Tuesday, March 22, 2016
IMPACTS: OBSERVATIONS
8:30 a.m. Waterway Ballroom 5

Chairs: Catherine Neish
Kirby Runyon

8:30 a.m.

The Tectonic Inventory of Small Complex Impact Structures: A Case Study at Jebel Waqf as Suwwan, Jordan  [#1299]
Our structural analysis showed that impact obliquity affects crater modification from the center to the rim. Buckling of the ring syncline is a novel feature.

8:45 a.m.

Sharpton V. L.  *  Lalor E.  Mouginis-Mark P. M.
Reconstructing Excavation Cavity Shapes from Anomalous Rim Height Variations in Fresh Lunar Craters  [#1115]
Rim crest range and height characteristics provide clues to reconstructing the shapes of excavation cavities in fresh lunar craters.

9:00 a.m.

Neish C. D.  *  Herrick R. R.  Smith D.  Ripper R.  Lashley J.
The Role of Pre-Impact Topography in Impact Melt Emplacement on Terrestrial Planets  [#1520]
Lazy impact melts / Find path of least resistance / Over rim crest low.

9:15 a.m.

Plescia J. B.  *  Baloga S. M.
Rheology of Lunar Impact Melt Flows  [#2585]
Estimates of impact melt rheology suggest significant variations in rheology, perhaps indicative of varying energy partitioning into melt and disruption.

9:30 a.m.

Kenny G. G.  *  Whitehouse M. J.  Kamber B. S.
Differentiated Impact Melt Sheets May Be a Potential Source of the Hadean Detrital Zircon Population  [#2473]
Impact melt sheet differentiation, strongest in the presence of a hydrosphere, was likely a major source of the Hadean zircons, not plate tectonic interactions.

9:45 a.m.

Young K. E.  *  Mercer C. M.  Hodges K. V.  van Soest M. C.  Osinski G.  et al.
Developing a Strategy for Geochronologic Sampling of the South Pole-Aitken Basin Based on Experiences with Low-Temperature Thermochronology of Terrestrial Craters  [#1754]
We discuss a sampling strategy for dating the South Pole-Aitken Basin based on the low-temperature thermochronology of a terrestrial analog crater.

10:00 a.m.

O'Connell-Cooper C. D.  *  Dickin A. P.  Spray J. G.
The Manicouagan Impact Melt Sheet: Identification of Protoliths and Degree of Initial Mixing and Heterogeneity  [#2259]
Sm-Nd, Rb-Sr, and Pb-Pb isotopes highlight initial homogenization of Manicouagan impact melt and later Rb/Sr fractionation, identifies Paleoproterozoic protolith.

10:15 a.m.

Winkler R.  *  Poelchau M. H.  Michalski C.  Kenkmann T.
Subsurface Deformation of Experimental Hypervelocity Impacts in Quartzite and Marble Targets  [#1480]
Impact experiments in quartzite and marble targets reveal a highly localized fracture pattern in quartzite and a more pervasive deformation in marble.

10:30 a.m.

Jaret S. J.  *  Johnson J. R.  Sims M.  Glotch T. D.
Micro-Raman Spectroscopy of Experimentally Shocked Albite  [#1530]
Flat Plate Hit Albite / Resists More Than Andesine / Says Raman Spectra.
10:45 a.m.  Avdellidou C. *  Price M. C.  Delbo M.  Cole M. J.  
*The Effect of Target's Porosity on the Fate of the Impactor in Hypervelocity Collisions*  [#1551]
We investigate the fragmentation, implantation, and final state of the impactor after hypervelocity collisions on targets with different porosities.

11:00 a.m.  Okamoto T. *  Kurosawa K.  Genda H.  Matsui T.  
*Ultra-High-Speed Imaging of the Impact Ejecta:  Comparison with a SPH Simulation*  [#2515]
We conducted impact experiments to investigate the high-speed ejecta from near the impact point, comparing the results with those of SPH simulations.

11:15 a.m.  Aschauer J. *  Kenkmann T.  Rudolf M.  
*Impact Cratering Processes on Slopes Using Analogue Experiments*  [#1350]
The effect of target morphology on the impact cratering process is investigated with a systematic parameter study using analogue experiments on inclined slopes.

11:30 a.m.  Runyon K. D. *  Barnouin O. S.  
*Ejecta Emplacement in the Lab*  [#1075]
Crater ejecta / Laboratory analog / Scour, mix, rock, and roll.