

Thursday, November 6, 2014
MARS 2020 MISSION AND INSTRUMENTS
1:20 p.m. / Building 34 -Conference Room W150

Chairs: **A. Bhardwaj (VSSC, India)**
 T. Stubbs (GSFC)

- 1:20 p.m. Farley K. A. * Schulte M. D. Williford K. H.
Overview of the Mars 2020 Mission and its Investigation Payload [#1133]
An overview of the investigations selected for the Mars 2020 rover mission.
- 1:40 p.m. Allwood A. C. * Clark B. Elam W. T. Flannery D. T. Grotzinger J. et al.
PIXL: Planetary Instrument for X-ray Lithochemistry on Mars 2020 [#1104]
PIXL is a microfocus XRF instrument on the robotic arm of the Mars 2020 rover. PIXL will be used to investigate abundances and submillimeter-scale distribution of chemical elements in rocks and soils.
- 2:00 p.m. Hamran S.-E. * Amundsen H. E. F. Carter L. Ghent R. Kohler J. et al.
The Ground Penetrating Radar RIMFAX on the Mars 2020 Mission. [#1034]
The Radar Imager for Mars' sub-surFACE eXperiment (RIMFAX) ground penetrating radar experiment for the Mars 2020 Rover will add a new dimension to the rover's toolset by providing the capability to image the shallow subsurface beneath the rover.
- 2:20 p.m. Wiens R. C. * Maurice S. Johnson J. R. Clegg S. M. Sharma S. K. et al.
The SuperCam Remote Sensing Suite for Mars 2020: Co-Aligned LIBS, Raman, and Near-IR Spectroscopies, and Color Micro-Imaging [#1086]
SuperCam/Mars2020 is a suite of 4 instruments: Laser Induced Breakdown Spectroscopy (LIBS), Raman spectroscopy, visible and near-infrared spectroscopy (VISIR), and high resolution color imaging, all co-aligned and at micro-radian angular resolution.
- 2:40 p.m. Bell J. F. III * Maki J. N. Mehall G. L. Ravine M. A. Caplinger M. A.
Mascam-Z: A Geologic, Stereoscopic, and Multispectral Investigation on the NASA Mars-2020 Rover [#1151]
Here we describe the mast-mounted Mastcam-Z imaging system on the Mars-2020 rover. We describe our geologic, atmospheric, and operational science goals, as well as the basic functionality and predicted performance of the cameras.
- 3:00 p.m. Beegle L. W. * Bhartia R. DeFlores L. White M. Asher S. et al.
SHERLOC: Scanning Habitable Environments with Raman & Luminescence for Organics & Chemicals, an Investigation for 2020 [#1078]
The SHERLOC investigation was recently selected for the Mars 2020 integrated payload. SHERLOC enables non-contact, spatially resolved, and highly sensitivity detection and characterization of organics and minerals on Mars.
- 3:20 p.m. Hecht M. H. * Rapp D. R. Hoffman J. A. The MOXIE TEAM
The Mars Oxygen ISRU Experiment (MOXIE) [#1134]
Recently selected to fly on NASA's Mars 2020 mission, MOXIE is a 1% scale model of an oxygen processing plant that might support a human expedition sometime in the 2030s. MOXIE will produce 22g/hr of O₂ on Mars with >99.6% purity during 50 sols.
- 3:40 p.m. **END OF ORAL SESSION**
 GSFC TOURS