Thursday, March 24, 2016 **[R650]**
POSTER SESSION II: INSTRUMENT CONCEPTS: METHODS AND TECHNIQUES FOR ANALYSIS
6:00 p.m. Town Center Exhibit Area

Setera J. B. Turrin B. VanTongeren J. A. Lindsay F. N. Herzog G. F. et al. ***POSTER LOCATION #705***
$^{40}Ar/^{39}Ar$ Thermochronology: A Method for Precise Age Dating and Closure Temperatures with Implications for Meteoritic and Terrestrial Samples **[#3017]**
We present a step-heating method for precise measurement of $^{40}Ar/^{39}Ar$ plateau ages and diffusion parameters for small terrestrial and meteorite samples.

Sears D. W. G. Hughes S. S. ***POSTER LOCATION #706***
A New Method — Potentially Suitable for Spacecraft Instrumentation — for Dating Volcanism on Planetary Surfaces **[#1369]**
The induced thermoluminescence intensity of 23 basalts from Idaho is dependent on their age and thus is a dating technique suitable to robotic spacecraft.

Treiman A. H. Filiberto J. ***POSTER LOCATION #707***
How Good is Good Enough? Major Element Chemical Analyses of Basalt by Spacecraft Instruments **[#1029]**
Connections between analytical uncertainties on chemical analyses of basalt and the utility of those analyses are shown via Monte Carlo methods.

Carey C. M. Jr. Breitenfeld L. B. Dyar M. D.
Crowley M. C. Leight C. et al. ***POSTER LOCATION #708***
Quantifying Mineral Abundances in Mixtures Using Raman Spectroscopy: Toward a Method for Spectral Unmixing **[#2626]**
Automated unmixing of Raman spectra is demonstrated on binary mineral mixtures using a simple algorithm built upon existing whole-spectrum matching techniques.

Naito M. Hasebe N. Nagaoka H. Yoshida K. Ishii J. et al. ***POSTER LOCATION #709***
Numerical Investigation of the Leakage Gamma-Ray and Neutron Fluxes from Martian Moons **[#1791]**
Numerical simulations of gamma-ray and neutron fluxes from Shergotty and CI chondrite were performed for future mission to the martian moons.

Boucher T. F. Dyar M. D. Carey C. Giguere S. Mahadevan S. ***POSTER LOCATION #710***
Calibration Transfer for Spectroscopy in Space Science **[#2784]**
Improving the predictive performance of space instruments using both on-board and lab-base calibration standards through the use of calibration transfer.

Mann P. Cloutis E. A. Bell J. F. III Wiens R. C. Johnson J. R. et al. ***POSTER LOCATION #711***
The Stability of Spectralon; a Potential Calibration Reference for Mars 2020 **[#2362]**
Assessing the optical and mechanical stability of Spectralon under deep space and Mars surface conditions.

Francis R. Estlin T. Gaines D. Doran G. Gasnault O. et al. ***POSTER LOCATION #712***
AEGIS Intelligent Targeting Deployed for the Curiosity Rover's ChemCam Instrument **[#2487]**
Rover picks, zaps rocks / Without Earth-in-the-loop wait / More mission science.

Jakobsen S. J. Kinch K. M. Madsen M. B. Bell J. F. Wellington D. et al. ***POSTER LOCATION #713***
An Excess Signal in the Tail of the PSF Observed in the Pancam R7 Filter on Board the Mars Exploration Rovers: Characterisation and Correction **[#2631]**
In order to correct for an excess signal effect, we construct an algorithm and use it in an iterative process.

Giguere S. Dyar M. D. Carey C. Boucher T. Mahadevan S. ***POSTER LOCATION #714***
Fully-Customized Baseline Removal Applied to LIBS Spectroscopy Under Mars Conditions **[#1318]**
To explore the effect of applying customized baseline removal, we compare results against several existing methods when used in LIBS prediction tasks.

Giguere S. Dyar M. D. Boucher T. Carey C. Mahadevan S. ***POSTER LOCATION #715***
A Fully-Customized Baseline Removal Framework for Spectroscopic Applications **[#1321]**
We present a system for automatically constructing baseline removal methods and tuning them to a user's task, making full optimization of BLR accessible.