

Thursday, July 26, 2018

POSTER SESSION II: PHYSICAL PROPERTIES OF METEORITES

5:30 p.m. Foyer

Efremov V. V. Popova O. P. Glazachev D. G. Kartashova A. N.

[Determination of the Meteor Particles Properties from Observational Data](#) [#6026]

The accuracy of meteor particles mass determination is low. Meteor mass estimates, suggested by different authors, vary by orders of magnitude. Corresponding meteor particles parameters were determined and model coefficients were estimated.

Murtazov Andrey K.

[Measuring of Some Basalts Spectra with the Comparison of the Metal Meteorite Spectrum](#) [#6084]

The work presents the results of measuring the spectra reflected by the lava samples collected in the caldera of Teide, Tenerife, and also the spectra of reflection by a number of terrestrial basalt samples, iron fragment of meteorit Seymchan.

Vokhmintsev A. S. Weinstein I. A.

[Photoluminescence of Chelyabinsk LL5 Chondrite with Light-Colored Lithology in 7–300 K Temperature Range](#) [#6304]

The purpose of this work was to study the temperature behaviour of the photoluminescence spectra excited by ultraviolet (263 nm) pulsed laser radiation in the 7–300 K range of Chelabinsk chondrite samples with predominantly light-colored lithology.

Chareev D. A. Bezaeva N. S. Khakhalova E.

[Synthesis and Characterization of Single Crystals of Monoclinic Pyrrhotite: Possible Implications for Extraterrestrial Magnetism](#) [#6359]

We present here a new synthesis and characterization of monoclinic pyrrhotite single crystals and discuss possible implications for extraterrestrial magnetism.

Szurgot M.

[Mean Atomic Weight of L'Aigle Chondrite](#) [#6001]

Mean atomic weight A_{mean} , mean atomic number, and Fe/Si atomic ratio of L'Aigle meteorite were determined, and its classification as an L6 chondrite confirmed. Grain density of L'Aigle, its silicates, and Fe,Ni metal was verified by A_{mean} and Fe/Si.

Szurgot M.

[Mean Atomic Weight and Grain Density of Košice Chondrite](#) [#6002]

Mean atomic weight, mean atomic number, and Fe/Si atomic ratio of Košice meteorite were determined, and its classification as a H5 chondrite confirmed. It was shown that Fe/Si ratio predicts grain density and mean atomic weight of Košice chondrite.

Danilenko I. A. Petrova E. V. Zamyatin D. A. Grokhovsky V. I.

[Chromite Crystals in Experimentally Heated Chelyabinsk LL5 Meteorite](#) [#6265]

Chromite crystals from the Chelyabinsk LL5 samples of light-colored and dark-colored lithology after the differential thermal analysis were investigated using electron probe microanalysis and Raman spectroscopy.

Weinstein I. A. Vokhmintsev A. S. Savchenko S. S. Grokhovsky V. I.

[Low Temperature Dependencies of UV Excited Luminescence Spectra for Tsarev Chondrite](#) [#6319]

Variations of UV excited photoluminescence parameters for Tsarev L5 chondrite in the low temperature range from 7 to 300 K are analyzed. The possible mechanisms of luminescence thermal quenching in the meteorite are discussed.

Maksimova A. A. Chukin A. V. Petrova E. V. Felner I. Kohout T. Oshtrakh M. I.

[Characterization of Annama H5 Ordinary Chondrite Using X-Ray Diffraction, Magnetization Measurements and Mössbauer Spectroscopy](#) [#6093]

In the present work we report studies of Annama H5 meteorite by means of X-ray diffraction (XRD), magnetization measurements and Mössbauer spectroscopy with a high velocity resolution.

Hontsova S. S. Petrova E. V. Chukin A. V. Maksimova A. A. Maksimova E. M. Oshtrakh M. I.
[*The First Characterization of a Newly Found Iranian Meteorite Gandom Beryan 008*](#) [#6111]

In the present work we discuss preliminary results of a Gandom Beryan 008 fragment characterisation by the means of optical microscopy, scanning electron microscopy (SEM) with energy dispersive spectroscopy (EDS), X-ray diffraction (XRD) and Mössbauer spectroscopy.

Ostrowski D. R. Bryson K. L.
[*Elastic Wave Velocity Variation Across Meteorites*](#) [#6349]

Elastic wave velocities relationship to density and porosity. How the velocities and moduli change across the different meteorite groups.