

Tuesday, March 20, 2018

[T309]

POSTER SESSION I: AMORPHOUS MATERIALS ON MARS

6:00 p.m. Town Center Exhibit Area

Pineau M. Le Deit L. Rondeau B. Chauviré B. Carter J. et al. **POSTER LOCATION #97**
[Investigation of Opals on Mars Using CRISM Data and Terrestrial Analogs](#) [#1076]

Spectral criteria are applied to CRISM data in order to better understand the major geological processes that formed opals on Mars.

Bamisile T. A. Hausrath E. M. Tschauer O. D. Harrold Z. R. Adcock C. et al. **POSTER LOCATION #98**
[Analysis of Iron-Containing Weathering Products in Serpentine Soils and Their Implications for Mars](#) [#2904]

Investigation of weathering products in terrestrial serpentine soils to understand the formation process of Fe-rich nano/poorly crystalline materials on Mars.

Dehouck E. David G. Meslin P.-Y. Cousin A. Gasnault O. et al. **POSTER LOCATION #99**
[Independent Characterization of the Amorphous Component of Martian Soils Using ChemCam LIBS Data](#) [#1322]

ChemCam analyses of fine-grained soils reveal mixing trends consistent with the amorphous component, allowing to confirm and refine its composition.

Jeute T. J. Baker L. L. Abidin Z. Bishop J. L. Rampe E. B. **POSTER LOCATION #100**
[Characterizing Nanophase Materials on Mars: Spectroscopic Studies of Allophane and Imogolite](#) [#2137]

Allophane on Mars indicates a time when water was intermittent and short lived. Characterization of these materials will increase accuracy of water models.

Ralston S. J. Hausrath E. M. Tschauer O. Rampe E. B. Christoffersen R. **POSTER LOCATION #101**
[Dissolution Rates of Allophane, Fe-Containing Allophane, and Hisingerite and Implications for Gale Crater, Mars](#) [#2823]

Dissolution experiments were conducted on synthetic allophane, Fe-substituted allophane, and hisingerite as analogs for the Mars amorphous soil component.

Gregerson J. C. Rogers A. D. Ehm L. Parise J. B. Tu S. **POSTER LOCATION #102**
[Low-Temperature Total X-Ray Scattering of Amorphous and Aqueous Iron\(III\) Sulfate](#) [#1581]

Amorphous hydrated iron(III) sulfate and its parent aqueous brine are brought to low temperatures and analyzed for changes in phase with total X-ray scattering.