Tuesday, July 28, 2015
POSTER SESSION: ORDINARY CHONDRITES:
COMPOSITIONS, PHYSICAL PROPERTIES, AND CHELYABINSK CHONDRITE
5:30 p.m. Hearst Memorial Mining Building (HMMB) Floor One

Xu L. Hu S.
Primitive Properties of the Heyetang L3 Chondrite **[#5163]**
We report the petrographical study of the Heyetang meteorite. According to the PMD values of Fa and Fs contents, it was classified as L3.4. The primitive property of the meteorite was confirmed by the presence of many taenite inclusions in kamacite.

Ruzicka A. M. Hutson M. Friedrich J. M. Bland P. A. Pugh R.
Northwest Africa 8709: A Rare but Revealing Type 3 Ordinary Chondrite Melt Breccia **[#5348]**
We discuss the discovery of a rare L3 melt breccia, which has implications for compaction processes that must have contributed to the lithification of what are expected to have been initially porous primordial chondritic agglomerates.

Ziegler K. Irving A. J. Kuehner S. M. Sipiera P. P.
Anomalous Oxygen Isotopic Compositions of Unequilibrated but Supposedly Ordinary Chondrites, Including Ungrouped Silica-Bearing Chondrite Jiddat Al Harasis 846 **[#5052]**
JaH 846 has many features suggestive of an UOC. It is unusual in having silica and opx in chondrules, and in oxygen isotopic compositions that plot beyond ($\delta^{18}O$) and below ($\delta^{17}O$) the ranges for OCs. We conclude it derived from a unique parent body.

Gilmour C. M. Herd C. D. K.
In Situ Analysis of Platinum Group Elements in Ordinary Chondrite Kamacite **[#5336]**
We investigate the variability of PGEs in ordinary chondrite kamacite grains with the use of laser ablation ICP-MS.

Voropaev S. Kocherov A. Gabitov R.
Comparative Analysis of Micrograins from Asteroid 25143 (Itokawa) and Chelyabinsk Meteorite **[#5012]**
We compare data concerning dust particles delivered by Hayabusa from the surface of the asteroid Itokawa and rock fragments of the Chelyabinsk meteorite. It is shown that they are LL ordinary chondrites with similar genesis and parent bodies.

Grokhovsky V. I. Brusnitsyna E. V. Yakovlev G. A.
Haxonite in Chelyabinsk LL5 Meteorite **[#5272]**
Haxonite was found in Chelyabinsk LL5 meteorite.

Sharygin V. V. Grokhovsky V. I. Yakovlev G. A.
Mineral Condensates in Black Lithology of Chelyabinsk Chondrite **[#5274]**
Rounded and shrank vugs with idiomorphic minerals on the walls were found in black lithology. These vugs were possibly formed by the gas condensation.

Weinstein I. A. Vokhmintsev A. S. Ishchenko A. V. Grokhovsky V. I.
High-Dose Induced Thermoluminescence of Light-Colored Lithology in Chelyabinsk Meteorite **[#5175]**
This work presents the study results of high-dose irradiation effects on the laboratory TL parameters in Chelyabinsk LL5 chondrite fragments with light-colored lithology. Obtained data are analyzed in terms of the general order kinetic formalism.

Maksimova A. A. Petrova E. V. Oshtrakh M. I.
Examination of the Re-Melted Zone of Chelyabinsk LL5 Blackened Fragment Using Mössbauer Spectroscopy with a High Velocity Resolution: Preliminary Results **[#5106]**
Preliminary results of Mössbauer spectroscopy of re-melted blackened fragment of Chelyabinsk LL5 meteorite demonstrated some differences in comparison with fragments with a light lithology.

Vokhmintsev A. S. Weinstein I. A. Grokhovsky V. I.
Luminescence Characterization of Tsarev L5 Chondrite **[#5200]**
This work presents the investigation results of spectral and kinetic properties of Tsarev L5 chondrite using photo- and thermoluminescence techniques. Dose fading estimates for laboratory TL response were fulfilled also.

Consolmagno G. J. Macke R. J.
Low-Temperature Heat Capacity of OC Falls as a Function of Olivine Content **[#5146]**
We have measured heat capacities for 18 ordinary chondrite falls of known olivine content and find a strong correlation between heat capacity and olivine abundance; furthermore, our measurements correlate with models based on meteorite composition.

Molesky M. J. Patmore E. B. Strait M. M.
Measurement of Density and Compression Strength in Meteorites **[#5300]**
A report on compression strength and density values of meteorites.

Li S. J. Wang S. J. Miao B. K. Li X. Y. Li Y. Zeng X. J. Shang Y. L. Xia Z. P.
Densities and Porosity Measurement of Ordinary Chondrites Using Pycnometer-Balloon Vacuum Packing Method **[#5307]**
The grain density, bulk density and porosity of 22 fall ordinary chondrites were reported.

Szurgot M.
Mean Atomic Weight of Pultusk Meteorite and H Chondrites **[#5013]**
Mean atomic weight Amean of Pułtusk and fifteen other H chondrites has been determined and analyzed. It was concluded that relationship between Fe/Si atomic ratio and Amean of ordinary chondrites predicts precisely Amean values.

Szurgot M.
Mean Atomic Weight of Chelyabinsk and Olivenza LL5 Chondrites **[#5008]**
Mean atomic weights (Amean) of Chelyabinsk and Olivenza LL5 chondrites have been determined and analysed. Relationship between Fe/Si atomic ratio and mean atomic weight of ordinary chondrites has been established which enables one to predict Amean values.

Łuszczek K. Przylibski T. A.
Chemical Composition of Meteorites as Representative Material for Potential Metallic Resources of Their Parent Bodies **[#5383]**
Since six years at Wrocław University of Technology the research concerning the metals content in different groups of meteorites are carried out. Data for iron meteorites and all chondrites' groups were analyzed so far.