Tuesday, March 18, 2003
POSTER SESSION I
7:00 p.m. Fitness Center

I'll Take Meteoritic Potpourri for $200, Please

Harvey R. P.
The Broken Belt: Meteorite Concentrations on Stranded Ice **[#1194]**
The horizontal movement of ice is a consistent feature of many accepted meteorite concentration mechanisms. Recent findings suggest, however, that iceflow is minimal at some important meteorite stranding sites, with massive deflation of stranded ice creating the concentration we see today.

Heck Ph. R. Baur H. Schmitz B. Wieler R.
Cosmic-ray Exposure Age of a 480 Myr Old Fossil Meteorite by Noble Gas Analyses of Relict Chromite Grains **[#1751]**
Cosmogenic He and Ne in chromites from a fossil meteorite in a marine limestone (480 Ma) were detected. He and Ne exposure ages agree at ~0.3 Myr, suggesting neglible loss of cosmogenic He and Ne.

Karner J. M. Sutton S. R. Papike J. J. Shearer C. K. Newville M.
Oxidation State of Vanadium in Glass and Olivine from Terrestrial and Martian Basalts: Implications for Oxygen Fugacity Estimates **[#1998]**
Preliminary results using XANES to determine the oxidation state of V, and thus oxygen fugacity of planetary basalts.

Meier A. Akridge D. G. Akridge J. M. C. Batchelor J. D. Benoit P. H. Brewer J. DeHart J. M. Keck B. D. Lu J. Schneider D. M. Sears D. W. G. Symes S. J. K. Zhang Y.
Cathodoluminescence Color Indices as a Parameter for Measuring Petrologic Changes in Meteorites **[#1037]**
Cathodoluminescence (CL) is the emission of light during exposure to an electron beam. Here, we discuss using the CL properties of meteorites to determine their petrologic type, with emphasis on CM, CO, ordinary and enstatite chondrites, and achondrites.

Smith D. L. Ernst R. E. Herd R.
Magnetic Susceptibility of Stony Meteorites from the National Meteorite Collection of Canada **[#1939]**
Using magnetic susceptiblity measurements to characterize stony meteorites from the National Meteorite Collection of Canada.

Mathew K. J. Marti K. Levskii L. K.
^{126}Xe Excesses: Monoisotopic Anomalies in Regolith Samples **[#1985]**
We present new Xe isotopic signatures of Pesyanoe regolith samples which document excesses of ^{126}Xe and we explore the possibility that it formed by low-energy reactions on transient Te-rich coatings.

Woodland S. J. Rehkämper M. Lee D-C. Halliday A. N.
High Precision Ag Isotopic Measurements of Low Pd/Ag Meteorites **[#1621]**
Ag isotopic compositions of different chondrite groups and the iron meteorite Canyon Diablo are the same within error as NISTSRM 978a. This has important implications regarding initial Ag compositions and element fractionation within the accretion disk.

Fehr M. A. Rehkämper M. Porcelli D. Halliday A. N.
Homogeneity of Tellurium Isotopes in Chondrites, Leachates of Allende and Canyon Diablo **[#1655]**
^{126}Sn decays to ^{126}Te with a half-life of 0.235 Myrs. Te isotopes were measured in ordinary chondrites, enstatite chondrites, iron meteorites and leachates of Allende by MC-ICPMS and were all within error identical to the JMC Te standard.

van Niekerk D.
Modal Analysis and Phase Identification in Meteorite Thin Sections Using "Freeware" for PC **[#2015]**
Modal analysis and phase identification in meteorite thin sections is demonstrated to be easily accessible to everyone through the use of free software. A technique developed at the University of Hawaii is applied to this program, and results of current and previous studies are compared.

Thompson C. K. Slater V. P. Stockstill K. R. Anand M. Nettles J. Milam K. Cahill J. Taylor L. A.
An Evaluation of the Igneous Crystallization Programs — MELTS, MAGPOX, and COMAGMAT Part 1: Does One Size Fit All? **[#1881]**
This is Part I of a study evaluating three models used to simulate magma crystallization (MELTS, MAGPOX, and COMAGMAT). No single program is a best fit for all melt compositions.