

Friday, April 28, 2017

NEW TECHNOLOGIES AND TECHNIQUES: LIFE DETECTION:
LIFE DETECTION LESSONS FROM ANALOGUE ENVIRONMENTS ON EARTH I
11:15 a.m. Palo Verde

Chairs: Jacqueline Goordial
Magdalena Osburn

- 11:15 a.m. Murray A. E. * Shen Y. Gimpel C. Benner R.
[*Microbes and the Molecular Signatures They Leave: Signs of Life from Our Own Ocean World*](#) [#3691]
Polar and deep ocean microbial and organic carbon biosignatures are used to establish benchmarks for detecting signs of life in outer solar system ocean worlds.
- 11:30 a.m. Whyte L. G. * Goordial J. Raymond-Bouchard I. Lamarche-Gagnon G. Davila A. McKay C.
[*Terrestrial Cryoenvironments as Mars, Europa, and Enceladus Analogues*](#) [#3738]
This presentation focuses on the cold temperature limits of life in cryoenvironments as analogues for informing the search for life on Mars and the icy moons.
- 11:45 a.m. Burkert A. * Mahendrarajah T. Mackelprang R.
[*Identifying Changes in the Active, Dead, and Dormant Microbial Community Structures Across a Chronosequence of Ancient Alaskan Permafrost*](#) [#3034]
Understanding how life adapts to extreme conditions in terrestrial permafrost could provide clues to survival strategies for life on other planetary bodies.
- 12:00 p.m. Chou L. * Kenig F. Jackson W. A.
[*Removing Perchlorate from the Brine of Lake Vida \(Antarctica\) for Volatile Organic Matter Analysis in a Mars Analog*](#) [#3604]
A strong base anion exchange resin was used to remove perchlorate from a Mars brine analog in order to facilitate organic matter detection and quantification.
- 12:15 p.m. *Lunch*