Thursday, March 15, 2007
POSTER SESSION II: INTERPLANETARY DUST
6:30 p.m. Fitness Center

Kimura Y. Saito M. Sakon I. Kaito C.
Laboratory Study on the Formation of PAH Clusters and Their UV Irradiation Effects Using Anthracene **[#1511]**
In order to elucidate the correlation between the plateau at 12 μm with UIR bands and the size of PAH clusters, anthracene clusters with various sizes were produced and measured their IR spectra. Radiation effect of UV is also presented.

Taylor S. Matrajt G. Lever J. H. Brownlee D. E. Joswiak D.
Types of Micrometeorites Accreting at the South Pole, Antarctica **[#2168]**
We have identified and mounted 3272 melted and unmelted micrometeorites from the South Pole water well. Here we describe the distribution of micrometeorite types found in the 2000 collection.

Engrand C. Duprat J. Maurette M. Gounelle M.
Fe-Ni Sulfides in Concordia Antarctic Micrometeorites **[#1668]**
We present the characterization of Fe-Ni sulfides in Concordia Antarctic micrometeorites. The sulfide population is dominated by troilite which is believed to be the first sulfur containing mineral to have formed in the solar nebula.

Davidson J. Genge M. J. Mills A. A. Johnson D. J. Grady M. M.
Ancient Cosmic Dust from Triassic Halite **[#1545]**
We describe the discovery of fossil micrometeorites in ancient Triassic rock salt; the first to be found in salt and the oldest complete micrometeorites found to date. We present an estimated flux rate of micrometeorites to Earth at this time.

Kehm K.
Predicted Abundances of Cosmogenic Noble Gases in Interplanetary Dust Particles from Different Parent Objects **[#2376]**
A numerical model is developed to test the idea that interplanetary dust particles from different parent objects can be distinguished based on the abundances of cosmogenic noble gases accumulated during transit from the parent object to the Earth.

Keller L. P. Christoffersen R.
Irradiation Effects in Forsterite and the Nature of Interstellar Grains: A Coordinated Infrared Spectroscopy and Electron Microscopy Study **[#1995]**
Heavy ion irradiation of forsterite destroys crystalline order as measured by electron diffraction, but residual crystalline order is detected by infrared spectroscopy. Implications for interstellar grains and ISM processing are discussed.

Jadhav M. Amari S. Marhas K. K. Zinner E. Maruoka T. Gallino R.
Ca and Ti Isotopic Ratios in High-Density Graphite Grains from Orgueil **[#2256]**
We report isotopic analyses (C, N, O, Si, Al-Mg, K, Ca, and Ti) for 44 new high-density graphite grains from Orgueil. Several grains have large Ca and Ti anomalies that indicate a supernova origin. Some grains with extreme Ca and Ti anomalies were also found to be enriched in ^{13}C.

King A. Henkel T. Lyon I.
Detailed Depth-Profiling of Presolar SiC Grains **[#2145]**
We are undertaking comprehensive, all-element analyses of presolar SiC grains by high resolution TOFSIMS depth profiling. This abstract looks at some experimental artifacts that limit the resolution and accuracy of data that can be obtained.