

Thursday, July 27, 2017
POSTER SESSION ~~K~~ METEORITE FALLS/FINDS
5:30 p.m. Poster Area

Silber R. E. Silber E. A. Gritsevich M. Niculescu M. L. Hocking W. K.

[*On the Mechanism of Early Rapid Removal of Electrons from Postadiabatically Expanding Overdense Meteor Trains*](#) [#6317]

We discuss the mechanism responsible for early rapid removal of electrons from postadiabatically expanding overdense meteor trains.

Silber R. E. Silber E. A. Gritsevich M.

[*On Detection of Shockwaves Generated by Overdense Meteors*](#) [#6256]

We discuss modes for detecting overdense meteor generated shockwaves.

Shuvalov V. V. Khazins V. M.

[*Ionospheric Disturbances Initiated by Explosive Disruption of Chelyabinsk and Tunguska Cosmic Bodies*](#) [#6044]

We calculated the dynamic flows in the upper atmosphere up to a few hours after the impact in case of small bodies (Chelyabinsk) and larger events (Tunguska).

Ostrowski D. R. Bryson K. L.

[*Laboratory Measurements of Meteorite Physical Properties*](#) [#6351]

Meteorite physical properties help determine parent body properties, behavior of asteroids during atmospheric entry, and methods to deflect hazardous objects.

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

[*Was the 1908 Tunguska Cosmic Body a Rubble Pile Asteroid?*](#) [#6069]

Authors discuss data on two anomalies (PGE and silicate microspherules) and macroscopic findings in the 1908 Tunguska event area. Tunguska projectile may be rubble pile asteroid partially consisting of planetary crust material from Earth-like planet.

Bronikowska M. Artemieva N. Hofmann B. A.

[*Reconstruction of the Twannberg Meteorite Fall*](#) [#6052]

We model the Twannberg meteorite fall and compare the strewn field shape, total mass on the surface and the largest mass with available data. The most probable pre-atmospheric radius should be 1–2 m, although a larger body cannot be excluded.

Silvia P. J.

[*The Civilization-Ending 3.7KYrBP Event: Archaeological Data, Sample Analysis, and Biblical Implications*](#) [#6001]

This paper overviews evidence for a cosmic airburst event that obliterated civilization in the Middle Ghor of the Jordan Valley ca. 1700 BCE, or 3700 years before present. Archaeological and analytical data of material evidence is presented.

Moreno-Ibáñez M. Gritsevich M. Lyytinen E. Silber E. A. Silber R. E. Trigo-Rodríguez J. M.

[*Revised Masses for the Canadian Meteor Network Fireballs*](#) [#6218]

We implement an atmospheric height correction method that utilizes more realistic atmospheric models to analyze the fireballs. We determine MORP fireball masses based on this approach.

Rochette P. Gattacceca J. Laubenstein M.

[*Finding Meteorites on Improbable Grounds: The Western Europe Case*](#) [#6021]

We present the statistics of finds in Europe and the case of Abbans Dessous and Mercantour declared recently found in France. We will discuss the question of authentication of the find place.

Pastukhovich A. Yu. Larionov M. Yu. Kruglikov N. A. Zamyatin D. A. Grokhovsky V. I.

[URFU Meteorite Expedition to the Lut Desert \(Iran\)](#) [#6356]

We have organized a 10-day field mission to the Lut desert supported by UrFU at 01.2017. Here we report preliminary information about founded samples and used field techniques. The participants were from the Russia and from the Iran.

Moggi Cecchi V. Cecchi L. Pratesi G. Giuli G. Nemati M. Di Martino M. Serra R.

[Preliminary Results of the Lut Desert 2017 Joint Italian-Iranian Expedition for Meteorite Recovery](#) [#6306]

A general description of the geomorphologic features of the Lut Desert area of Iran and the preliminary results of the joint Italian-Iranian expedition for meteorite recovery to this area is provided.

Yakovlev G. A. Grokhovsky V. I.

[On Some Features of Meteorites from Hot and Cold Deserts](#) [#6349]

On possibility of unequal distribution of weathering factors across meteorite surface.

Larionov M. Yu. Chukin A. V. Yakovlev G. A. Khasanov T. A.

[Crystal Structure and Chemical Composition of Metal Particles from Kolymskiy Fulgurite](#) [#6346]

Similarities and differences between some phases of metal particles in fulgurite and phases of iron meteorites.

Muravyev L. A. Grokhovsky V. I.

[Mass Balance Evaluation of Tsarev Meteorite Collection Completeness](#) [#6103]

For Tsarev meteorite strewn field we calculated a mass balance right and left from the meteoroid flight direction, dividing the trajectory into sections of 1 km long to estimate completeness of the collection of meteorite on the Earth.

Sipiera P. P. Irving A. J. Kuehner S. M. Sipiera C. A. Hollis C. M. Wragg C. Shaw R. G.

[Diversity Among 40 Selected Specimens from a Large Collection of Northwest African Chondrites](#) [#6019]

Forty specimens from a collection of over 25,000 NWA chondrites were studied to determine their types. Electron microprobe and magnetic susceptibility analyses found 18 different types suggesting the potential for diversity within large collections.

Devillepoix H. A. R. Bland P. A. Towner M. C. Sansom E. K. Howie R. M. Cupak M. Benedix G. K.

Jansen-Sturgeon T. Hartig B. A. D. Cox M. A. Paxman J. P.

[Fall and Recovery of the Dingle Dell Meteorite](#) [#6211]

Dingle Dell is the fourth meteorite with an orbit recovered by the DFN in Australia. It was recovered within one week of its fall in the Western Australian Wheat Belt, without any precipitation contaminating the rock.

Macke R. J. Benedix G. K. Bland P. A. Desert Fireball Network Team

[Dingle Dell Density and Other Physical Properties](#) [#6197]

We measure density, porosity, and magnetic susceptibility of the Dingle Dell meteorite recovered recently by the Australian Desert Fireball Network.

Kerraouch I. Belhai D. Naitamar A. H.

[Conception and Development of a Decision-Making System for the Classification of Meteorites \(SICAM\)](#) [#6254]

The SICAM is a decision-making system, new scientific method that facilitates study of meteorites. It aims to automatically and accurately classify meteorites and their nomenclature based on new techniques of artificial intelligence and data analysis.