Tuesday, March 22, 2016 [T307]
POSTER SESSION I: TERRESTRIAL CRATERS AND CRATER-LIKE FEATURES
6:00 p.m. Town Center Exhibit Area

Rathbun K. Ukstins Peate I. Drop S. Gutierrez F. ***POSTER LOCATION #127***
A Preliminary Report on the Structure of Monturaqui Crater, Chile **[#2876]**
We present new structural data that show preservation of part of the overturned fold at Monturaqui Crater, Chile.

Rathbun K. Ukstins Peate I. Drop S. Gutierrez F. ***POSTER LOCATION #128***
A New Geologic Map of Monturaqui Meteorite Impact Crater, Chile: Implications for Satellite-Based Geologic Mapping of Small Craters **[#2583]**
A new field-based geologic map has been generated to compare with satellite-based maps to assess the reliability of using remote mapping for small craters.

Gaither T. A. Hagerty J. J. Gullikson A. L. ***POSTER LOCATION #129***
Meteor Crater Impact Melt Formation: Evidence for Carbonate Melting **[#2113]**
We present new compositional data for Meteor Crater impact melt glasses, carbonate inclusions, and metallic inclusions.

Gullikson A. L. Gaither T. A. Villarreal K. A. Hagerty J. J. ***POSTER LOCATION #130***
Lithostratigraphic Analysis of the Meteor Crater Ejecta Blanket **[#1541]**
We have produced cross-sections of the ejecta blanket from four transects to highlight the extent of target rock-projectile mixing and internal structures.

Denton C. A. Kring D. A. ***POSTER LOCATION #131***
Differential Vertical and Radial Displacement Along Faults in the Crater Wall During the Formation of Meteor Crater, AZ **[#1197]**
We collected structural data and remapped faults in the southeast corner of Meteor Crater to determine the types of motion that occurred during formation.

Losiak A. Belcher C. Hudspith V. Zhu M. Bronikowska M. et al. ***POSTER LOCATION #132***
How to Form Charcoal in a Small Impact Crater? A Kaali Crater Case **[#1467]**
100-m impact craters shouldn't cause forest fires. But we have found charcoal in proximal ejecta of Kaali crater. We investigate its formation mechanisms.

Greenberger R. N. Ehlmann B. L. Osinski G. R.
Tornabene L. L. Green R. O. et al. ***POSTER LOCATION #133***
Lithologic Mapping of Impactites from the Haughton Structure, Canada, Using Imaging Spectroscopy **[#1259]**
Imaging spectroscopy is well-suited to mapping heterogeneous samples such as those from impact structures. We map lithologies in impactites from Haughton.

Marion C. L. Osinski G. R. Linnen R. L.
Zylberman W. Rochette P. et al. ***POSTER LOCATION #134***
Textural Evidence for Impact Melt in Drill Core at the Haughton Impact Structure, Nunavut, Canada **[#2173]**
Igneous textures indicative of rapid cooling of a carbonate-silicate melt have been identified in drill core from the Haughton impact structure.

Schedl A. D. Seabolt A. ***POSTER LOCATION #135***
The Challenges of Studying Meteorite Impacts into Carbonate Rocks: Jeptha Knob Kentucky **[#1589]**
Using calcite stress piezometer confirms earlier work showing that Jeptha Knob is an impact structure and shows hydrothermal activity has obscured its origin.

Newman J. D. Osinski G. R. ***POSTER LOCATION #136***
Geological Mapping of the Tunnunik Impact Structure, Victoria Island, Canadian High Arctic **[#1591]**
The first detailed study of the Tunnunik impact structure begins with the creation of a geological map from formation, fault, and impact breccia data.

Brown J. J. Spray J. G. Thompson L. M. ***POSTER LOCATION #137***
Shock Attenuation Within the Manicouagan Impact Structure **[#1996]**
A shock attenuation study of drill core and surface samples is used in iSALE modelling of the Manicouagan impact structure.

Milam K. A. Henderson T. Steinberg R. M. Martin J. ***POSTER LOCATION #138***
Shock Metamorphism of Shatter-Coned Knox Group Dolostones from the Central Uplifts of the Flynn Creek and Wells Creek Impact Structures **[#2504]**
Peak broadening occurs in powder XRD patterns of shatter-coned dolostones from two complex impact craters in mid-continent North America.

Adrian D. R. King D. T. Jr. Ormo J. Petruny L. W. Hagerty J. J. et al. ***POSTER LOCATION #139***
Analysis of Drill Core FC77-1 from the Flynn Creek Impact Structure, Tennessee USA **[#2953]**
The coarsening-upward trends and lack of clast mixing in this Flynn Creek drill core suggest origin by slumping or another non-aqueous depositional mechanism.

