

**Monday, July 17, 2017**  
**METEORITES, COMETS AND THE FATE OF THEIR ORGANIC MATTER I**  
**2:00 p.m. Price Center Theatre**

**Chair: Hiroshi Naraoka**

- 2:00p.m. Bredehöft J. H. \* Schmidt F. Goesmann F.  
[\*The Organics on the Nucleus of 67P/C-G and How They Might have Gotten There\*](#) [#4091]  
 The COSAC instrument aboard Rosetta mission lander Philae identified a suite of 16 small organic molecules on the nucleus of comet 67P/Churyumov-Gerasimenko. Laboratory studies show a complex inter-relation between these and possibly other compounds.
- 2:20 p.m. Cottin H. \* Altwegg K. Baklouti D. Bardyn A. Briois C. Engrand C. Fray N. Le Roy L. Modica P. Raulin F. Schulz R. Siljestrom S. Thirkell L. Isnard R.  
[\*Comets and Astrobiology. \(Re\)Assessment for Comet 67P After Rosetta\*](#) [#4082]  
 The form in which carbon has been delivered to the early Earth by comets, and implications for the origin of life, will be discussed with regard to the new inventory of organic matter detected by Rosetta instruments in comet 67P.
- 2:40 p.m. Yabuta H. \* Noguchi T. Itoh S. Nakamura T. Okazaki R. Tachibana S. Terada K. Ebihara M. Nagahara H.  
[\*Coevolution of Organic and Inorganic Compounds in the Early Solar System Revealed from Antarctic Micrometeorites\*](#) [#4216]  
 We investigated Antarctic micrometeorites and revealed that the precursor compositions of meteoritic organics prior to parent body aqueous alteration were enriched in carboxyls, aliphatic carbon, and nitriles or pyrimidines.
- 3:00 p.m. Martins Z. \* Modica P. Zanda B. d'Hendecourt L.  
[\*The Degree of Aqueous Alteration of Carbonaceous Chondrites and its Influence on the Soluble Organic Content\*](#) [#4114]  
 The degree of aqueous alteration on the parent body of CM chondrites appears to have influenced the distribution and relative abundance of their soluble organic compounds.
- 3:20 p.m. Kebukawa Y. \* Chan Q. H. S. Misawa S. Matsukuma J. Tachibana S. Kobayashi K. Zolensky M. E.  
[\*Synthesis of Amino Acid Precursors with Organic Solids in Planetesimals with Liquid Water\*](#) [#4062]  
 We demonstrated synthesis of a complex suite of amino acids simultaneously with IOM via hydrothermal experiments starting from formaldehyde, glycolaldehyde and ammonia, simulating the aqueous processing in the planetesimals.
- 3:40 p.m. *Coffee Break*