

Thursday, March 21, 2013

[R705]

POSTER SESSION: REFRACTORY INCLUSIONS IN CHONDRITES

6:00 p.m. Town Center Exhibit Area

- Ma C. Krot A. N. Bizzarro M. *POSTER LOCATION #45*
[Discovery of Meteoritic Dmisteinbergite \(Hexagonal \$\text{CaAl}_2\text{Si}_2\text{O}_8\$ \) in the Allende Type B FUN CAI STP-1: A New Refractory Mineral](#) [#1440]
We report the first occurrence of dmisteinbergite in a meteorite as a new refractory silicate in a CAI, likely formed from a silicate melt via rapid cooling.
- Petaev M. I. Jacobsen S. B. Krot A. N. Holst J. Bizzarro M. *POSTER LOCATION #46*
[REE and U Fractionation in the Solar Nebula: Implications for Redox Processes During CAI Formation](#) [#2072]
Negative Ce anomaly in the Type B2 FUN CAI STP-1 results from evaporation at reducing conditions, consistent with low $\text{Ti}^{4+}/\text{Ti}^{3+}$ ratio in its pyroxene.
- Fukuda K. Hiyagon H. Sasaki S. Fujiya W. Takahata N. et al. *POSTER LOCATION #47*
[An Ion Microprobe Study of FUN-Like Hibonite-Bearing Inclusions from the Murchison \(CM2\) Meteorite](#) [#1870]
We found two FUN-like inclusions from the Murchison, which exhibit large mass-dependent fractionation in Mg isotopes (~50%/amu) and negative anomaly in ^{50}Ti .
- Kööp L. Davis A. M. Heck P. R. *POSTER LOCATION #48*
[Morphology of Hibonite-Bearing Inclusions Separated from the Murchison Meteorite](#) [#2736]
We present the morphology of hibonite-rich inclusions separated for isotopic studies and show differences between acid-treated and untreated inclusions.
- Komatsu M. Fagan T. J. Mikouchi T. *POSTER LOCATION #49*
[Manganese-Rich Olivine in AOAs: Implications for Formation and Alteration Conditions](#) [#1847]
Mn-rich olivine in AOAs can be a sensitive indicator for thermal processes such as annealing in the solar nebula and parent body alteration.
- Paque J. M. Burnett D. S. Beckett J. R. Guan Y. Ishii H. A. *POSTER LOCATION #50*
[Low Temperature Carbonate Control of Barium in Igneous Ca-, Al-Rich Inclusions](#) [#2505]
Using standard and nano-SIMS plus FIB/TEM, we find some Ba-rich carbonate alteration in a Leoville CAI. An Allende CAI has one Ba-rich perovskite in 45 spots.
- Harries D. Schwander D. Palme H. Langenhorst F. *POSTER LOCATION #51*
[Niobium- and Platinum-Rich Refractory Metal Alloys from a Type B CAI](#) [#1927]
Nb- and Pt-rich refractory alloys from an Allende type B CAI were studied by FIB-TEM. The results are discussed in terms of a possible condensation origin.
- Jordan M. K. Young E. D. Jacobsen S. B. *POSTER LOCATION #52*
[Mg, Si Isotope Fractionation in Allende CAI SJ101 as a Result of Condensation](#) [#3052]
We present new Mg and Si laser ablation MC-ICPMS data for an unusual Allende CAI and compare these results with models for condensation.