MacLagan E. A. Herd C. D. K. Walton E. L. ***POSTER LOCATION #140***
Investigation of Impact Melt Clasts in Allochthonous Crater-Fill Deposits of the Steen River Impact Structure **[#1641]**
A detailed study of the impact melt clasts in the crater-fill breccia of the Steen River Impact Structure.

Mohr-Westheide T. Greshake A. Wirth R. Reimold W. U. ***POSTER LOCATION #141***
Transmission Electron Microscope Studies of Platinum Group Element-Rich Micronuggets in Barberton Spherule Layer Samples **[#1875]**
First results of a TEM study of three submicrometer -sized, primary PGE metal nuggets in Archean spherule layers from the Barberton Greenstone Belt, South Africa.

Nimura T. Ebisuzaki T. Maruyama S. ***POSTER LOCATION #142***
Global Cooling and Mass Extinction at the End of the Cretaceous Period Driven by a Dark Cloud Encounter **[#1345]**
We found the evidence of a dark nebula encounter at the end of the Cretaceous period in pelagic sediment core in the deep sea floor as an iridium-rich layer.

De Marchi L. Hauser N. Reimold W. U. Crósta A. P. Braz L. ***POSTER LOCATION #143***
Geological and Petrographical Characterization of the Polymict Impact Breccia of the Araguainha Dome, Brazil **[#1120]**
We present the results of a detailed geological and petrographical study of the polymict impact breccias of the central uplift of Araguainha Dome.

Mougel B. Moynier F. Koeberl C. Gopel C. ***POSTER LOCATION #144***
Chromium Isotope Evidence in Impact Ejecta for the Nature of the Impactors of the Sudbury and Vredefort Structures **[#2483]**
We present Cr isotope data for impact ejecta related to Sudbury and Vredefort impact events, and discuss the nature of the impators at their origin.

Deseta N. Boonsue S. ***POSTER LOCATION #145***
Shock-Related Textures in the Core of the Central Uplift of the Vredefort Dome: Rapid Compression and Decompression in an Impact Regime **[#2562]**
This study provides a detailed petrological analysis of shock-induced microtextures in impactites from the central uplift of the Vredefort Dome.

Wilks R. P. A. Osinski G. R. ***POSTER LOCATION #146***
Melt Veins at the West Clearwater Impact Structure: In-Situ vs. Injected Melt **[#1570]**
Melt veins by impact / injected or in-situ? / chem to the rescue.

Shankar B. Tornabene L. L. Osinski G. R. Roffey M. Bailey J. M. et al. ***POSTER LOCATION #147***
Automated Lineament Extraction Technique for the Sudbury Impact Structure Using Remote Sensing Datasets — An Update **[#1424]**
This study provides updates on the automated lineament extraction methodology for structural analysis for the Sudbury impact structure.

Shankar B. Tornabene L. L. Osinski G. R. Roffey M. ***POSTER LOCATION #148***
A Comprehensive Study of Structural Features for Several Terrestrial Complex Craters in Canada Using an Automated Extraction Technique **[#1432]**
This is a comprehensive overview on automated lineament extraction methodology for structural analysis around terrestrial complex craters in Canada.

Güldemeister N. Wünnemann K. ***POSTER LOCATION #149***
Quantification of Seismic Signals Generated by Hypervelocity Impacts from Numerical Modeling and Laboratory Experiments **[#1935]**
We quantify seismic signals induced by hypervelocity impacts from numerical models. Therefore, a calibration of numerical material models is required.

Harris R. S. ***POSTER LOCATION #150***
Evidence for an Early Mesozoic Impact in Southeastern North America **[#3049]**
Lamprophyric rocks in east-central Georgia contain xenocrysts exhibiting petrographic evidence of shock metamorphism.

Xie Z. Zuo S. ***POSTER LOCATION #151***
The Occurrences of Taihu Lake Iron-Rich Concretions Indicate Their Formation Relating to Airburst Fallout Deposition Rather than Groundwater Colloidal Deposition **[#2398]**
Describe details of occurrence of Fe-rich concretions in a specific mud layer in Taihu lake. Discuss whether it is related to impact fallout or water deposition.

Albin E. F. Harris R. S. ***POSTER LOCATION #152***
Woodbury Astrobleme: Further Evidence for a Late Proterozoic Impact Structure in West-Central Georgia, USA **[#1398]**
We consider the Woodbury feature to be a deeply eroded peak ring that formed at the center of a 35 to 40 km diameter impact structure.