

Friday, March 16, 2007
ORGANICS IN CHONDRITES
3:00 p.m. Crystal Ballroom B

Chairs: L. A. J. Garvie
 S. Pizzarello

- 3:00 p.m. Garvie L. A. J. *
Using Electron Energy-Loss Spectroscopy to Reveal the Bonding of Carbon in Clay from Primitive Meteorites [#1907]
 EELS shows abundant C in clays from Ivuna, Orgueil, and Tagish Lake meteorites. This C is present as aromatic, aliphatic, carboxylic acid, and carbonate.
- 3:15 p.m. Kebukawa Y. * Ishikawa M. Nakashima S. Nakamura T. Zolensky M. E.
Infrared Microspectroscopic Mapping of Organic Matter in Tagish Lake Meteorite for Studying Organic Evolution During Aqueous Alteration [#1450]
 Mapping analyses of Tagish Lake meteorite were conducted using FTIR and SEM-EDS together with XRD. Three organic rich positions were recognized with different organic and mineral compositions.
- 3:30 p.m. Pizzarello S. * Garvie L. A. J.
The Organic Composition of a CR2 Chondrite: Differences and Similarities with the Mighei-type Meteorites [#1393]
 The GRA 95229 (CR2) meteorite contains a large amount of amino acids, whose molecular distribution, relative abundances, and chiral asymmetry differ from those seen in CMs.
- 3:45 p.m. Pearson V. K. Morgan G. H. Turner D. Perronnet M. Gilmour I. *
Identification of Trace Organic Components in the CR Chondrites by 4D TOFMS [#1833]
 This paper reports preliminary results of a 4D TOFMS study of CR chondrite organic material, highlighting the low-level organic species that may further reveal the complexity of parent body modification of interstellar precursors.
- 4:00 p.m. Greenwood R. C. Pearson V. K. Verchovsky A. B. Johnson D. Franchi I. A. * Roaldset E. Raade G. Bartoschewitz R.
The Moss (CO3) Meteorite: An Integrated Isotopic, Organic and Mineralogical Study [#2267]
 The recent Moss meteorite fall presents a unique opportunity to investigate the processes that operated on the CO3 parent body. The results of an integrated study indicate that alteration on the CO3 asteroid was more complex than previously envisaged.
- 4:15 p.m. Delpoux O. * Gourier D. Vezin H. Binet L. Derenne S. Robert F.
Evidence for Extreme Deuterium Enrichment in Radicals of the Insoluble Organic Matter of Orgueil by Pulsed Electron Paramagnetic Resonance [#1138]
 Electron paramagnetic resonance of the insoluble organic matter of Orgueil shows that radical moieties are characterized by a very high deuterium content (D/H>1%), much larger than the average bulk value D/H=0.035%.