

**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.  
*Mastcam-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 O<sub>2</sub> on Mars with >99.6% purity during 50 sols.
- 3:40 p.m. **END OF ORAL SESSION**  
**GSFC TOURS**

**Thursday, November 6, 2014**  
**GSFC Tours**  
**3:55 p.m.**

- 3:55 p.m.      *Group A: Bus departs from Building 34 for Visitor Center, then returns to Building 34 for Group B*
- 4:00 p.m.      *Group A: The Astrobiology Walk at the Visitor Center Garden, Visitor Center*
- Group B: Bus departs from Building 34 for Building 29, then returns to Visitor Center for Group A*
- 4:10 p.m.      *Group B:*  
James Webb Space Telescope Space Systems Development and Integration Facility Clean Room and Building 29
- 4:30 p.m.      *Group A: Bus returns to Visitor Center for Group A, takes VIPs to Building 29 and picks up Group B to take to Visitor Center*
- 4:40 p.m.      *Group A:*  
James Webb Space Telescope Space Systems Development and Integration Facility Clean Room and Building 29
- Group B: Bus departs from Building 29, for the Visitor Center*
- 4:50 p.m.      *Group B:*  
The Astrobiology Walk at the Visitor Center, Garden, and Visitor Center
- 5:15 p.m.      *Group A: bus picks up VIPs from Building 29, takes to Visitor Center*
- Group B: already at Visitor Center*
- 5:20 p.m.      *Group A & B await hotel shuttles at Visitor Center, then depart center*