Wednesday, March 22, 2017 **[W402]**
MARTIAN IGNEOUS AND HYDROTHERMAL PROCESSES FROM ORBIT AND ON THE SURFACE
8:30 a.m. Waterway Ballroom 4

Chairs: **Michelle Minitti**
Jeff Berger

8:30 a.m. Riu L. * Poulet F. Bibring J.-P. Gondet B. Langevin Y. et al.
A New Global View of the Martian Composition **[#1815]**
We present new global maps of mafic mineral (LCP, HCP, olivine, and plagioclase will be discussed) abundance derived from OMEGA complete NIR dataset.

8:45 a.m. Yant M. H. * Rogers A. D. Horgan B. H. N. Smith R. J.
Aqueous Alteration of Glass on the Martian Surface: A Comparison of Remotely-Acquired and Experimental Data Sets **[#2090]**
Comparison of laboratory acquired infrared signatures of altered glasses with TES and OMEGA data to more reliably interpret remote spectra of terrains on Mars.

9:00 a.m. Viviano-Beck C. E. * Morgan M. F. Núñez J. I. Matiella Novak M. A. Murchie S. L. et al.
Fresh Craters as Compositional Probes for Dust-Covered Bedrock in Tharsis and Elysium, Mars **[#2800]**
Preliminary analysis of CRISM spectra from fresh craters and dust-free surfaces reveals compositional diversity in Elysium and Tharsis Amazonian-aged terrains.

9:15 a.m. Brown A. J. * Viviano-Beck C. E. Goudge T. A. Putirka K. D.
Carbonate Mineralogy of the Jezero Crater Watershed **[#2346]**
We use CRISM observations of the proposed landing site at Jezero Crater to constrain and explain the spatial extent of carbonates in the delta watershed.

9:30 a.m. Bramble M. S. * Mustard J. F. Cannon K. M.
Testing Carbonate Formation Mechanisms at Northeast Syrtis Major Using Manual and Automated Hyperspectral Analyses **[#2815]**
Carbonates on Mars / We seek clues to how they formed / In the infrared.

9:45 a.m. Schröder C. * Schwenzer S. P.
Evidence for Impact-Induced Hydothermal Clay Mineral Formation at Endeavour Crater, Mars **[#2429]**
Impact rocks at Endeavour Crater contain clay minerals. We explore their formation pathways.

10:00 a.m. Bouchard M. C. * Jolliff B. L. Farrand W. H. Mittlefehldt D. W.
Constraining the Origin of Basaltic Volcanic Rocks Observed by Opportunity Along the Rim of Endeavour Crater **[#1608]**
Mysterious “blue rocks” (false color) have been observed along Opportunity’s traverse. They could be volcanic rocks that pre- and post-date Endeavour Crater.

10:15 a.m. Haberle C. W. * Ruff S. W. Christensen P. R.
Revisiting the Alkaline Volcanic Rocks of Gusev Crater with Mini-TES **[#2497]**
Improved techniques for modeling dust-contaminated Mini-TES spectra allow for the determination of mineralogy in the alkaline volcanic rocks of Gusev Crater.

10:30 a.m. Bridges J. C. * Bedford C. C. Schwenzer S. P. Frydenvang J. Thompson L. et al.
The Igneous End Member Compositions Preserved in Gale Crater Sediments **[#2504]**
ChemCam data shows that despite alteration, Gale sediments preserve the average compositions of two major igneous protoliths and traces of up to three minor ones.

10:45 a.m. Schmidt M. E. * Izawa M. R. M. Thomas A. P. Thompson L. Gellert R.
Diverse Igneous Protolith Contributions to Sediments in Gale Crater: Variable Metasomatism of the Mars Mantle **[#1571]**
Variable partial melting of "normal" Mars mantle and fractional crystallization alone cannot account for the diverse igneous compositions in Gale Crater.

11:00 a.m. Achilles C. N. * Downs R. T. Ming D. W. Rampe E. B. Morris R. V. et al.
Ground Truth Mineralogy vs. Orbital Observations at the Bagnold Dune Field **[#2889]**
CheMin analyses of Gobabeb present a unique opportunity to provide mineralogical ground truth for orbital observations of the Bagnold Dune Field in Gale Crater.

11:15 a.m. O'Connell-Cooper C. D. * Thompson L. M. Spray J. G. Gellert R. Berger J. A. et al.
APXS Gale Soil and Bagnold Sand Compositions **[#2403]**
APXS analyses of the sands within the active Bagnold Dune field are compared to the basaltic soils of Gale Crater, Meridiani Planum, and Gusev Crater.

11:30 a.m. Ashley J. W. * Herkenhoff K. E.
Meteorite Weathering on Mars – Updates on Exogenic Iron Survivability Biases and Micro-Mapping of Meridiani Planum Block Island Mosaics **[#2656]**
The chemical weathering of meteoritic materials on the martian surface produces an assortment of effects that vary with meteorite type.