

Tuesday, March 14, 2000  
POSTER SESSION I  
7:00 p.m. UHCL

**Iron Meteorites**

Leya I. Wieler R. Herzog G. F.

*Helium and Neon in Canyon Diablo Spheroids* [#1480]

Relative to Canyon Diablo meteorites, six Canyon Diablo spheroids contain similar quantities of  $^4\text{He}$  ( $10^{-8} \text{ cm}^3\text{STP/g}$ ), ~50 to ~450, but much less  $^3\text{He}$ ,  $\leq 0.155$ , and  $^{21}\text{Ne}$   $\leq 0.01$  due primarily to gas loss by the spheroids when molten and secondarily, to shielding in space.

Ponganis K. V. Kohl C. P. Marti K.

*Nitrogen Sources in IAB/III CD Iron Meteorites and Their Implications* [#1412]

Nitrogen isotopic structures are reported in IAB/III CD irons. To explain the existence of multiple N sources, models of incomplete mixing of pre-accumulation signatures in several carriers and/or of diffusion-fractionated components are discussed.

Skála R. Drábek M.

*Variation of Unit-Cell Dimensions of Experimentally Synthesized Members of  $\text{Fe}_3\text{P-Ni}_3\text{P}$  Solid Solution* [#1564]

Several members of  $\text{Fe}_3\text{P-Ni}_3\text{P}$  solid solution were synthesized and characterized by unit-cell dimensions. Parameters vary with chemistry; the difference between unit cell parameters of end-members reaches up to 1.7% and for the cell volume up to 4.9%.