Thursday, March 26, 2009
POSTER SESSION II: ACHONDRITES: PRIMITIVE AND NOT SO PRIMITIVE
6:30 p.m. Town Center Exhibit Area

Nyquist L. E. Shih C.-Y. Reese Y. D.
Early Petrogenesis and Late Impact(?) Metamorphism on the GRA 06128/9 Parent Body **[#1290]**
Sm-Nd analyses of GRA06128 and GRA06129 determine its crystallization age to be 4.550 ± 0.034 Ga. Plagioclase, whole rock, and leachate (phosphate) samples give a secondary isochron age of 3.4 ± 0.4 Ga probably dating an impact event on the parent body.

Day J. M. D. Sunshine J. M. Ash R. D. Walker R. J. Liu Y. Rumble D. III
McDonough W. F. Taylor L. A.
Making Crust in the Asteroid Belt: Evidence from GRA 06128/9 and Brachinites **[#2012]**
The GRA 06128/9 achondrite meteorites are thought to be fragments of evolved asteroidal crust. We examine their petrogenesis, possible link to brachinites and search for their parent body in the solar system.

Sanborn M. E. Wadhwa M.
Rare Earth Element Geochemistry of Angrites Northwest Africa 4590 and Northwest Africa 4801 **[#1345]**
We report ion microprobe analyses of rare earth element abundances in minerals of the plutonic angrites NWA 4590 and NWA 4801. Based on these results, implications are presented for the petrogenetic history of these two angrites and their relationships to other angrites.

Irving A. J. Rumble D. III Kuehner S. M. Gellissen M. Hupé G. M.
Ultramafic Achondrite Northwest Africa 5400: A Unique Brachinite-like Meteorite with Terrestrial Oxygen Isotopic Composition **[#2332]**
We characterize a remarkable brachinite-like specimen, which is perhaps a sample of proto-Earth or Theia.

Crowther S. A. Whitby J. A. Busfield A. Holland G. Busemann H. Gilmour J. D.
The I-Xe System in Lodranites Suggests Impact-related Rapid Cooling **[#1595]**
The I-Xe system of three lodranites has been investigated. Two metal and one silicate separate from GRA 95209 gave ages consistent with each other (and the I-Xe age of Acapulco feldspar), suggesting the parent material underwent a period of rapid cooling.