Tuesday, March 18, 2014 [T620]
POSTER SESSION: LUNAR SPECTROSCOPY:
PROBING ELEMENTAL COMPOSITION AND MINERALOGY FROM ORBIT
6:00 p.m. Town Center Exhibit Area

Zhu M. H. Chang J. Fa W. Z. Ip W. H. Ma T. et al. ***POSTER LOCATION #269***
Thorium on the Lunar Highlands Surface: Insights from Chang'e-2 Gamma-Ray Spectrometer **[#1237]**
The new global Th map derived from CE-2 GRS indicates a possible indigenous Th on the lunar highlands besides the Imbrium impact contribution.

Chin G. Sagdeev R. Milikh G. M. Usikov D. Su J. J. et al. ***POSTER LOCATION #270***
Determining the Magnitude of Neutron and Galactic Cosmic Ray (GCR) Fluxes at the Moon Using the Lunar Exploration Neutron Detector (LEND) During the Historic Space-Age Era of High GCR Flux **[#1704]**
The LRO was launched June 18, 2009 during an historic spaceage era of minimum solar activity and maximum GCR flux that coincided with the operation of LEND.

Athiray P. S. Kusuma K. N. Narendranath S. Sreekumar P. ***POSTER LOCATION #271***
Direct Evidence of Enhanced Sodium Content on the Moon Around Tycho Region: C1XS Observations **[#1857]**
X-ray observations of Chandrayaan-1 X-ray Spectrometer (C1XS) showing the direct evidence of enhanced sodium on the lunar surface around the crater Tycho.

Wilson J. K. Schwadron N. Spence H. E. Golightly M. J. Case A. W. et al. ***POSTER LOCATION #272***
Detecting Low-Contrast Features in the Cosmic Ray Albedo Proton Map of the Moon **[#2206]**
The albedo proton map of the Moon shows localized regions with slightly higher yield that may be correlated with elemental abundances in the lunar regolith.

Bodnarik J. G. Mitrofanov I. G. Boynton W. V.
Hamara D. K. Harshman K. et al. ***POSTER LOCATION #273***
LEND CSETN Circular and Elliptical Orbital Data Processing **[#2925]**
The data reduction procedures that reduce the LEND raw elliptical orbit CSETN neutron data into corrected higher-level derived data products are presented.

Bhattacharya S. Chauhan M. Chauhan P. ***POSTER LOCATION #274***
Compositional Heterogeneity of Crater Aristoteles as Revealed by Chandrayaan-1 Moon Mineralogy Mapper (M^3) Data **[#1845]**
We have studied the complex heterogenetic lithological association of dunitic-noritic-grabbroic compositions at Crater Aristoteles with olivine-rich exposures.

Donaldson Hanna K. L. Pieters C. M. Cheek L. C. Bowles N. E. Dhingra D. ***POSTER LOCATION #275***
Shocked Anorthosite: Puzzling over Its Whereabouts **[#2231]**
Shocked anorthositic material and its relationship to crystalline anorthositic material is mapped within highland craters as well as across the lunar surface.

Dhingra D. Pieters C. M. Head J. W. ***POSTER LOCATION #276***
Impact Melt Mineralogy at Lunar Complex Craters: Systematics of Melt Emplacement and Evolution **[#2138]**
The mineralogy of impact melt is diverse. Coupled with its pervasive nature, impact melt likely played a role in the compositional diversity of the lunar crust.

Dhingra D. Pieters C. M. Head J. W. ***POSTER LOCATION #277***
Nature and Distribution of Olivine at Copernicus Crater: New Insights About Origin from Integrated High Resolution Mineralogy and Imaging **[#1117]**
Olivine occurrence at Copernicus is enriched by new floor exposures and a different morphological form of olivine in the northern wall compared to the peaks.

Zhang Y. Z. Zhou C. Chen S. B. Li C. L. Huang Z. J. et al. ***POSTER LOCATION #278***
Spatial Distribution of Olivine the Sinus Iridium Using M^3 Data **[#1141]**
Here we present an olivine survey of the Sinus Iridium using M^3 data.

Corley L. M. McGovern P. J. Kramer G. Y. ***POSTER LOCATION #279***
Olivine Exposures on the Moon: Origins and Mechanisms of Transport to the Lunar Surface **[#1564]**
We identified olivine at several areas with the Moon Mineralogy Mapper and examined the geophysical settings using GRAIL data.

Isaacson P. J. Lucey P. G. Sunshine J. M. Klima R. L. ***POSTER LOCATION #280***
Remote Compositional Analyses of Lunar Olivines **[#1709]**
Compositions of lunar olivines are estimated using MGM-based techniques. Our approach provides rough but absolute compositional assessments.

Chauhan M. Bhattacharya S. Chauhan P. ***POSTER LOCATION #281***
New Locations of Fe-Mg-Spinel-Bearing Lithologies on the Moon as revealed by Chandrayaan-1 Moon Mineralogy Mapper (M^3) Observations **[#1829]**
We have reported Fe-Mg-spinel-bearing lithologies from three new locations on the Moon at Crater Letronne, Montes Teneriffe, and Moretus Crater at the SPA Basin.

Hendrix A. R. Mandt K. E. Greathouse T. K.
Retherford K. D. Gladstone G. R. et al. ***POSTER LOCATION #282***
Ultraviolet Characteristics of the Lunar Compton-Belkovich Region from LRO/LAMP **[#2790]**
We discuss FUV results of the Compton-Belkovich region using the LRO UV spectrograph. This region displays redder FUV spectra than anywhere else on the Moon.

Seifert C. M. Mandt K. E. Retherford K. D.
Greathouse T. K. Hendrix A. R. et al. ***POSTER LOCATION #283***
LRO Lyman Alpha Mapping Project (LAMP) Investigation of the Lunar Albedo Far-UV Spectral Inversion **[#1191]**
Comparing mare and highland regions measured within the 57–196 nm spectral range of the LAMP instrument.