**Tuesday, March 16, 2004**
**POSTER SESSION I: MARTIAN METEORITES: CHEMICAL WEATHERING**
**7:00 p.m. Fitness Center**

Rao M. N. Wentworth S. J. McKay D. S.
*Chemical Weathering Records of Martian Soils Preserved in the Martian Meteorite EET79001* **[#1501]**
Some impact melt glasses in Martian meteorite ET79001 contain Martian soil which resembles Viking and Pathfinder soils. Mixed sulfates and sulfides occur in them.

Treiman A. H. Lanzirotti A. Xirouchakis D.
*Synchrotron X-Ray Diffraction Analysis of Meteorites in Thin Section: Preliminary Results* **[#1172]**
X-ray diffraction using a synchrotron light source is useful in study of meteorites in thin section. Examples given are: symplectite in Los Angeles, silica in Serra de Mage, and iddingsite in nakhlites (Martian).

Kuebler K. Jolliff B. L. Wang A. Haskin L. A.
*A Survey of Olivine Alteration Products Using Raman Spectroscopy* **[#1704]**
Recognition of mineral alteration products is key to interpreting past Martian environments. We analyzed two basalts and a nakhlite with aqueously altered olivine by Raman spectroscopy and EMPA. Comparisons are made with respect to alteration environments.

Brandon A. D. Nyquist L. E. Shih C.-Y. Wiesmann H.
*Rb-Sr and Sm-Nd Isotope Systematics of Shergottite NWA 856: Crystallization Age and Implications for Alteration of Hot Desert SNC Meteorites* **[#1931]**
NWA 856 is a hot desert martian shergottite. We obtain crystallization ages of 150 ± 32 and 186 ± 24 Ma, using Rb-Sr and Sm-Nd isotopic systematics, respectively. Terrestrial alteration is present for Rb-Sr, but not Sm-Nd.