Wednesday, March 23, 2016
CHONDRITES: WHOLE ROCK
1:30 p.m. Montgomery Ballroom

Chairs: Neyda Abreu
Emmanuel Jacquet

1:30 p.m. Johnson B. C. * Walsh K. J. Minton D. A.
Late Formation and Migration of the Giant Planets as Constrained by Formation of
CB Chondrites [#1136]
Accretion models that include giant planet migration can explain the formation of CB chondrites and the
age of CBs constrain the timing of such a migration.

1:45 p.m. Dauphas N. * Pourmand A. Barrat J. -A.
Refractory Lithophile Abundance Patterns: The Devil is in Thulium [#1276]
All refractory lithophile elements are not present in CI proportions in all planetary bodies; the devil is
in Tm.

2:00 p.m. Archer G. J. * Tino J. Walker R. J. Wasson J. T.
The 182Hf-182W Isotopic Systematics of H Chondrite Metal: Constraining the Thermal History of the H
Chondrite Parent Body [#2973]
The 182Hf-182W isotopic system constrains the thermal evolution of the H chondrite parent body.
H chondrite metal grains have nucleosynthetic W anomalies.

The Thermal Evolution of H Chondrites as Revealed by the I-Xe Chronometer [#2128]
I-Xe data indicate cooling of the H chondrite parent body was more complicated than can be accounted
for by the onion-shell model.

2:30 p.m. Abreu N. M. * Are Phyllosicate CR Chondrite Matrices Generated by Hydrothermal Alteration? [#1926]
Criptic aqueous alteration of CR chondrites did not result from varying hydrothermal temperatures.

2:45 p.m. King A. J. * Schofield P. F. Russell S. S.
Characterizing Type 1 Aqueous Alteration in CM Carbonaceous Chondrites with Modal
Mineral Abundances [#1130]
CM1 chondrites contain more phyllosilicates but are depleted in carbonates relative to CM2s. Aqueous
alteration was more extensive due to higher temperatures.

3:00 p.m. Noguchi T. * Yabuta H. Itoh S. Sakamoto N. Mitsunari T. et al.
Early Stage of Aqueous Alteration and Interaction Between Inorganic and Organic Materials in
Cometary Bodies: Insights from Antarctic Micrometeorites [#1426]
We have revealed a series of aqueous reactions in cometary bodies with special interests on the
interaction among silicate, oxides, organic materials, and water.

3:15 p.m. Chan Q. H. S. * Zolensky M. E. Bodnar R. J. Farley C.
A Raman Study of Carbonates and Organic Contents in five CM Chondrites [#1403]
With the use of Raman spectroscopy, we determined the structure of the insoluble organic matter in the
matrix and carbonate phases in five CM chondrites.

STXM-XANES Analysis of Organic Matter in Dark Clasts and Halite Crystals in Zag and
Monahans Meteorites [#1802]
We report results of C-, N-, and O-XANES analysis of C-rich particles in a dark clast and halite crystals
(both xenolithic) in the H5 ordinary chondrites.
3:45 p.m. Piani L. * Remusat L. Robert F. Yurimoto H.  
*Hydrogen Isotopic Evolution of Water and Organic Compounds on Chondritic Asteroids [#1707]*  
In situ isotopic analyses by SIMS suggest differences in the water and organics accreted by carbonaceous and ordinary chondrites in the early solar system.

4:00 p.m. Nakato A. * Chan Q. H.-S. Nakamura T. Kebukawa Y. Zolensky M. E.  
*Mineralogy of Experimentally Heated Tagish Lake [#1218]*  
We describe mineralogical change during heating of Tagish Lake, and compared them with thermally metamorphosed carbonaceous chondrites.

4:15 p.m. Bryson J. F. J. * Weiss B. P. Scholl A. Young A. T. Nimmo F.  
*Paleomagnetic Evidence for a Partially Differentiated H Chondrite Parent Planetesimal [#1546]*  
We find evidence that the Portales Valley H chondrite experienced ancient magnetic fields and argue that its parent body was therefore partially differentiated.

4:30 p.m. Tarduno J. A. * O’Brien T. M. Smirnov A. V.  
*Does the Magnetization of CV Meteorites Record a Parent Body Core Dynamo? [#2609]*  
No dynamo recorded by the Allende meteorite.