

**Thursday, March 22, 2018** [R611]  
**POSTER SESSION II: IMPACTS VIII: TERRESTRIAL IMPACT CRATERING**  
**6:00 p.m. Town Center Exhibit Area**

- Dutta A. Raychaudhuri D. Bhattacharya A. **POSTER LOCATION #184**  
[\*The Ramgarh Structure, Rajasthan, India: A Meteorite Impact Crater?\*](#) [#1293]  
 Shock characterization of Ramgarh Structure, India.
- Wang H. N. Chen Y. Shen X. F. Zhou L. Y. Wang Y. W. **POSTER LOCATION #185**  
[\*Shatter Cone and Its Surface Mesh-Structure Formed by Impact Melt-Gasification in Xishan Taihu Lake China\*](#) [#1376]  
 Report investigates a new type of shatter cone discovered recently at Xishan, Taihu, China. Will contribute to the study of formation mechanism of shatter cone.
- Ure A. Westaway R. Bridgland D. R. Demir T. Ernstson K. **POSTER LOCATION #186**  
[\*Impact Hypothesis for the Kas Bay Structure \(Turkey/Greece\) Strengthened\*](#) [#1455]  
 New field and lab work confirm the previously proposed hypothesis of a minimum 10 km-diameter meteorite impact structure at the Turkish/Greek frontier.
- Lobpries T. Lapen T. J. **POSTER LOCATION #187**  
[\*A Potential Impact Site in the Sahara Desert, Niger, Based on Remote Sensing Evidence\*](#) [#1636]  
 Remote sensing of a previously unreported circular feature in Niger, which occurs near a suite of ring plutons, indicates this structure is not an intrusion.
- Ernstson K. Müller W. Gawlik-Wagner A. **POSTER LOCATION #188**  
[\*The Saarlouis Semi Crater Structure: Notable Insight into the Saarland \(Germany\) Meteorite Impact Event Achieved\*](#) [#1876]  
 DTM data, field, and lab work establish a new 2.3 km-diameter meteorite impact crater and suggest a paired impact event in the Saarland (Germany) region.
- Svensson M. J. O. Osinski G. R. Longstaffe F. J. Simpson S. L. **POSTER LOCATION #189**  
[\*Hydrothermal Alteration of Crater Lake Deposits at the Ries Impact Structure, Germany\*](#) [#1370]  
 The hydrothermal alteration in the paleolacustrine deposits of the Ries assessed by mainly clay separations and X-ray diffraction to distinguish clay minerals.
- Neal C. R. Burney D. Kring D. A. Schmieder M. Tikoo S. et al. **POSTER LOCATION #190**  
[\*What Do Platinum Group Elements Reveal About the Formation of the Chicxulub Impact Basin?\*](#) [#2067]  
 PGEs in the transitional layer formed during the Chicxulub impact shows that the impactor can't be identified, and the PGEs have suffered from re-mobilization.
- Verhagen C. M. Tikoo S. M. **POSTER LOCATION #191**  
[\*Magnetism of the Chicxulub Crater Lower Peak Ring\*](#) [#2291]  
 Chicxulub peak ring / Magnetic analysis / Hydrothermal wins?
- Pilles E. A. Osinski G. R. Grieve R. A. F. Tornabene L. L. **POSTER LOCATION #192**  
[\*A Review of Impact Melt and Breccia Dykes in Terrestrial Impact Structures\*](#) [#1994]  
 A comparison of observations of impactite dykes from terrestrial impact structures, considering the varying scales of impact melt rock and lithic breccia dykes.
- Tolometti G. D. Osinski G. R. **POSTER LOCATION #193**  
[\*The Impact Melt Sheet at West Clearwater Impact Structure: A Petrographic and Geochemical Analysis\*](#) [#2083]  
 Investigating the change in textures and geochemistry moving up the impactite stratigraphy at West Clearwater impact structure.

MacLagan E. A. Herd C. D. K. Walton E. L.

**POSTER LOCATION #194**

[\*Hyperspectral Imaging of Drill Core from the Steen River Impact Structure: Implications for the Formation of Melt-Bearing Polymict Impact Breccia\*](#) [#2213]

Visible and infrared hyperspectral data was collected from Steen River drill core, and will be used to constrain an emplacement mechanism for the impact breccia.

Debono L. E. Osinski G. R.

**POSTER LOCATION #195**

[\*Spatial and Geochemical Relationships Between Footwall Granophyre and Sulfide Ni-Cu-PGE Veins, Sudbury Impact Structure, Canada\*](#) [#2369]

This study reflects on data suggesting footwall granophyre veins are associated with the occurrence of sulfide Ni-Cu-PGE veins at the Sudbury impact structure.

O'Connell-Cooper C. D. Spray J. G.

**POSTER LOCATION #196**

[\*Profile of the Differentiated Manicouagan Impact Melt Sheet — Geochemistry, Mineralogy, Petrography, and Isotope Analysis\*](#) [#2843]

Geochemical, mineralogical, petrographical, and isotope profile of the differentiated Manicouagan impact melt sheet, Quebec, Canada.

Wulf G. Kenkmann T.

**POSTER LOCATION #197**

[\*Meteor \(Barringer\) Impact Crater, AZ, USA: Indications for Rampart-Like Ejecta Morphologies?\*](#) [#2619]

Our interpolation results indicate that the ejecta thickness distribution of Meteor Crater shows a weakly pronounced but detectable eroded remnant of a small ejecta rampart.

