

Wednesday, March 22, 2017

[W406]

CHONDRITIC COMPONENTS: INSIGHTS FROM EXPERIMENTS

10:30 a.m. Montgomery Ballroom

Chairs: Tasha Dunn
Justin Simon

- 10:30 a.m. Mendybaev R. A. * Davis A. M.
[Experimental Study of REE and Uranium Fractionation in Hydroge-Rich Gases: Implications for Formation of FUN CAIs](#) [#2817]
Results on fractionation of REE and U when CAI melt is evaporated in H₂-rich gases with various fO_2 s at 1 atm and in vacuum are presented.
- 10:45 a.m. Hauri E. H. * Alexander C. M. O'D. Wang J. Mendybaev R. A. Jacobsen S. D.
[Hydrogen in Evaporation Experiments and Links to CAIs and Chondrules](#) [#1636]
We have detected H in vacuum evaporation experiments; extrapolation of 1-bar solubility experiments is a poor guide to predicting nebular H contents in melts.
- 11:00 a.m. Paque J. M. * Burnett D. S. Beckett J. R. Guan Y.
[Relict Grains in CAIs? Constraints from an Experimental Analog](#) [#2031]
Refractory lithophile elements in melilite produced in an experimental analog are compared with those in Leoville with attention to the role of inclusions.
- 11:15 a.m. Han J. * Kööp L. Keller L. P. Davis A. M.
[Microstructural Constraints on the Formation History of Hibonite in Refractory Inclusions](#) [#2895]
A TEM study of hibonite in CM chondrites and produced by annealing experiments was conducted to better understand the formation conditions of hibonite in CAIs.
- 11:30 a.m. Ustunisik G. U. * Ebel D. S. Walker D.
[An Experimental Study of Dissolution, Fe-Mg Exchange, and Zoning Between Relict Forsterite and Chondrule Melt: Implications for Thermal Histories of Chondrules](#) [#2907]
Relict olivines tell the T-time story for chondrules / High-T resorption erases Fe-Mg exchange and relict signature / Resorption is a faster player than diffusion.
- 11:45 a.m. Foustoukos D. I. * Alexander C. M. O'D. Cody G. D.
[D/H Exchange During Hydrothermal Alteration of Insoluble Organic Matter](#) [#2361]
An experimental study on the kinetics and equilibrium of D/H exchange reactions during hydrothermal alteration of insoluble organic matter at 250–450°C, 500 bar.
- 12:00 p.m. Vinogradoff V. Le Guillou C. * Bernard S. Jaber M. Remusat L.
[Simulating the Asteroidal Hydrothermal Alteration of Organic Compounds](#) [#2681]
How would organics from the interstellar media evolve during hydrothermal alteration? Experiments show that IOM would form and that clays have a role to play.