Tuesday, October 25, 2016
RAMAN AND VIS-NIR INSTRUMENTS
FOR IN SITU MINERALOGY AND RESOURCE PROSPECTING
1:30 p.m. International East

Chair: Carlton Allen

1:30 p.m. Moral A. G. * Rull F. Maurice S. Hutchinson I. B. Canora C. P. López G. Canchal R. Gallego P. Seoane L. Prieto J. A. R. Santiago A. Santamaría P. Colombo M. Belenguer T. Ramos G. Parot Y. Ingley R. Woodward S. Shulte W.
Raman Laser Spectrometer for 2020 ExoMars Mission **[#4025]**
The Raman Laser Spectrometer (RLS) is one of the scientific payloads on the ExoMars 2020 mission, within ESA's Aurora Exploration Program. It will perform Raman spectroscopy on crushed powdered samples, obtained from two meters depth under Mars surface.

1:45 p.m. Wang A. * Lambert J. L. Hutchinson I. Monacos S. McHugh M. Wei J. Yan Y. C.
Two High Performance In Situ Raman Spectrometers for Landed Planetary Missions **[#4086]**
We report the results from a CIRS performance test that was accomplished in August 2016. Now both in situ Raman systems, MMRS and CIRS, are ready for missions. We will compare them with other Raman architectures.

2:00 p.m. McHugh M. * Hutchinson I. B. Ingley R. Nelms N.
Optimising the Operation and Performance of a Stand-Off Raman Instrument Developed for Planetary and Lunar Exploration **[#4076]**
We describe the development of a radiometric model for stand-off Raman Spectrometer and discuss the initial results.

2:15 p.m. Ehlmann B. L. * Blaney D. L. Green R. O. Mouroulis P.
VSWIR Microimaging Spectroscopy for Geologic History and Identifying and Quantifying Mineral, Ice, and Organic Abundances on Planetary Surfaces **[#4097]**
VSWIR microimaging spectroscopy is a key tool for landed planetary missions, acquiring simultaneous composition and texture. It has been matured to TRL 6 as UCIS and is presently being used for meteorite and terrestrial earth science studies.

2:30 p.m. Cook A. M. * Colaprete A. Roush T. L. Benton J. E. Forgione J. B. White B. Bielawski R. Fritzler E.
NIR Spectroscopy and Multi-Wavelength Imaging for Volatile Prospecting **[#4023]**
We present a demonstration of an instrument system built at NASA Ames Research Center, for in situ near-infrared spectral observations and visible imagery of planetary surfaces.

2:45 p.m. *Coffee Break*