

Tuesday, March 11, 2008
POSTER SESSION I: CHONDRULES AND CHONDRULE FORMATION
6:30 p.m. Fitness Center

Miura H. Yasuda S. Nakamoto T.

Fragment-Collision Model for Compound Chondrule Formation: Size Ratio of Secondary to Primary [#1215]

We calculated the formation probability of compound chondrules with two different-sized ejectors as a function of the size ratio. We found that the probability can be enhanced by a factor of 100–1000 comparing with a case of same-sized ejectors.

Seitz H.-M. Zipfel J. Brey G. P. Ott U.

Lithium Isotope Composition of Chondrules and CAIs from Ordinary and Carbonaceous Chondrites [#1944]

We analyzed Li isotopes and concentrations in chondrules and CAIs from OCs and Allende. Chondrules have lower Li and lighter Li isotopes than their bulk hosts. Higher proportions of chondrules in OCs could explain their bulk compositions.

Nehru C. E. Weisberg M. K. Ebel D. S. Boesenberg J. S. Connolly H. C. Jr.

Origin of Na-, Al-, Glass-rich Chondrules in H, L and LL Chondrites [#1697]

Glass-rich chondrules have >50% glass and Na-Al-rich compositions and are rare in OCs. Ones with > 90% glass are very rare. Melting of albitic or nepheline-bearing and ferromagnesian precursors is the most justifiable scenario for their formation.

Bell D. R. Buseck P. R. Channon M. D. Hervig R. Rieck K. D. Singletary S. J.

SIMS Analysis of the Isotopic Composition of Lithium in Meteorites [#2276]

Li isotope data are presented for olivine and other minerals from pallasites, the Allende carbonaceous chondrite, the El Gouanem ureilite, and the Pasamonte eucrite. The calibration of significant matrix effects in SIMS analysis of $^7\text{Li}/^6\text{Li}$ is discussed.