

Tuesday, July 25, 2017

POSTER SESSION I: CHONDRITES:

ORIGINS AND PROCESSING OF CHONDRITES AND CHONDRITIC COMPONENTS

5:30 p.m. Poster Area

Will P. Materese C. K. Maden C. Sandford S. A. Busemann H.

[Experimental Noble Gas Trapping in Organic Residues — On the Way to Understanding “Phase Q”?](#) [#6399]

We produced organic residues from starting gas mixtures containing Kr and Xe to study the formation conditions of “phase Q”. Trapped noble gas contents and elemental fractionation of Kr and Xe in our residues correspond to those observed in phase Q.

Alpert S. A. Ebel D. S. Weisberg M. K.

[Classification of Metal Sulfide Nodules in Chondritic Meteorites](#) [#6136]

Metal sulfide blebs / Categories to define. / Possibly two types.

Bakhtin A. I. Sonin G. V. Sungatullin R. Kh. Petrova R. D. Gusev A. V. Kuzina D. M.

[Meteorite Ochansk: Genesis and Composition Peculiarities](#) [#6114]

Ochansk was studied by several methods. The absence of traces of recrystallization of the meteorite substance and its high porosity indicate that it did not sink deep into the maternal body and was not exposed to elevated temperatures and pressures.

Tymiński Z. Krześcińska A. M. Burakowska A. Stępisiewicz M. Tymińska K. Dziel T.

Olech A. Żołądek P.

[<sup>26</sup>Al Isotope in Pultusk Meteorite Fragments](#) [#6278]

Low deviations in <sup>26</sup>Al distribution between analysed Pultusk meteorite fragments indicate that they had come from the same region of meteoroid. Only one sample may record either the pre-atmospheric fragmentation or complex brecciated texture.

Szurgot M. Wach R. A. Bartoschewitz R.

[Mean Atomic Weight of Braunschweig Meteorite](#) [#6002]

Mean atomic weight A<sub>mean</sub>, and atomic number of Braunschweig meteorite were determined and analyzed. Classification of Braunschweig, as one of L6 chondrites was confirmed. A<sub>mean</sub> can be predicted by Fe/Si, grain density, and magnetic susceptibility.

Szurgot M.

[Relationship Between Density of Planetary Materials and Iron to Silicon Ratio. Predicting Grain Density for Ordinary Chondrites, and Uncompressed Density for Moon, Earth, Venus, and Mars](#) [#6008]

Relationship between density and Fe/Si atomic ratio for planetary materials was discovered. Fe/Si ratio and uncompressed density of Moon, rocky planets: Earth, Venus, and Mars, and mean grain density of H, L, and LL chondrites have been verified.

Fagan T. J. Yasuda T. Nagashima K. Krot A. N.

[Chondrule-Cored Aggregates in CV Chondrites: Origin by Chondrule Formation Followed by Olivine Condensation](#) [#6202]

Chondrule-cored aggregates (ChCAs) are a new component of CV chondrites, in which early-stage pyroxene crystallized from chondrule melt and was followed by olivine condensation. We describe two ChCAs from Allende and a related object in Vigarano.

Kuehner S. M. Irving A. J. Ziegler K. Sipiera P. P. Jonikas A.

[Northwest Africa 11253: A Vesicular, Melt-Textured Metal-Poor Achondrite With Mineralogical and Oxygen Isotopic Affinities to L Chondrites](#) [#6273]

A small vesicular stone with very low metal content may be an L melt rock similar to Patuxent Range 91501.

Irving A. J. Kuehner S. M. Gao Y. Chen Y. Lapen T. J. Pitt D.

[\*Petrology and Bulk Composition of the Oudiyat Sbaa Fluororichterite-Bearing EH5 Chondrite: A Witnessed Fall from Eastern Morocco\*](#) [#6383]

We characterize a recent Moroccan enstatite chondrite fall and report on a new occurrence of fluororichterite.

Anfinogenov J. Anfinogenova Y. Budaeva L. Kuznetsov D.

[\*Hypothetical Planets as Parent Bodies of Some Asteroids and Meteorites\*](#) [#6068]

Based on mathematical modeling, authors propose scenario of the exploded planet hypothesis involving two hypothetical planets Phaeton I and Phaeton II which may be parents of some asteroids and meteorites. Phobos is discussed as remnant of Phaeton I.