Grabiec J. G. Schmieder M. Kring D. A.

**POSTER LOCATION #198**

[\*A Petrological Assessment of Shock Deformation in Uplifted Crater Wall Strata of Barringer Meteorite Crater, Arizona\*](#) [#1481]

Barringer Meteorite Crater, AZ, interrupts the Coconino sandstone, which recorded shock deformation in quartz and is petrologically observed and quantified.

Harris R. S. Wright S. P. Jaret S. J.

**POSTER LOCATION #199**

[\*Petrography of a Lenticular Quartz Body Inside Shatter-Coned Schist: Implications for Discussions of Peak Shock Pressures at the Santa Fe Impact Structure, New Mexico\*](#) [#2453]

A quartz body enveloped by shatter cone-bearing schist at the Santa Fe impact structure provides a unique test of the shock pressures associated with the event.

King D. T. Jr. Petruny L. W. Leiphart D.

**POSTER LOCATION #200**

[\*Planar Deformation Features in Quartz Grains from a Deeply Buried, Candidate Impact Structure, Central New York\*](#) [#2589]

Bear Swamp, a candidate marine impact structure in central New York, shows impact evidence in the form of quartz grains that display shock-characteristic PDFs.

King D. T. Jr. Petruny L. W. de Marchi L.

Chinchalkar N. S. Adams M. C.

**POSTER LOCATION #201**

[\*Sub-Crater Breccias, Flynn Creek Impact Structure, Tennessee\*](#) [#2494]

Sub-crater (parautochthonous) breccias occur among horizontally bedded and slightly dipping target strata at depths of up to 300 m beneath Flynn Creek Crater.

de Marchi L. Ormo J. King D. T. Jr. Adrian D. R.

**POSTER LOCATION #202**

[\*Marine Resurge Sequences and Interpreted Processes at Flynn Creek Impact Structure, Tennessee\*](#) [#2323]

Marine resurge sequences within Flynn Creek impact structure, Tennessee, are interpreted here in terms of early modification stage processes.

Petruny L W. King D. T. Jr. **POSTER LOCATION #203**  
[\*Distal Ejecta Particles in Marine Resurge Deposits \(Mooreville Chalk\), Wetumpka Impact Structure, Alabama\*](#) [#2704]

Several kinds of impact-affected grains, including quartz with PFs, PDFs, and toasting, were found in chalky resurge deposits at Wetumpka impact structure, AL.

Harris R. S. Jaret S. J. **POSTER LOCATION #204**  
[\*Cenozoic Impact Stratigraphy of the Southeastern Atlantic Coastal Plain\*](#) [#2859]

We review the evidence for Paleogene impact deposits in the coastal plains of Georgia and the Carolinas.

Newman J. D. Osinski G. R. **POSTER LOCATION #205**  
[\*Investigation of Carbonate-Rich Breccias and Their Emplacement in the Central Uplift of the Decaturville Impact Structure, Missouri\*](#) [#2880]

Diverse breccia samples from a drill core show complex relationships within the central uplift, including evidence for localized carbonate melt.

Webb A. Hood D. R. James P. Ermakov A. Heinrich P. et al. **POSTER LOCATION #206**  
[\*Field Exploration of the Brushy Creek Feature: Possible Impact Structure in Louisiana\*](#) [#1619]

A Ground Penetrating Radar survey was conducted at a potential impact crater in St. Helena Parish, LA.

James P. B. Ermakov A. I. **POSTER LOCATION #207**  
[\*Gravity Anomaly at the Brushy Creek Feature\*](#) [#1512]

A gravimetry field campaign at the Brushy Creek feature in Louisiana provides insight into the open question of its origin (impact or otherwise).

Fox R. Ernstson K. **POSTER LOCATION #208**  
[\*In Honor of Doctor Robert E. Cohenour, the Great Salt Lake Astrobleme \(GSLA\), Revisited\*](#) [#1407]

We report on the revival of a 30 year old hypothesis of a Great Salt Lake astrobleme in the light of modern meteorite impact cratering research.

Waldmann G. Herten F. Hiltl M. Ernstson K. **POSTER LOCATION #209**  
[\*The Enigmatic Niederrhein \(Germany\) Deposit: Evidence of a Middle-Pleistocene Meteorite Impact Strewn Field\*](#) [#1610]

We report on a deposit of a superficial accumulation of alien rocks suggesting a meteoritic origin and a relation with a terrestrial impact event.

Ullmann P. V. Ash R. D. **POSTER LOCATION #210**  
[\*Characterizing the Structure of Diagenetically Phosphatized K/Pg Impact Spherules from Edelman Fossil Park, Mantua Township, New Jersey\*](#) [#2767]

We report the first occurrence of diagenetic phosphatization of impact spherules, recovered from the K/Pg boundary at Edelman Fossil Park in Mantua Township, NJ.

Simpson S. L. Osinski G. R. Longstaffe F. J. Kring D. A. Schmiieder M. et al. **POSTER LOCATION #211**  
[\*Characterization of Impact Glass Alteration and Associated Secondary Clay Mineralogy Through the Upper Chicxulub Peak-Ring\*](#) [#2518]

XRD analyses reveal smectite-group clays are ubiquitous throughout the upper Chicxulub peak-ring breccias; here we investigate the types and sources.