

Thursday, March 22, 2018
POSTER SESSION II: FIELD WORK AND INSTRUMENT TESTING
FOR ANALOG PLANETARY SCIENCE
6:00 p.m. Town Center Exhibit Area

[R627]

- Marusiak A. G. Schmerr N. C. Weber R. C. DellaGiustina D. N. Bailey S. H. et al. **POSTER LOCATION #429**
[*SIOS in Alaska — Active Source Comparative Test for an Europa Lander Seismometer*](#) [#2478]
 Alaskan array / Active source seismology / Waves moving through ice.
- Meng X. Xu Y. Xiao L. Liu B. Gou S. et al. **POSTER LOCATION #430**
[*Ground Penetrating Radar Measurement of Lacustrine Sediments in the Qaidam Basin, NW China*](#) [#1379]
 Qaidam Basin is a suitable analogue site of Mars. We used GPR to measure the subsurface structure of playas (dry salty lakes) at several sites in the basin.
- Phillips M. S. Moersch J. E. Cabrol N. A. Davila A. F. **POSTER LOCATION #431**
[*Thresholds of Detection and Identification of Halite Nodule Habitats in the Atacama Desert Using Remote Imaging*](#) [#1289]
 Remote imaging / Of halite habitats in / Dry Atacama.
- Nefian A. V. Rogg A. To V. Wong U. Blanck J. **POSTER LOCATION #432**
[*Automatic Mapping and Localization Within Lava Tubes*](#) [#2396]
 This paper presents a fully automatic mapping and rover localization method for planetary sub-surface missions in lava tubes.
- Blank J. G. Battazzo S. J. Bieler B. B. Cohen T. E. Colaprete A. et al. **POSTER LOCATION #433**
[*BRAILLE Field Campaign I: Astrobiology Instrument Testing and Science Sampling at Lava Beds National Monument \(N. CA, USA\)*](#) [#3005]
 We introduce the BRAILLE project and discuss results from our first field season at Lava Beds National Monument, N. CA, USA.
- Garry W. B. Ames T. J. Brandt M. A. Slocum S. Grubb T. G. et al. **POSTER LOCATION #434**
[*Virtual Analog Environments: Exploring Lidar Data in Virtual Reality*](#) [#2424]
 We created a virtual reality environment of the Indian Tunnel lava tube (Idaho) using lidar data imported into Unity game software.
- Glass B. Parro V. Bergman D. Wang A. Stucky T. et al. **POSTER LOCATION #435**
[*Life-Detection Mars Analog Testing at Rio Tinto*](#) [#2927]
 The LMAP lander demonstrated fully robotic and intelligent drilling, sample transfer, and *in-situ* onboard biomarker analysis at the Rio Tinto analog site.
- Lillo A. Foing B. H. Van Der Sanden G. Dubois L. Clavé E. et al. **POSTER LOCATION #436**
[*Improvements and Telecontrol of the Exogeolab Lander in Analogue Environments*](#) [#1242]
 The ExoGeoLab Lander is a small class prototype deployed at LunAres analogue station to investigate cooperation between telerobotics and astronauts' EVAs.
- Lee H. Lee J. Shin H. **POSTER LOCATION #437**
[*A Reverse-Tripod-Multi-Actuator Type Planetary Drilling System for Detecting Lunar Icy-Soil Deposits*](#) [#2270]
 This paper presents the conceptual design of a reliability drilling equipment and evaluates ground strength in depth to detect icy-soil deposits.
- Zacny K. Rehnmark F. Cervantes W. Kim D. Wei B. et al. **POSTER LOCATION #438**
[*Approach for Acquisition of Rock Cores in the Field*](#) [#1310]
 We present custom coring system for acquisition of cores in the field. The tool is ideal for scientists who want to capture core samples.

Zacny K. Costa T. Rehnmark F. Mueller J. Cwik T. et al. **POSTER LOCATION #439**
[SLUSH: Search for Life Using Submersible Heated Drill](#) [#1312]

We present a deep drilling probe for penetrating Europa ice and reaching subglacial ocean.

John K. K. Saucedo V. L. Fisher K. R. Fries M. D. Dove A. R. et al. **POSTER LOCATION #440**
[Hermes Microgravity Research Facility on the ISS](#) [#1790]

Hermes delivers / Microgravity science / To users like you.

Anderson R. C. Peters G. Meirion-Griffith G. **POSTER LOCATION #441**
[Measuring the Shear Stress of In-situ Soils on Planetary Surfaces](#) [#2670]

Understanding the properties of a planetary soil is limited without geotechnical information. Here we demonstrate a new miniaturized vane shear stress tester.

Yingst R. A. Bartley J. Chidsey T. Jr. Cohen B. A. Hynek B. M. et al. **POSTER LOCATION #442**
[Is a Linear or a Walkabout Protocol More Efficient for Robotic Sample Selection in a Small Region of Interest?](#) [#1173]

Is a walkabout protocol more efficient than a linear one for robotic sample selection in a small region of interest?
In short, yes.

Toda R. Ma R. Scott V. Fraeman A. Moreland S. et al. **POSTER LOCATION #443**
[Development of "Tactile" Wheel for Rover Mobility, Survey, and Science](#) [#1690]

"Tactile" rover wheel is developed to demonstrate sensor integration enabling spatially resolved ground pressure and regolith moisture sensing capabilities.