

Monday, September 21, 2015
SUEVITES, GLASSES AND MELT ROCKS
3:15 p.m. Pathology and Anatomy Lecture Hall

Chairs: Gordon Osinski
Natasha Artemieva

- 15:15 Grieve R. A. F. * Osinski G. R. Chanou A.
[*The Suevite Conundrum: A General Perspective*](#) [#1036]
 “Suevites” occur at many terrestrial impact structures. Their various geologic settings argues against a common genesis. In particular, the natures of the Onaping “suevite” and Ries suevite are not equivalent and do not share the same origin.
- 15:45 Stöffler D. *
[*The Suevite Conundrum: New Concepts for the Ries Crater — A Retake*](#) [#1002]
 This invited keynote presentation discusses the new concept for the genesis of suevite in the Ries crater. The concept is based on observations and numerical modeling postulating the temporary presence of a melt pool in the Ries crater.
- 16:15 DISCUSSION
- 16:45 Vålja R. * Kirsimäe K. Koeberl C. Boamah D. K.
[*Devitrification of Impact Glasses at the Bosumtwi Impact Structure, Ghana: Implications for Suevite Cooling History and Presence of Water*](#) [#1009]
 We report petrography and geochemistry of devitrification products in impact glasses in Bosumtwi suevites and we aim for refining the cooling history of suevites and estimate the presence-influence of water on the impact glass devitrification.
- 17:00 Neish C. D. * Herrick R. R. Ripper R. Lashley J.
[*The Role of Pre-Impact Topography in Impact Melt Emplacement on Terrestrial Planets*](#) [#1072]
 Lazy impact melts / Find path of least resistance / Over rim crest low.
- 17:15 Mader M. M. * Osinski G. R.
[*Impactites of the Mistastin Lake Impact Structure, Canada: Insights into Impact Ejecta Emplacement*](#) [#1033]
 A multi-stage model for the origin and emplacement of impact melt rocks and the formation of impact ejecta is proposed for the Mistastin Lake impact structure based on a synthesis of field and petrographic observations.
- 17:30 Reimold W. U. * Wannek D. Hoffmann M. Hansen B. T. Hauser N. Schulz T. Siegert S. Thirlwall M. Zaag P. T. Mohr-Westheide T.
[*Vredefort Pseudotachylitic Breccia and Granophyre \(Impact Melt Rock\): Clues to Their Genesis from New Field, Chemical and Isotopic Investigations*](#) [#1035]
 New field, chemical and isotopic data for occurrences of large-scale pseudotachylitic breccia and Granophyre (Impact melt rock) on the Vredefort Dome are presented.

- 17:45 Deutsch A. * Langenhorst F. Berndt J.
[Trace Element Data help Understanding the Origin of Lake Bosumtwi Crater Related Glass \(Ivory Coast Tektites, Microtektites, Fall-Back Particles, Suevite Glass\) \[#1051\]](#)
We report for the four internally rather homogeneous groups of glass (IVC, IVC-MT, BOT 12 [suevite], FBG) concentrations of major and 42 minor elements (in-situ data with LA-ICP-MS) as well as Sr-Nd, and DEGAS data.
- 18:00 Fritzke B. * Götze J. Lange J.-M.
[Cathodoluminescence of Moldavites \[#1063\]](#)
The present study provides first results of cathodoluminescence microscopy and spectroscopy of moldavites from different occurrences. Also structural defects as luminescence-centers have been characterised.
- 18:15 DISCUSSION