Thursday, March 15, 2001
POSTER SESSION II
7:00–9:30 p.m.   UHCL

Carbonaceous Chondrites

Brearley A. J.   Abreu N. M.
In Situ Observation of Carbonaceous Material in the Matrices of CV and CM Carbonaceous Chondrites: Preliminary Results from Energy Filtered Transmission Electron Microscopy [#1461]
Energy filtered transmission electron microscopy shows that organic matter can be detected in situ in the matrices of carbonaceous chondrites at a spatial resolution of at least 1 nm. In CM chondrites, carbon is often associated with sulfide particles.

Chizmadia L. J.   Brearley A. J.
Petrographic Studies of Fine-grained Rims in the Yamato 791198 cm Carbonaceous Chondrite and Comparison to Murchison and ALH81002 [#1906]
Fine-grained rims in Y791198 (CM2) have been studied in detail using SEM and EPMA techniques. In comparison with the more highly altered CM chondrite, ALH 81002, the rims are texturally and compositionally more heterogeneous.

Romstedt J.   Jäckel A.
Micro-Magnetic Properties of Selected Mineral Grains in Primitive Meteorites [#1687]
Optically opaque phases from the CV Chondrite Vigarano were investigated by magnetic force microscopy. The detection limit of small magnetic grains is below 200 nm. Different signal strengths could be detected for various mineral groups.

Hoffman E.   Housley R. M.   Bland P. A.   Seifu D.   Oliver F. W.
Fe-rich Pentlandite in Allende Bulk Samples and Separates: Mössbauer Spectroscopic Analysis [#2116]
Allende separates contain pentlandite of unusually high Fe:Ni ratio. Mössbauer spectra show clear evidence of this phase.

Saylor J.   Zolensky M. E.   Bodnar R. J.   Le L.   Schwandt C.
Fluid Inclusions in Carbonaceous Chondrites [#1875]
Fluid inclusions are present in carbonaceous chondrites. Of the chondrites studied (CI1, CM1and2, CV3) fluid inclusions were found only in CM2s and CI1s, and by extrapolation are most likely to be found there in the future.

Botta O.   Glavin D. P.   Kminek G.   Bada J. L.
Classification of Carbonaceous Meteorites Through Amino Acid Signatures? [#1245]
An overview of the amino acid composition of all carbonaceous chondrites analyzed in our lab will be presented, including the CMs Murchison, Murray, Nogoya, the CIs Orgueil and Ivuna, the CR Renazzo and the CV3 Allende.

Petaev M. I.   Ivanova M. A.   Nazarov M. A.   Wood J. A.
Al-rich Clinopyroxenes in the CH Chondrite NWA 470: Condensates from Fractionated Nebular Systems [#1445]
Clinopyroxenes with very different Al₂O₃ contents coexist in two CAIs and a euhedral pyroxene grain of the CH chondrite NWA 470. These clinopyroxenes apparently formed by condensation from fractionated nebular systems.