

Tuesday, March 11, 2008
POSTER SESSION I: REFRACTORY INCLUSIONS
6:30 p.m. Fitness Center

Thrane K. Nagashima K. Krot A. N. Bizzarro M.

The Mineralogy, Petrography, Magnesium and Oxygen Isotopic Composition of a Wollastonite-bearing FUN CAI from the CV Chondrite NWA 779 [#2341]

A bulk analyses of a new FUN CAI yields a $\delta^{26}\text{Mg}^*$ deficit of -0.41 ± 0.02 and $\delta^{25}\text{Mg}$ of 39.73 ± 0.01 . *In situ* oxygen analyses of spinel, fassaite, melilite, and wollastonite returns analyses along both the mass-fractionation line and the exchange line.

Yin Q.-Z. Jacobsen B. Moynier F. Amelin Y. Krot A. N. Nagashima K. Hutcheon I. D. Palme H.
 ^{26}Al - ^{26}Mg and ^{207}Pb - ^{206}Pb Systematics of Allende CAIs: Reinstated Canonical Solar Initial $^{26}\text{Al}/^{27}\text{Al}$ Ratio, Variable κ -Values ($^{232}\text{Th}/^{238}\text{U}$) and the Age of the Galaxy [#1525]

We present new CAI data that reinstate the canonical $^{26}\text{Al}/^{27}\text{Al}$ ratio and negate the supra-canonical value reported in the literature. Our $^{26}\text{Al}/^{27}\text{Al}$ is anchored to a new U-Pb age in the same CAIs. κ -value is used to calculate the age of galaxy.

Liu M.-C. McKeegan K. D. Davis A. M. Ireland T. R.

Reevaluation of Calcium-41 in CM and CV Refractory Inclusions [#1895]

In this abstract, we report results of potassium isotope measurements in CM hibonite and the E44 CAI using the UCLA CAMECA IMS 1270 ion probe and we confirm the presence of ^{41}Ca in early solar system materials.

Aléon J. Bourot-Denise M.

Mineralogy and Petrography of a Spectacular Refractory Inclusion that Underwent Chondrule Formation [#1638]

We report the discovery and petrographic characterization of a meteoritic Ca-Al-rich inclusion, which periphery was transformed into a chondrule during melting in the solar nebula .

Dyl K. A. Young E. D. Simon J. A.

Reassessing the Titanium Valence State in the Wark-Lovering Rim of a Leoville CAI: Further Evidence for an Oxidizing Nebular Environment for Wark-Lovering Rim Formation [#2372]

We analyzed Leoville 144A Wark-Lovering rim fassaite to investigate the claim that low-Ti³⁺ values are the result of spinel contamination. We prove spinel contamination does not occur in our data set, and verify that WL rims formed in a more oxidizing environment than CAIs.

Uchiyama K. Hiyagon H. Takahata N. Sano Y. Ushikubo T. Kimura M. Hashimoto A.
Ion Microprobe Analyses of Rare Earth Elements in an Extremely Ultrarefractory Nodule from the Efremovka CV3 Chondrite [#1519]

REE abundance patterns of an extremely ultrarefractory nodule "Himiko" and its host inclusion "EFG-1" obtained using NanoSIMS and ims-6f ion microprobes, respectively, are presented and their formation conditions are discussed.

Petaev M. I. Jacobsen S. B.

SJ101, A New Rorsterite-bearing CAI from the Allende CV3 Chondrite: SEM and EPMA Studies [#1833]

We report the results of petrologic study of SJ101, the only known FoB CAI that did not experience substantial evaporation and, therefore, has retained its primary texture, mineralogy, and chemistry.