Tuesday, March 18, 2014
POSTER SESSION: REFRACTORY INCLUSIONS IN CHONDRITES
6:00 p.m. Town Center Exhibit Area

Komatsu M. Fagan T. J. Mikouchi T. POSTER LOCATION #53
TEM Study of LIME Silicates in Y-81020 Primitive Chondrite [#1852]
TEM study combined with SEM and EPMA analyses shows that MnO and FeO in AOA olivines can be sensitive indicators of both condensation and alteration conditions.

Han J. Brearley A. J. POSTER LOCATION #54
Hibonite-Spinel Inclusions from the ALH A77307 CO3.0 Chondrite: A FIB/TEM Approach [#2125]
We describe the microstructure and textural relationships of refractory phases in hibonite-spinel inclusions from ALH A77307 by utilizing FIB/TEM.

Ma C. Krot A. N. Nagashima K. Tschauner O. POSTER LOCATION #55
Discovery of a New Scandium Aluminate Mineral, Ca2Sc6Al6O20: An Ultra-Refractory Phase in Refractory Inclusions from Murchison and Vigarano [#1196]
We present a new refractory mineral, Ca2Sc6Al6O20 with P-1 rhonite structure. It formed in an 16O-rich reservoir, likely as a condensate or evaporative residue.

Bullock E. S. Bouvier A. Wadhwa M. MacPherson G. J. Kita N. T. POSTER LOCATION #56
Mineralogy and Petrology of an Unusual Large Type A CAI from NWA 6991 [#1919]
Pristine CAIs / Canonical isotopes / Remelted early.

In Situ Trace Element Analysis of an Allende Type B1 CAI: EK-459-5-1 [#2523]
We present in situ major and trace element analyses of a Type B1 CAI from Allende. We discuss the causes for coexisting Tm and Yb anomalies in CAI phases.

Stable Magnesium Isotope Variation in Melilite Mantle of Allende Type B1 CAI EK 459-5-1 [#2874]
Stable Mg-isotopic profiles of two melilite mantle transects are presented along with a petrographic discussion of a type B1 CAI of Allende.

Shornikov S. I. Yakovlev O. I. POSTER LOCATION #59
A Study of Complex Gaseous Oxides over the CaO–MgO–Al2O3–TiO2–SiO2 Melts [#1624]
We have considered the regularities of complex gaseous oxides over the CMATS–melts at the redox conditions and the condensed phase changes at evaporation.

Ireland T. R. Sapah M. S. Avila J. N. Holden P. Amelin Y. et al. POSTER LOCATION #60
Oxygen Isotope Compositions of CAI from NWA 4502 CV3 Chondrite [#1671]
Oxygen-isotopic compositions have been measured from CAI from the NWA 4502 CV3 chondrite. The range in oxygen isotopes is similar to other CV3 chondrites.

Daly L. Bland P. A. Dyl K. A. Forman L. V. Ryan C. G. POSTER LOCATION #61
In Situ Analysis of Refractory Metal Alloys in Carbonaceous Chondrites: Implications for Early Solar System Processes [#2071]
RMNs have been assumed to be uniquely associated with CAIs. Here we present evidence that RMNs are associated with all components of carbonaceous chondrites.

Williams C. D. Mendybaev R. A. Ushikubo T. Bullock E. S. Janney P. E. et al. POSTER LOCATION #62
Mass-Dependent Mg and Si Isotopic Fractionation of Allende FUN CAI CMS-1: Implications for Thermal and Chemical Evolution of the Early Solar System [#2146]
In situ Mg-isotopic data for CMS-1 are reported along with a new set of vacuum experiments that were performed on its estimated precursor composition.