Thursday, April 27, 2017
SOLAR SYSTEM SITES: ICE AND OCEAN WORLDS:
CREATIVE DESTRUCTION? THE SURVIVAL AND FATE OF MICROBES AND MOLECULES AT THE NEAR-SURFACE OF ICY WORLDS
11:15 a.m. Arizona Ballroom A-C

Chairs: **Bryana Henderson**
Aaron Noell

11:15 a.m. Loeffler M. J. * Hudson R. L. Yocum K. M.
The Possible Origin of Propylene Oxide, a Chiral Interstellar Molecule **[#3544]**
Here we present results that show radiolysis of relevant interstellar ice analogs can produce propylene oxide at 10 K.

11:30 a.m. Abou Mrad N. * Duvernay F. Isnard R. Chiavassa T. Danger G.
The Gas Phase as a Probe of the Chemistry of Astrophysical Ice Analogs **[#3139]**
The gaseous phase monitoring of ice analogs that underwent VUV irradiation and warming allows determining solid ice composition and chemical mechanisms.

11:45 a.m. Lindensmith C. A. * Bedrossian M. Rider S. McKinney S. Nadeau J. L.
Bacterial Concentration in Bubbles Bursting Under Vacuum **[#3215]**
We built a system for measuring bacterial concentrations in jet drops from bubbles bursting under vacuum, and tested it with three different species.

12:00 p.m. Noell A. C. * Hodyss R. Johnson P. V. Hein J. D. Ponce A.
Investigating the Viability of Bacterial Spores Under Near-Surface Conditions of Icy Worlds **[#3525]**
Laboratory experiments investigate whether life and/or its biosignatures could survive in potentially mission accessible, near-surface regions of icy worlds.

12:15 p.m. *Lunch*