

Thursday, July 26, 2018
POSTER SESSION II: IRONS AND STONY IRONS
 5:30 p.m. Foyer

Kontny A.

[*The Morasko Iron Meteorite: Magnetic Mineralogy and Stability of Magnetic Domains in Cohenite*](#) [#6367]

Magnetic phases like cohenite provide a unique tool to approach magnetic field records of early solar magnetic fields. We investigated the stability of magnetic domains in cohenite after field and heat treatment to learn more about its stability.

Kaminsky F. Wirth R. Schreiber A.

[*Unusual Phosphide, Carbide and Carbonate from the Morasko IAB-MG Iron Meteorite*](#) [#6048]

In the Morasko iron meteorite utilizing the TEM techniques, we identified 1.5–2 μm inclusions of phosphide $(\text{Fe,Ni})_4\text{P}$ and nanometre-sized inclusions of taenite, Ba-carbonate witherite, and Fe-Ni carbide $(\text{Fe,Ni})_5\text{C}_2$.

Ponomarev D. S. Litasov K. D. Ishikawa A. Bazhan I. S. Hirata T. Podgornykh N. M.

[*Detailed Mineralogy and Trace-Element Composition of Silicate-Bearing IAB Iron Meteorite Maslyanino*](#) [#6148]

Here we report first detailed results on Maslyanino iron meteorite, which was found in 1992 (Novosibirsk region) and preliminary classified to IAB irons based on metal composition.

Teplyakova S. N. Lorenz C. A.

[*Mechanism of Formation of the Fine-Grained Metal in IIE Irons and Possible Meteorite Analogs*](#) [#6003]

We reconstruct a crystallization history of structurally anomalous IIE irons with the silicate inclusions based on the modal mineral compositions and mineral chemistry and compare the IIEs texture with that of large metal nodule Budulan mesosiderite.

Sharygin V. V.

[*Mineralogy of Inclusion with Silicate-Natrophosphate Immiscibility, Meteorite Elga \(IIE\)*](#) [#6013]

The detailed mineralogy is given for the inclusion with silicate-natrophosphate immiscibility in metal of the Elga meteorite (main silicates, phosphates and minor phases).

Neumann W. O. Kruijer T. S. Breuer D. Kleine T.

[*Multi-Stage Core Formation in Planetesimals Revealed by Numerical Models and Hf-W Chronometry of Iron Meteorites*](#) [#6209]

The ^{182}W content in IVB iron meteorites indicates metal separation at ~ 2.9 Ma after CAIs. We calculated the differentiation of the IVB parent body comparing its evolution to the Hf-W model ages and provide a best fit on its radius and formation time.

Ek M. Hunt A. C. Schönbächler M.

[*Mass-Dependent Palladium Isotope Variations in Iron Meteorites*](#) [#6241]

We present a new method for mass-dependent Pd isotope analysis and present new data for iron meteorites. We resolve small Pd isotope variations between different groups and Earth. Ongoing work will help to constrain the origin of this variation.

Dos Santos Filho E. Scorzelli R. B. Zucolotto M. E. Tosi A. A. Letichevsky S. de Aviliez R. R.

[*Order-Disorder Reaction in Olivines from Pallasites: A Proxy for Thermal History Study*](#) [#6177]

Preliminary data concerning the Fe-Mg cation distribution in olivines extracted from pallasites is used to infer the thermal history of representative samples from pallasites main group, aiming to gain insights concerning the origin of this group.

Petrova E. V. Maksimova A. A. Chukin A. V. Oshtrakh M. I.

[*Variations in Olivine Extracted from Two Different Fragments of Seymchan Main Group Pallasite*](#) [#6094]

We present a comparison of olivine from two different fragments of Seymchan PMG using X-ray diffraction and Mössbauer spectroscopy.

Begunova A. S. Yakovlev G. A. Grokhovsky V. I.

[*Synthesis of Carbon Nanotubes on Seymchan Meteorite Surface*](#) [#6322]

Carbon nanotubes (CNT) were synthesized on the Seymchan surface with CVD technique. Meteorite consists of different Fe-Ni alloys, with various structures and nickel content. The dependence of CNT growth on the composition of surface is studied.

Kuehner S. M. Irving A. J. Falls R. J.

[*Mesosiderite Northwest Africa 11774 from Mauritania: A Near Clone of Bondoc*](#) [#6288]

A metal-rich specimen found in Mauritania has remarkable similarities to nodules from the Bondoc mesosiderite.

Muftakhetdinova R. F. Brusnitsyna E. V. Yakovlev G. A. Grokhovsky V. I.

[*Carbon-Rich Phases in Meteorites*](#) [#6303]

In this work, the structure of two varieties of iron carbides (cohenite, haxonite) in meteorites of various types was studied.

Brusnitsyna E. V. Badekha K. A. Grokhovsky V. I. Muftakhetdinova R. F.

[*Martensite Morphology in Different Types of Meteorites*](#) [#6290]

In the present work martensite morphology in the fragments of several meteorites were studied.