Thursday, March 20, 2014 **[R718]**
POSTER SESSION: THE CHELYABINSK METEORITE: STUDIES OF A TRULY NEAR-EARTH OBJECT
6:00 p.m. Town Center Exhibit Area

Taylor L. A. Liu Y. Guan Y. Day J .M. D. Ma C. et al. ***POSTER LOCATION #333***
Metamorphism in the Chelyabinsk Meteorite **[#2346]**
The well-documented airblast over Chelyabinsk, Russia, on 2/15/2013, resulted in an LL5 chondrite, with geochemistry in apatite of OH, δD, and $^{37}Cl/^{35}Cl$ values.

Haba M. K. Sumino H. Nagao K. Mikouchi T. Komatsu M. et al. ***POSTER LOCATION #334***
Noble Gases in the Chelyabinsk Meteorite **[#1732]**
All noble gases were measured for the Chelyabinsk meteorite. Our data show that the cosmic-ray exposure age is 1.2 m.y. and the preatmospheric radius is >6 m.

Andronikov A. V. Lauretta D. S. Hill D. Andronikova I. E. ***POSTER LOCATION #335***
Chemical Composition of Metals and Sulfides from the Chelyabinsk Meteorite: Electron Microprobe and LA-ICP-MS Study **[#1407]**
A fragment of the Chelyabinsk meteorite (LL5, S4, WG0) represented by an impact melt breccia is studied for chemical composition of metals and sulfides.

Rout S. S. Heck P. R. ***POSTER LOCATION #336***
Shock Features in the Chelyabinsk LL5 Chondrite: Preliminary Results **[#2159]**
Chelyabinsk is a new LL5 chondrite fall. Here we present our preliminary results on shock features present within and near the impact melt veins.

Kocherov A. V. Korochantsev A. V. Lorenz C. A.
Ivanova M. A. Grokhovsky V. I. ***POSTER LOCATION #337***
Recovery, Laboratory Preparation and Current State of the Main Mass of the Chelyabinsk Meteorite **[#2227]**
The details of recovering process, preparation, and description of the main mass of Chelyabinsk are presented here.

Kohout T. Gritsevich M. Grokhovsky V. I.
Yakovlev G. A. Haloda J. et al. ***POSTER LOCATION #338***
Mineralogy, Reflectance Spectra, and Physical Properties of the Chelyabinsk LL5 Chondrite — Insight into Shock Induced Changes in Asteroid Regoliths **[#1986]**
Shock does not have significant effect on meteorite properties, but causes spectral darkening and suppression of silicate absorption bands.

Reddy V. Sanchez J. A. Cloutis E. A. Mann P. A. Izawa M. R. M. et al. ***POSTER LOCATION #339***
Impact Melt Origin of Baptistina Asteroid Family: Lessons from the Chelyabinsk Meteorite Fall **[#1399]**
We present the first compositional evidence linking the Chelyabinsk meteorite to the Flora and Baptistina asteroid families (the proposed source of the K/T impactor).

Beard S. P. Kring D. A. Isachsen C. E. Lapen T. J. Zolensky M. E. et al. ***POSTER LOCATION #340***
Ar-Ar Analysis of Chelyabinsk: Evidence for a Recent Impact **[#1807]**
Argon-argon analysis of Chelyabinsk shows evidence for a recent impact event that is much younger than other known LL chondrites and consistent with U-Pb work.

Arai T. Abe S. Ohtsuka K. Hiroi T. Komatsu M. et al. ***POSTER LOCATION #341***
Mineralogical and Spectral Heterogeneity of Chelyabinsk Meteorite **[#2860]**
Mineralogical and spectral reflectance study of the Chelyabinsk meteorite suggests possible compositional and spectral heterogeneity of the Chelyabinsk parent body.

Busemann H. Toth E. R. Clay P. L. Gilmour J. D. Nottingham M. et al. ***POSTER LOCATION #342***
Noble Gases in the LL5 Chondrite Chelyabinsk **[#2805]**
Noble gas data in various specimens of the Chelyabinsk meteorite are presented to assess its exposure in space and the chronology of events on the parent body.

Tappa M. J. Mills R. D. Ware B. Simon J. I. ***POSTER LOCATION #343***
A Procedure to Determine the Coordinated Chromium and Calcium Isotopic Composition of Astromaterials Including the Chelyabinsk Meteorite **[#1908]**
Detailed methodology of a procedure developed to measure Cr and Ca isotopes. Data demonstrate that this method provides results consistent with other work.

Lapen T. J. Kring D. A. Zolensky M. E. Andreasen R. Righter M. et al. ***POSTER LOCATION #344***
Uranium-Lead Isotope Evidence in the Chelyabinsk LL5 Chondrite Meteorite for Ancient and Recent Thermal Events **[#2561]**
U-Pb isotope systematics of phosphate from the Chelyabinsk meteorite indicate two periods of Pb loss, one at 4456 ± 18 Ma and another at 559 ± 180 Ma.

Yoshida S. Mikouchi T. Nagao K. Haba M. K. Hasegawa H. et al. ***POSTER LOCATION #345***
Mineralogical Variation of Chelyabinsk with Depth from the Surface of the Parent Meteoroid **[#2509]**
We report mineralogical variation of Chelyabinsk fragments whose burial depths in the parent meteoroid were estimated (0–3 m) by noble gas compositions.