

Thursday, April 27, 2017

**NEW TECHNOLOGIES AND TECHNIQUES: OTHER TECHNOLOGIES AND TECHNIQUES:  
STABLE ISOTOPE TECHNIQUES  
10:15 a.m. Arizona Ballroom A-C**

**Chairs:** **Nancy Merino**  
**Mayuko Nakagawa**

- 10:15 a.m. Sherwood Lollar B. \* Li L. Wing B. A. Warr O. Ballentine C. J. Giunta T. McDermott J. M. M. Lollar G. S. Telling J.  
[Novel Isotopic Discoveries on the Biogeochemistry of the Deep Earth and the Habitability of Planetary Subsurface Environments](#) [#3118]  
Novel isotopic discoveries on the biogeochemistry of the deep Earth and the habitability of planetary subsurface environments.
- 10:30 a.m. Zheng X.-Y. \* Beard B. L. Reddy T. R. Roden E. E. Johnson C. M.  
[Tracing Biological and Abiological Processes in the Early Earth Using Silicon Isotopes](#) [#3211]  
We present experimental results that constrain Si isotope exchange kinetics and fractionations in systems pertinent to the Precambrian ocean.
- 10:45 a.m. Nakagawa M. Alexis G. Julien M. Yamada K. Yoshida N.  
[Relative Contributions Estimation of Metabolic Processes in Microbial Ecosystems Using Multiple Isotopic Analysis](#) [#3742]  
In order to understand microbial activities, we investigate compound-specific and position-specific isotopic signatures of microbial ecosystems.
- 11:00 a.m. Naraoka H. \*  
[Organic Compound Distribution in Asteroidal Materials Revealed by Ultrahigh-Resolution Mass Spectrometry](#) [#3269]  
The development of ultrahigh-resolution mass spectral analysis will allow for the improved identification of asteroidal organic compounds.