ICP-MS, and compared to other lunar material.

11:30 a.m. Schmitt H. H.

* Geology and Stratigraphy of Shorty Crater Pyroclastic Ash Deposits [#1072]

Stratigraphy of five pyroclastic ash units at Shorty Crater has been defined. Eruptions of ash occurred over ~150 Myr. Basaltic ejecta protected the ash units.