

Tuesday, April 27, 2010
RESULTS FROM ASTEP AND OTHER ASTROBIOLOGY FIELD CAMPAIGNS II
10:30 a.m. Crystal Salon A

This session will provide a forum for NASA ASTEP-funded projects as well as other astrobiology field campaigns to present their science results and major discoveries.

Chairs: Peter Doran
Pamela Conrad

- 10:30 a.m. German C. R. * Bowen A. D. Coleman M. L. Connelly D. P. Honig D. Huber J. Jakuba M. V. Kinsey J. C. Kurz M. D. McDermott J. Nakamura K. Sands C. M. Seewald J. S. Smith J. Sylva S. Van Dover C. L. Whitcomb L. Yoerger D. R.
[*Oases for Life and Pre-Biotic Chemistry: Hydrothermal Exploration of the Mid-Cayman Rise*](#) [#5276]
 The Mid-Cayman Rise, an isolated deep mid-ocean ridge, hosts all 3 known submarine vent-types AND the deepest vents known, making it an ideal natural laboratory for continuing studies of astrobiology, evolutionary biology and the origins of life.
- 10:45 a.m. Takai K. * Miyazaki J. Morono Y. Inagaki F. Kubota K. Moyer C. Seewald J. Wheat G.
[*Exploration of the Most Alkaline Extreme in a Deep-Sea Serpentine Seamount, the South Chamorro Seamount as an Interface Between Abiotic and Biotic in this Planet*](#) [#5242]
 The most alkaline-extreme environment beneath the Mariana Forearc serpentine seamount was geochemically and microbiologically explored. The results suggested that the environment was a marginal between abiotic and biotic terrains in this planet.
- 11:00 a.m. Binsted K. A. *
[*Augmented Shared Reality Tools for Collaborative Science on a Planetary Exploration Analogue Mission*](#) [#5652]
 An astronaut with field-geology tasks must collaborate with Earth-bound scientists, via an augmented reality system. We are investigating this scenario via an analogue mission in Hawaii, and will present the results.
- 11:15 a.m. Steele A. * Amundsen H. E. F. Conrad P. G. Benning L. AMASE 09 Team
[*Arctic Mars Analogue Svalbard Expedition \(AMASE\) 2009*](#) [#5674]
 The Arctic Mars Analogue Svalbard Expeditions (AMASE) 2009 was the latest of a series of expeditions that are NASA and ESA funded and have as their primary goals.
- 11:30 a.m. Blake D. F. * Amundsen H. E. F. Benning L. Bish D. Conrad P. Fogel M. Midtkandal I. Ming D. Steele A. Treiman A. H. AMASE Team
[*Carbonate Cements from the Sverrefjell and Sigurd fjell Volcanoes, Svalbard Norway; Terrestrial Analogs for Martian Carbonates?*](#) [#5119]
 Carbonate localities on the Sverrefjell and Sigurd fjell volcanoes, Svalbard Norway, present themselves as compelling analog sites for the study of geologically ancient carbonate-precipitating hydrothermal systems (should they exist) on Mars.
- 11:45 a.m. Mahaffy P. R. * Stern J. C. Franz H. B. Stalport F. Eigenbrode J. Blake D. F. Conrad P. Steele A. McAdam A. C.
[*Field and Laboratory Studies of Samples from the Bockfjord Volcanic Complex in the 2009 Arctic Mars Analog Svalbard Expedition*](#) [#5306]
 Evolved gas analyses similar to those planned for the MSL SAM instrument suite conducted during the 2009 Arctic Svalbard Mars Analog campaign are described with a focus on carbonate data and comparison with detailed mineralogy studies.

- 12:00 p.m. Foing B. H. * Stoker C. Zhavaleta J. Ehrenfreund P. Quinn R. Blake D. Martins Z. Sephton M. Becker L. Orzechowska G. van Sluis C. Boche-Sauban L. Gross C. Thiel C. Wendt L. Sarrazin P. Mahapatra P. Direito S. Roling W. Eurogeomars MDRS Team
[*Eurogeomars Field Campaign: Sample Analysis of Organic Matter and Minerals*](#) [#5656]
A strategic search for life on Mars requires a thorough interdisciplinary preparation phase that include the optimization of sample analysis techniques, instrument development and calibration and extensive terrestrial field test at Mars analog sites.
- 12:15 p.m. Dueck S. L. * Zachary S. Michael D. Parenteau M. Kubo M. Jahnke L. L. Scalice D. Des Marais D. J.
[*Astrobiology Student Intern Program at Lassen Volcanic National Park*](#) [#5434]
The NASA Astrobiology Institute (NAI) Ames Team has partnered with Lassen Volcanic National Park and Red Bluff High School to engage high school students in the collection of scientific data for NASA astrobiologists and the National Park Service.
- 12:30 p.m. LUNCH