

Thursday, March 22, 2018

[R624]

**POSTER SESSION II: ASTROBIOLOGY V:
BIG PICTURE, ORIGIN OF LIFE, PREBIOTIC CHEMISTRY
6:00 p.m. Town Center Exhibit Area**

Cabrol N. A. Diamond W. H. Bishop J. Cady S. L. Fenton L. et al. **POSTER LOCATION #401**
[Advancing Astrobiology Through Public/Private Partnership: The FDL Model](#) [#1275]

Astrobiology requires to synergistically analyze vast amounts of data, creating an opportunity for AI to accelerate understanding and discoveries.

Neveu M. Hays L. E. Voytek M. A. Schulte M. D. New M. H. **POSTER LOCATION #402**
[The Ladder of Life Detection](#) [#1162]

To find life out there / The ladder may be our guide / Tell us what you think.

Ranjan S. Wordsworth R. D. Sasselov D. D. **POSTER LOCATION #403**
[The Surface UV Environment on Planets Orbiting M-Dwarfs: Implications for Origins-of-Life Chemistry and Need for Experimental Follow-Up](#) [#2021]

Temperate M-dwarf planets have low surface UV. This may pose a challenge for the origin of life on these worlds, though flares may help. Experiments are needed.

Cooper G. Rios A. C. **POSTER LOCATION #404**
[Enantiomer Excesses in Meteoritic Organic Compounds: A Role for Radiation-Magnetism?](#) [#2726]

Did formaldehyde chemistry, under the influence of radiation/magnetism, lead to enantiomer excesses of organic compounds in carbonaceous chondrites?

Ugelow M. S. Berry J. L. Browne E. C. Tolbert M. A. **POSTER LOCATION #405**
[Impact of Molecular Oxygen on Ion Chemistry and Archean Earth Haze](#) [#1580]

Similar to what is observed in Titan's atmosphere, it is likely that ions played an important role in the formation of an Archean Earth haze.

Lewis E. K. Burton A. S. **POSTER LOCATION #406**
[Re-Evaluating the Plausibility of the Strecker Cyanohydrin Formation Pathway for Hydroxy Acids in Meteorites](#) [#2464]

The Strecker cyanohydrin formation pathway for hydroxy acids in meteorites is investigated experimentally by searching for key reaction intermediates with GCMS.

Nuevo M. Sandford S. A. Cooper G. **POSTER LOCATION #407**
[Sugars and Their Derivatives in Residues Produced from the UV Irradiation of Astrophysical Ice Analogs](#) [#2434]

Laboratory experiments show that UV irradiation of astrophysical ice analogs forms sugars, sugar alcohols, sugar acids, and other sugar derivatives.