Thursday, March 24, 2016 **[R604]**
POSTER SESSION II: CHONDRITES: IMPACTS AND ORBITS
6:00 p.m. Town Center Exhibit Area

Rout S. S. Heck P. R. Schmitz B. ***POSTER LOCATION #83***
A Search for Shocked Chromites in Fossil Meteorites with Raman Spectroscopy **[#3043]**
Chromites from fossil meteorites and shock melt veins and matrix of highly shocked (S6) L chondrites were studied using Raman spectroscopy.

Caplan C. E. Huss G. R. Schmitz B. Nagashima K. ***POSTER LOCATION #84***
Oxygen-Isotope Analysis of Extraterrestrial Chromite Grains from the Lynna River, Russia **[#2269]**
We measured O isotopes in extraterrestrial chromite from sediments along the Lynna River to investigate the types of meteorites falling in the Ordovician.

Heck P. R. Schmitz B. Rout S. S. Tenner T. Villalon K. et al. ***POSTER LOCATION #85***
The Composition of the Flux of Micrometeorites after the L-Chondrite Parent Body Breakup ~470 Ma Ago: ≤1% H Chondritic, ≥99% L Chondritic **[#1191]**
We searched for H-chondritic micrometeorites in ~470 Ma old limestone that is highly abundant in L-chondritic material. We analyzed O isotopes with SIMS.

Schmieder M. Kring D. A. Swindle T. D. Carter-Bond J. C. Moore C. B. ***POSTER LOCATION #86***
The Gao-Guenie (Burkina Faso) Impact Melt Breccia — A Piece of an Impact Melt Injection Dike on an H-Chondrite Asteroid **[#1239]**
The Gao-Guenie impact melt breccia is interpreted in terms of its petrology and cooling rates as a sample from an impact melt dike on a H-chondrite asteroid.

Schmieder M. Shaulis B. J. Kring D. A. ***POSTER LOCATION #87***
Larkman Nunatak 06507 — Insights into the Impact Melting of Carbonaceous Chondrites **[#1646]**
Antarctic meteorite Larkman Nunatak 06507, listed as an LL-impact melt breccia, is here classified as a brecciated and shock-melt-veined CK-chondrite.

Moreau J. Kohout T. Wünnemann K. ***POSTER LOCATION #88***
Shock-Darkening in Ordinary Chondrites: Pressure-Temperature p-T Conditions Study by Impact Modelling **[#1349]**
To study shock-darkening in ordinary chondrites, we use the shock physics code iSALE (Wünnemann, 2006) using mesoscale modelling with appropriate materials.

Phelps P. R. Schmieder M. Kring D. A. ***POSTER LOCATION #89***
LL-Chondrite Dominion Range 10092: A Shock-Metamorphosed Sample from an Impact-Modified Asteroid **[#1698]**
Thought to have undergone impact melting, a different split of the meteorite shows contrasting metamorphic conditions.

Bryson K. L. Ostrowski D. R. ***POSTER LOCATION #90***
Meteorite Fractures and Scaling for Atmospheric Entry **[#2619]**
To model objects entering the atmosphere we must know their internal structure and methods of fragmentation. We work to determine a scaling factor for fracturing.

Welten K. C. Caffee M. W. Nishiizumi K. ***POSTER LOCATION #91***
The Complex Cosmic Ray Exposure History of Jesenice (L6): Possible Evidence for Ejection from Parent Body by Tidal Disruption or YORP Related Effects **[#2924]**
Chondrites with complex CRE histories may provide clues on ejection mechanism, either by impacts on asteroid or by tidal disruption or YORP-related effects.

Meier M. M. M. Bindi L. Busemann H. Heck P. R. Neander A. I. et al. ***POSTER LOCATION #92***
Cosmic-Ray Exposure and Shock Degassing Ages of the Quasicrystal-Bearing Khatyrka Meteorite **[#1226]**
We have measured the He, Ne content of six forsteritic olivine grains from the quasicrystal-bearing CV chondrite Khatyrka to reconstruct its cosmic history.

Delaney J. S. Turrin B. Lindsay F. N. Park J. Herzog G. F. et al. ***POSTER LOCATION #93***
$^{40}Ar/^{39}Ar$ Ages vs. Meteoroid Depth in Murchison (CM2): A Test of the Solar Heating Hypothesis **[#1569]**
^{40}Ar-^{39}Ar 'ages' of Murchison subsamples show depth-age variation inconsistent with simple solar heating and suggest a role for variable interaction with water.

McAdam M. M. Sunshine J. M. Howard K. T.
McCoy T. J. Alexander C. M. O'D. ***POSTER LOCATION #94***
Finding the Most Primitive Asteroids: Spectral Identification of Amorphous Materials in CO Chondrites **[#2291]**
We present MIR spectral evidence for amorphous silicates in mildly heated COs. We propose using this method to find the most primitive asteroids.

Binzel R. P. DeMeo F. E. Burt B. J. Burbine T. H. Polishook D. ***POSTER LOCATION #95***
Where Do H, L, and LL Chondrites Come From? Tracing Their Source Regions Using Astronomical Tools **[#1352]**
We find the ordinary chondrite stratigraphy in the asteroid belt to be LL, H, L (in increasing heliocentric distance) by tracing near-Earth object sources.