

Tuesday, July 24, 2018

POSTER SESSION I: PROTOPLANETARY DISK PROCESSES AND CHONDRITIC COMPONENTS:
OBSERVATIONS, THEORETICAL MODELS, AND EXPERIMENTS

5:30 p.m. Foyer

Berzin S. V.

[Refractory Forsterite-Rich Objects in the Meteorite Severny Kolchim \(H3\) \[#6019\]](#)

Forsterite-rich objects and magnesian chondrules were studied in the Severny Kolchim meteorite. The mechanisms of the formation of the enstatite rim in the forsterite-rich objects are not understood.

Ebert S. Patzek M. Bischoff A.

[A Remarkable and Well-Rounded Zn-CAI in the CO3 Chondrite Dar al Gani 083 \[#6232\]](#)

Zn-rich CAI from the CO3 chondrite Dar al Gani 083. Volatile elements in the center surrounded by refractory minerals. Investigation is based on major, minor, and trace element (REE) concentrations and O-isotope data.

Ma C.

[Discovery of Meteoritic Baghdadite, \$Ca_3\(Zr,Ti\)Si_2O_{10}\$, in Allende: The First Solar Silicate with Structurally Essential Zirconium? \[#6358\]](#)

Baghdadite is probably the first solar silicate mineral with structurally essential Zr, condensed from solar nebula gas or crystallized from a refractory melt.

Render J. Brennecka G. A. Ebert S. Burkhardt C. Kleine T.

[Titanium Isotope Signatures of Ca-Al-Rich Inclusions from Various Types of Carbonaceous Chondrites \[#6191\]](#)

We present high-precision Ti isotopic compositions of CAIs from CO and CM chondritic meteorites, including two highly anomalous hibonite-rich inclusions.

Dugushkina K. A. Berzin S. V.

[Microxenolite in Gao-Guenie Meteorite \(H5\) \[#6020\]](#)

The results of a chemical study of microxenolite in the meteorite Gao-Guenie. It is composed of olivine, pyroxene and mesostasis. Rare grains of merrillite, kamacite and chromite are also found. The microxenolite is a fragment of unclassified chondrites.

Leili M.H. Chennaoui Aoudjehane H. Devouard B. Folco L. Gemelli M.

[Millimeter-Sized Granular Inclusions in Al Haggounia 001 \(Laayoune, Morocco\) Enstatite Chondrite: Hexotic Clasts or Recrystallized Macrochondrules? \[#6263\]](#)

Characterize and better understand the nature of millimeter-sized granular inclusions in Al Haggounia 001 (Laayoune, Morocco) in enstatite chondrite, if they are hexotic clasts or recrystallized macrochondrules.

Cohen O. A. Swartz N. A.

[Investigation of Chondritic Metal Oxidation States by X-Ray Photoelectron Spectroscopy \[#6316\]](#)

XPS and SEM-EDX were used to investigate the oxidation state of forsteritic chromium in olivine grains and sulfur crystallization in the matrix, which may be indicative of the formation conditions of primitive chondrites.

Sheikh D.

[An Extensive Analysis of Chondrule Textures in Un-Equilibrated Ordinary Chondrites and the Creation of a Chondrule Database \[#6047\]](#)

Rather than using textural and chemical nomenclatures for grouping chondrules, using a chondrule database system to individualize chondrules, rather than group them, could potentially better constrain chondrule formation mechanisms and conditions.

Slyuta E. N. Korochantsev A. V. Lorents C. A.

[Structure Anisotropy of Ordinary Chondrites \[#6231\]](#)

The strong structure anisotropy was found in the most widespread type of stony meteorites-ordinary chondrites, when in one of the three directions the compressive strength limit exceeds by 60% the values in the other two directions.