Tuesday, March 15, 2005
POSTER SESSION I: NAKHLITES AND CHASSIGNITES:
NEW ARRIVALS AND FAMILIAR FRIENDS
7:00 p.m. Fitness Center

McBride K. M. Righter K. Satterwhite C. E. Schwarz C. Robinson P.
Curation and Allocation of the New Antarctic Nakhlite, MIL03346 **[#1499]**
We will provide a full summary of the curation and allocation of the new Antarctic nakhlite, MIL03346, which was discovered in 2003 in the Miller Range of the Transantarctic Mountains.

Kinman W. S. Neal C. R.
Petrology of Nakhlite MIL 03346 **[#1660]**
We will present mineralogical and whole-rock elemental data for new nakhlite MIL-03346.

Anand M. Williams C. T. Russell S. S. Jones G. James S. Grady M. M.
Petrology and Geochemistry of Nakhlite MIL 03346: A New Martian Meteorite from Antarctica **[#1639]**
MIL 03346 is the first nakhlite in the US Antarctic collection. We have performed detailed mineralogical and bulk-geochemical investigations to compare petrogenesis of this Martian meteorite with other nakhlites.

Dyar M. D. Pieters C. M. Hiroi T. Lane M. D. Marchand G. J.
Integrated Spectroscopic Studies of MIL03346 **[#1261]**
Mossbauer, thermal emittance, mid-IR, near-IR, and visible region spectra are reported for whole rock and cpx separate of MIL03346. Results confirm the absence of olivine, and suggest that MIL03346 is the most oxidized of all SNCs studied by us to date.

Beck P. Barrat J.-A. Gillet P. Franchi I. A. Greenwood R. C. Van de Moortele B. Reynard B. Bohn M. Cotten J.
The Diderot Meteorite: The Second Chassignite **[#1326]**
The Diderot meteorite is a dunite discovered in Sahara. The martian origin is unambiguous and Diderot shares strong petrographical similarities with Chassigny.

Terada K. Sano Y.
U-Pb Systematics of Phosphates in Nakhlites **[#1178]**
U-Pb systematics of phosphate grains from Martian meteorites, Lafayette and Yamato-000593/000749, were measured using an ion microprobe.

Garrison D. H. Bogard D. D.
Ar-Ar Ages of Nakhlites Y000593, NWA998, and Nakhla and CRE Ages of NWA998 **[#1137]**
New Ar-Ar ages of nakhlites NWA-998, Y-000593, and Nakhla indicate a common formation time, a likely common Mars ejection time, and variable amounts of trapped Martian radiogenic ^{40}Ar.

Musselwhite D. S. Treiman A. H. Shearer C.
Light Lithophile Element Trends in Nakhlite NWA 817 Pyroxenes: Implications for Water on Mars **[#1230]**
Abundances of LLE are strongly zoned in augites of the NWA 817 nakhlite. Be and B increase to grain rims, consistent with their geochemical behavior as incompatible elements. Oddly, Li increases outward in some rims, but decreases in others.

Chevrier V. Lorand J. P.
Sulfide Mineralogy, Redox Conditions and Alteration Effects in Some SNC Meteorites **[#2067]**
Sulfides mineralogy and compositions have been studied in some SNC meteorites. Results show the presence of preterrestrial hydrothermal alteration, while compositions of unaltered sulfides are in accordance with published redox conditions of SNC's.