

Tuesday, March 21, 2017

[T308]

**POSTER SESSION I: EXOBIOLOGY: SEARCHING FOR (SIGNS OF)
LIFE HIGH AND LOW, NEAR AND FAR
6:00 p.m. Town Center Exhibit Area**

- Thomas R. J. Potter-McIntyre S. Hynek B. M. **POSTER LOCATION #93**
[Fluid-Deposited Fracture-Margin Ridges in Margaritifer Terra, Mars](#) [#1185]
 Water from fractures / Depositing minerals / Entombing Mars life?
- Ruff S. W. Farmer J. D. **POSTER LOCATION #94**
[The Case for Silica Sinter in the Columbia Hills of Mars and Why It Matters](#) [#2879]
 A set of features in silica deposits next to Home Plate are matched by those of hot spring silica sinter at El Tatio, Chile, including potential biosignatures.
- Rummel J. D. McKay C. P. **POSTER LOCATION #95**
[Water on Mars: A Status Report and Suggestions for Further Study](#) [#2945]
 This paper addresses arguments for and against the possible presence of liquid water on Mars — whether salty or pure — given conditions in the Mars atmosphere.
- Freissinet C. Glavin D. P. Buch A. Szopa C. Kashyap S. et al. **POSTER LOCATION #96**
[In Situ Wet Chemistry Experiment on Mars Using the Samples Analysis at Mars \(SAM\) Instrument: “Opportunistic Derivatization” to Investigate Organics in a Martian Mudstone](#) [#2687]
 New organic molecules identified in a martian mudstone sample with SAM, Curiosity.
- Millan M. Szopa C. Buch A. Belmahdi I. Glavin D. P. et al. **POSTER LOCATION #97**
[Influence of Oxychlorine Phases During the Pyrolysis of Organic Molecules: Implications for the Quest of Organics on Mars with the SAM Experiment Onboard the Curiosity Rover](#) [#2124]
 Work on the impact of oxychlorines during the pyrolysis of organic molecules to help the data interpretation of the SAM instrument onboard the Curiosity rover.
- Mißbach H. Steininger H. Thiel V. Goetz W. **POSTER LOCATION #98**
[Characterization of Organic Compounds in Martian Sediments: A Case Study Imitating MOMA Pyrolysis and Derivatization Onboard the ExoMars Rover](#) [#2142]
 MOMA-like GC-MS measurements on analog materials to get insights on the general performance of the methods envisioned for MOMA surface operations.
- Odegaarden N. A. Benison K. C. **POSTER LOCATION #99**
[Suspect Microbial Textures in Cores from Mars-Analog Acid Saline Lake Aerodrome in Western Australia](#) [#1782]
 Petrographic study of microbial textures in acid saline lake sediment, Western Australia as analog to Mars.
- Gentry D. M. Amador E. S. Cable M. L. Cantrell T. **POSTER LOCATION #100**
 Chaudry N. et al.
[Lessons from Astrobiological Planetary Analogue Exploration in Iceland: Biomarker Assay Performance and Downselection](#) [#2898]
 Four Icelandic Mars planetary analogue expeditions have yielded an increasingly refined battery of sites, biomarker assays, and physicochemical measurements.
- Phillips M. S. Moersch J. E. Cabrol N. A. Davila A. F. **POSTER LOCATION #101**
[Thresholds of Detectability for Habitable Environments in the Atacama Desert, with Implications for Mars Exploration](#) [#2042]
 Halite nodules / Not detectable on Mars / With present spacecraft.

Rossato S. Pajola M. Baratti E.

POSTER LOCATION #102

[Maars on Mars: Potential Niches for Early Martian Life](#) [#1290]

Maar-diatremes (in particular the Simud Vallis ones) are extremely valuable sites for in-situ investigation on local rocks and for search of past life on Mars.

Riebe M. E. I. Stroud R. M. Alexander C. M. O'D. Katz M. B.

Nittler L. R. et al.

POSTER LOCATION #103

[Preliminary Isotopic, Chemical, and Microstructural Investigation of Irradiated Organic Dust Analogs](#) [#2579]

Organic unknowns / Is irradiation key? / Bonding, isotopes.

Rios A. C. Cooper G.

POSTER LOCATION #104

[A Continuous Production of Fragile Proto-Metabolites in the Early Solar System: Evidence from Carbonaceous Chondrites?](#) [#1808]

We attempt to explain the origin and survivability of relatively labile pyruvate reaction products found in carbonaceous chondrites.

Yano H. Sasaki S. Imani J. Horikawa D. Arai K. et al.

POSTER LOCATION #105

[In-Orbit Operation and Initial Sample Analysis and Curation Results for the First Year Collection Samples of the Tanpopo Project](#) [#3040]

Japanese first astrobiology experiment Tanpopo successfully returned its first year collection samples of meteoroid and debris impacts onto aerogel in 2016.

Lafuente B. Bristow T. Stone N. Pires A. Keller R. M. et al.

POSTER LOCATION #106

[Data Sharing in Astrobiology: The Astrobiology Habitable Environments Database \(AHED\)](#) [#2943]

AHED is a central, high-quality, long-term data repository to store, manage, and share information pertinent to the advancement of the field of Astrobiology.

Berliner A. J. McKay C. P.

POSTER LOCATION #107

[The Terraforming Timeline](#) [#1032]

We propose the following abstract on a martian terraforming timeline as a guide to shaping a roadmap of terraforming-related planetary science.