Monday, May 16, 2016
POSTER SESSION: FUNDAMENTAL COMPARISON OF EARTH VS. MARS FROM A PALEOBIOLOGY PERSPECTIVE
5:30 p.m. Regency C

Thomas N. K. Hamilton J. C. Veillet A. Muir C. ***POSTER LOCATION #1***
Biologic Analog Science Associated with Lava Terrains **[#2016]**
The goal of BASALT is to use Hawaiian volcanic terrain to constrain the upper limits of biomass that could have been supported on Mars and how those upper bounds inform future detection requirements for manned missions.

Osterhout J. T. Czaja A. D. Fralick P. W. ***POSTER LOCATION #2***
Organic Geochemistry of a 1.4-Billion-Year-Old Evaporitic Lake: Insights for the Mars 2020 SHERLOC Instrument **[#2068]**
Evaporitic lakes on Mars have been considered interesting target sites for astrobiological investigations on Mars. Findings from this study provide a useful geochemical context for interpreting future detections of sedimentary organics by Mars 2020.

Thomas R. J. Hynek B. M. ***POSTER LOCATION #3***
Crater Floor Fractures: Probes Into Habitable Martian Environments **[#2007]**
Geologic and spectral analysis of martian impact craters reveals the potential for floor-fractures with a aqueous/volcanic genesis to probe into both ancient surface and Hesperian-aged deep habitable environments.

Bower D. M. Conrad P. G. Steele A. Fries M. D. ***POSTER LOCATION #4***
Characterizing the Biological and Geochemical Architecture of Hydrothermally Derived Sedimentary Deposits: Coupling Micro Raman Spectroscopy with Noble Gas Spectrometry **[#2013]**
The chemical species in cherts and glass fragments were analyzed using micro Raman spectroscopy in conjunction with measurements of heavy noble gas isotopes to characterize hydrothermally derived sedimentary environments.

Faucher B. F. Lacelle D. L. Davila A. D. Pollard W. P. McKay C. P. M. ***POSTER LOCATION #5***
Abundance, Distribution and Cycling of Organic Carbon and Nitrogen in University Valley (McMurdo Dry Valleys of Antarctica) Permafrost Soils with Differing Ground Thermal and Moisture Conditions: Analogue to C-N Cycle on Mars **[#2046]**
High elevation McMurdo Dry Valleys of Antarctica are key Mars analogue sites. Our investigation focuses on the link between ground ice origin, distribution and cycling of organic carbon and nitrogen in University Valley, and its soil habitability.

Gibson E. K. Thomas-Keprta K. L. Clemett S. J. McKay D. S. ***POSTER LOCATION #6***
Martian Biosignatures: Tantalizing Evidence Within Martian Meteorites **[#2052]**
Several of the martian meteorites offer a unique opportunity to study possible biosignatures over the history of Mars. Reduced carbon components have been found within the pre-terrestrial aqueous alteration phases (iddingsite) of martian meteorites.

Miura Y. Tanosaki T. ***POSTER LOCATION #7***
Different Topography and Composition of Earth- and Mars-Type Surfaces **[#2077]**
Mars shows different location and shape of higher lands compared with global water planet Earth, together with possible carbon concentration process of global surface on Earth and Mars with more detailed exploration on Mars.

Vidmachenko A. P. ***POSTER LOCATION #8***
Where is Necessary to Search Traces of Life on Mars? **[#2002]**
To identify possible relict life on Mars needs to carefully examine areas, which are located in areas of soil emission in Hellas valley at latitudes near –(40–50)°, where there are evidence of modern water outputs from under the planet’s surface.

Fairen A. G. Uceda E. R. Essefi E. Rodriguez J. A. P. ***POSTER LOCATION #9***
Spring Mounds in Eastern Tunisia as Analogs to Open Pingos on Argyre **[#2040]**
The MCSH system in Eastern Tunisia is an exceptional terrestrial analog which continuing analysis will help to make informed decisions regarding where to search for biosignatures on Mars.

Westall F. Campbell K. A. Gautret P. Bréhéret J. Foucher F. ***POSTER LOCATION #10***
Vago J. Kminek G. Hubert A. Hickman-Lewis K. Cockell C. S.
Hydrothermal Chemotrophic Biosignatures on Mars **[#2028]**
Hydrothermal chemotrophic biosignatures (morphological and geo-organochemical) were common in shallow water on the anaerobic early Earth, preserved by silicification. They are representative also of shallow crustal biosignatures.