

Thursday, March 22, 2018
POSTER SESSION II: TOPICS IN ADVANCED CURATION
6:00 p.m. Town Center Exhibit Area

[R607]

Harrington A. D. Zeigler R. A. McCubbin F. M. **POSTER LOCATION #124**
[*The Need for Medical Geology in Space Exploration — Implications for the Journey to Mars and Beyond*](#) [#2465]
 Harmful martian dust / Medical geology / Bridges knowledge gaps.

Harrington A. D. Calaway M. J. Regberg A. B. Mitchell J. L.
 Fries M. D. et al. **POSTER LOCATION #125**
[*The Importance of Contamination Knowledge in Curation — Insights into Mars Sample Return*](#) [#2599]
 Contamination / Knowledge is a key baseline / For returned samples.

Hutzler A. Meneghin A. Aléon J. Berthoud L. Brucato J. R. et al. **POSTER LOCATION #126**
[*EURO-CARES — How to Advance European Efforts to Have a Curation Facility for Unrestricted and/or Restricted Samples from Sample Return Missions*](#) [#2787]
 Major recommendations from the EURO-CARES project are presented, in an effort to pave the road for a new generation of curation facilities.

Smith C. L. Gill S.-J. Manick K. Miller C. G. Jones C. et al. **POSTER LOCATION #127**
[*The European Space Agency Exploration Sample Analogue Collection \(ESA²C\) and Curation Facility — Present and Future*](#) [#1623]
 Update, mission statement, and vision from NHM London for the European Space Agency Exploration Sample Analogue Collection and Curation Facility (ESA²C).

Welzenbach L. C. Bell M. S. Fries M. D. Grady M. M.
 Gruener J. E. et al. **POSTER LOCATION #128**
[*Mars 2020 Cache Curation Protocol: Developing a Mars Regolith Analogue*](#) [#2605]
 Pick Mars regolith / Does it matter where we go? / Magic mixing starts.

Fries M. D. Fries W. D. McCubbin F. M. Zeigler R. A. **POSTER LOCATION #129**
[*The Opera Instrument: An Advanced Curation Development for Mars Sample Return Organic Contamination Monitoring*](#) [#2276]
 CC and CK / Must be there for good science / We will meet the need.

Returned Sample Science Board Beaty D. W. McSween H. Y. Carrier B. L.
 Czaja A. D. et al. **POSTER LOCATION #130**
[*Analysis of the Scientific Value of the Mars 2020 Spacecraft Genetic Inventory to Mars Sample Return*](#) [#1202]
 An archive of spacecraft-sourced swab/wipe samples is required as a part of the scientific logic of MSR in order to assess potential terrestrial contamination.

Pace L. F. Righter K. Nakamura-Messenger K. McQuillan J. **POSTER LOCATION #131**
[*OSIRIS-REx and Hayabusa2 Sample Cleanroom Design and Construction Planning at NASA-JSC*](#) [#2507]
 NASA will curate asteroid samples returned by the OSIRIS-REx and Hayabusa2 (JAXA) missions and here we outline our current plans for sample cleanrooms.

Snead C. J. McCubbin F. M. Nakamura-Messenger K. Righter K. **POSTER LOCATION #132**
[*Advances in Small Particle Handling of Astromaterials in Preparation for OSIRIS-REx and Hayabusa2: Initial Developments*](#) [#2426]
 We report initial developments in astromaterials small particle handling, in preparation for samples returned by OSIRIS-REx and Hayabusa2.

Snead C. J. Jang J. H. Cowden T. R. McCubbin F. M. **POSTER LOCATION #133**
[*Investigating Astromaterials Curation Applications for Dexterous Robotic Arms*](#) [#2572]
 We investigate the use of 4-axis commercial and 3D-printed robot arms for use in astromaterials applications.

Mitchell J. L. Fries M. D. Zeigler R. A. McCubbin F. M. *POSTER LOCATION #134*
[*New Challenges in the Curation of Cold, Volatile-Rich Extraterrestrial Samples*](#) [#1019]
Cold, ice-rich samples / Brought from comets and the Moon / Must be stored long-term.

Bell M. S. Regberg A. B. Rucker M. Hood A. Walker M. *POSTER LOCATION #135*
[*Human Forward Contamination Assessment: Just How Leaky are Space Suits and What Do They Leak?*](#) [#2285]
A team at NASA/JSC has developed a prototype tool designed to sample space suits to determine the present day microbial load and eventually the rate of leakage.

Abe M. Yada T. Okada T. Sakamoto K. Yoshitake M. et al. *POSTER LOCATION #136*
[*Curation Facility for Asteroid Sample Return Mission in Japan*](#) [#1211]
We report current status of curation facility for asteroid sample return mission in Japan.