Tuesday, March 21, 2017 **[T337]**
POSTER SESSION I: CHARACTERIZING MARS THROUGH ORBITAL SPECTROSCOPY
6:00 p.m. Town Center Exhibit Area

Seelos F. P. Romeo G. Hash C. D. Murchie S. L. Garhart E. C. ***POSTER LOCATION #536***
Next Generation CRISM Multispectral Map of Mars: Noise Reduction and Radiometric Reconciliation **[#2183]**
The next generation of CRISM mapping observation mosaic data products will incorporate noise remediation and radiometric reconciliation.

Saranathan A. M. Parente M. ***POSTER LOCATION #537***
Active Classification of Neutral Spectra for CRISM Images **[#2866]**
An active learning based technique for classifying neutral spectra used for ratioing in CRISM images.

He L. Arvidson R. E. O'Sullivan J. A. Politte D. V. ***POSTER LOCATION #538***
Regularization in Maximum Log-Likelihood Method for CRISM Hyperspectral Image Cube **[#2147]**
We describe key improvements of our original log maximum likelihood method (MLM) for regularization of CRISM data and analyze the performance of outputs.

Lin H. L. Mustard J. F. Zhang X. ***POSTER LOCATION #539***
A Novel Methodology for the Determination of Hydrous Minerals on Mars: Application to Kashira Crater **[#2707]**
A novel methodology which combined Hapke and Sparse unmixing model to determine the hydrous minerals on Mars was present.

Ahern A. A. Rogers A. D. Bandfield J. L. Edwards C. S. Fergason R. L. ***POSTER LOCATION #540***
Constraining Shallow Vertical Heterogeneity in Martian Surface Materials from Mars Odyssey THEMIS Data **[#2337]**
Mars' surface layers / Revealed by models and temps / Of thermal response.

Carter J. ***POSTER LOCATION #541***
A Mars Orbital Catalog of Hydrated Alteration Signatures (MOCHAS) **[#2231]**
We report on the completion of a global inventory of hydrated minerals on Mars as seen from orbit, showing the pervasive aqueous alteration of early Mars.

Riu L. Poulet F. Bibring J.-P. Gondet B. Langevin Y. et al. ***POSTER LOCATION #542***
Mapping Elemental Mars **[#1937]**
We present global maps of chemical composition modelled from OMEGA NIR complete dataset. Comparison with other global and in situ measurements are discussed.

Audouard J. Vincendon M. Poulet F. Gondet B. ***POSTER LOCATION #543***
Solar Albedo High Resolution Global Map of the Martian Surface from OMEGA/MEX **[#1980]**
We present a global map of solar albedo derived from OMEGA data. It is the highest resolution map of this key parameter for climate modelling and TI retrievals.

Audouard J. Poulet F. Vincendon M. Gondet B. Rogers D. A. ***POSTER LOCATION #544***
First 5µm Emissivity Global Map of the Martian Surface **[#1972]**
We present the first high resolution global map of emissivity at 5µm of the martian surface, derived from OMEGA data. It is distributed to the community.

Wilson J. T. Peplowski P. N. Lawrence D. J. Goldsten J. O.
Burkes M. et al. ***POSTER LOCATION #545***
Characterizing Near-Surface Chemical Stratigraphy on Mars Using Gamma Ray Spectroscopy **[#2587]**
Using experiment and modeling we demonstrate the ability of gamma ray spectroscopy to reveal cm-scale elemental stratigraphy at the surface of Mars.

Cowart J. C. Rogers A. D. ***POSTER LOCATION #546***
Initial Results from a Global Spectral Survey of Noachian Plains Bedrock Units **[#1547]**
Noachian plains / Ancient exposures of rock / What are they made of?

Sessa A. M. Wray J. J. ***POSTER LOCATION #547***
Occurrence of Feldspathic Rocks in the Martian Southern Highlands **[#3013]**
Light-toned rocks present? / Could be phyllosilicates… / Perhaps feldspathic?

