

Wednesday, April 26, 2017
POSTER SESSION III:
SOLAR SYSTEM SITES: ICE AND OCEAN WORLDS:
BIOCHEMICAL STRATEGIES FOR SEARCHING
FOR SIGNS OF LIFE ON AND WITHIN OCEAN WORLDS
7:00 p.m. Main Hall

Theiling B. P. Tan X.

[Stable Isotope Biogeochemistry in Laboratory Simulations of Europa](#) [#3650]

This study employs stable isotopes in laboratory simulations of Europa to evaluate the potential for detection of isotopic biosignatures.

Duca Z. Tan G. Cantrell T. Van Enige M. Dorn M. Cato M. Speller N. Pital A.
Mathies R. Stockton A.

[Operation of Pneumatically-Actuated Membrane-Based Microdevices Designed for In Situ Analysis of Extraterrestrial Organic Molecules After Prolonged Storage and Upside Down](#) [#3617]

Pneumatically-actuated membrane-based microdevices for in situ analysis of extraterrestrial organic molecules were operated upside down after prolonged storage.

Neish C. D. Lorenz R. D. Turtle E. P. Barnes J. W. Trainer M. G. Kirk R. Stiles B. Hibbitts C. A.

[Strategies for Detecting Biological Molecules on Titan](#) [#3081]

Amino acids / Hiding in Titan's craters / Let's go collect them!

Blake D. F. Thompson K. Sarrazin P. Bristow T. Hoehler T. Quinn R.

[The Importance of Particle Induced X-Ray Emission \(PIXE\) Analysis and Imaging to the Search for Life on Ocean Worlds](#) [#3074]

Monte Carlo modeling shows that 244-Cm sources are optimal for XRF fluorescence and detection of the biogenic elements C, N, O, P, S in an icy water matrix.