Dapremont A. M. Viviano-Beck C. E. Beck A. W. Seelos K. D.
Murchie S. L. et al. ***POSTER LOCATION #548***
Investigation of Noachian Crustal Structure Using CRISM Multispectral Mapping Data **[#2004]**
We examine alteration and vertical structure of Mars ancient Noachian highlands. Regional differences may be due to impact disruption or post-impact alteration.

Pan L. Ehlmann B. L. ***POSTER LOCATION #549***
Aqueous Alteration from Diverse Hydrated Minerals in Lyot Crater and Its Vicinity **[#2440]**
Diverse hydrated minerals in the region of Lyot Crater are analyzed to understand their formation and relationship to previous events of liquid water mobility.

Salvatore M. R. Goudge T. A. Bramble M. S. Edwards C. S.
Bandfield J. L. et al. ***POSTER LOCATION #550***
Bulk Mineralogy of the Northwest Isidis Region of Mars Derived Through Thermal Infrared Spectral Analyses **[#1154]**
Surface mineralogy is derived to support ongoing and future investigations of this region, which includes Jezero Crater, its watershed, and Northeast Syrtis.

Powell K. E. Arvidson R. E. ***POSTER LOCATION #551***
Geologic Setting and Mineralogy of Horowitz Crater **[#1489]**
We explore the geology and mineralogy of Horowitz Crater, a southern hemisphere recurring slope lineae site.

Bi X. Y. Ling Z. C. Chen J. Zhang J. Cao H. J. et al. ***POSTER LOCATION #552***
Light-Toned Materials of Melas Chasma: Evidence for Their Formation on Mars **[#2794]**
We find a distinctive terrain in Melas Chasma on Mars which has wavy shape, determine the mineral phases, and figure out their possible formation mechanism.

Noe Dobrea E. Z. Warner N. H. ***POSTER LOCATION #553***
Mineralogical Diversity in Xanthe Terra, Mars **[#2949]**
We conducted a survey of aqueous minerals in the Xanthe Terra region of Mars. We identified phyllosilicates, sulfates, hydrated silica, and carbonates.

Carnes L. K. Karunatillake S. Susko D. A. Hood D. R. ***POSTER LOCATION #554***
Delineating the Arabia Terra Region on Mars to Investigate Paterae Origins **[#1756]**
Explosive volcanism in Arabia Terra (Michalski and Bleacher, 2013) is further explored through a robust delineation and characteristic bulk composition comparison.

Kimbrough L. P. Wray J. J. ***POSTER LOCATION #555***
Phyllosilicates in Shalbatana Vallis, Mars **[#2914]**
Hydrous minerals / In Shalbatana Vallis / Wetter ancient Mars?

Hanley J. Horgan B. ***POSTER LOCATION #556***
Investigating the Distribution of Martian Chlorine Salts **[#2651]**
Chlorine salts on Mars / Depresses water's freezing / Where can we find them?

Phillips B. P. Glotch T. D. Rogers A. D. Osterloo M. M. ***POSTER LOCATION #557***
Spectroscopic Investigation of Chloride Salt Deposits in Noachis Terra **[#2416]**
We take advantage of multiple orbital datasets (THEMIS, CRISM) to investigate the compositional stratigraphy of a chloride–bearing region in Noachis Terra.

Glotch T. D. Phillips B. P. Bandfield J. L. Osterloo M. M. Rogers A. D. ***POSTER LOCATION #558***
The Hydration State of Chloride Salt Deposits on Mars **[#2232]**
Salty parts of Mars / Have very little water / So say the spectra.

Mitchell J. L. Christensen P. R. ***POSTER LOCATION #559***
The Impact of Texture on the Thermal Infrared Spectra of Chlorides **[#2423]**
Evaporite salts / Come in all shapes and sizes / And their spectra too!

Beck A. W. Viviano-Beck C. E. Murchie S. L. Dapremont A. M. ***POSTER LOCATION #560***
CRISM Mapping of Chloride Deposits at Central Latitudes on Mars – Noachis Terra **[#2247]**
Here we map chloride and phyllosilicate deposits in Noachis Terra using CRISM.