

Thursday, August 21, 2008
IMPACT EJECTA
8:30 a.m. Hippo Room

Chairs: Joanna Morgan
Axel Hofmann

- 8:30 a.m. Hofmann A. * Reimold W. U. Koeberl C. **[KEYNOTE]**
[A Review of Impact Spherule Layers in the Barberton Greenstone Belt](#) [#3105]
 In the Barberton greenstone belt, four specific spherule horizons, named S1 to S4, have been proposed as being of impact origin.
- 9:00 a.m. Morgan J. V. * Artemieva N. **[KEYNOTE]**
[Chicxulub Distal Ejecta: Modeling Versus Observations](#) [#3016]
 We investigate the formation of the K-P layer through numerical modeling. A subset of our models replicate the observational data reasonably well, and suggest that non-ballistic ejection is required for shocked minerals to reach distal sites.
- 9:30 a.m. de Niem D. *
[Models of an Ejecta Curtain](#) [#3055]
 I develop an analytical model for the density distribution in an evolving ejecta curtain. This will be compared to two-fluid (dust + gas) simulations.
- 9:45 a.m. Goldin T. J. * Melosh H. J.
[Thermal Radiation from Atmospheric Reentry of Chicxulub Ejecta](#) [#3114]
 The discorty of soot within the K/T boundary sequence led to the hypothesis that thermal radiation from the atmospheric reentry of hypervelocity impact ejecta was sufficient to ignite global wildfires.
- 10:00 a.m. BREAK
- 10:30 a.m. Schmieder M. * Buchner E.
[Can Impact Ejecta Survive Fluvial Reworking?](#) [#3006]
 In contrast to impact ejecta reworked by marine and glacial processes, fluvial reworking is sparsely mentioned in the literature. This is the first report of impact ejecta that show evidence for multiple fluvial reworking.
- 10:45 a.m. Addison W. D. * Brumpton G. R. Fralick P. W. Kissin S. A.
[Sudbury Impact Ejecta Features in Base Surge Debrisites North of Lake Superior, Ontario, Canada](#) [#3007]
 Ejecta-bearing debrisites from the 1850 Ma Sudbury impact are described from eight base surge deposits north of Lake Superior. Despite being deposited on stromatolites, evidence suggests that the study area was sub-aerial before, during and after the base surges.
- 11:00 a.m. Wright S. *
[Ejecta Facies at Lonar Crater, India: Inventory of Expected Impactites, Thermal Infrared Spectroscopy, and Implications for Mars](#) [#3099]
 The structure of the Lonar Crater, India ejecta blanket is described along with SEM data and spectroscopy on impactites from a range of shock pressures.
- 11:15 a.m. Bron K. *
[Accretionary Lapilli from the Tookoonooka Impact Event, Australia](#) [#3072]
 The Tookoonooka subsurface impact structure (Queensland, Australia) is located in the lower K, sedimentary Eromanga Basin succession. An ejecta layer identified in drillcore hosts unusual clasts that have been interpreted as accretionary lapilli.

- 11:30 a.m. Warne J. E. * Morrow J. R. Pinto J. A.
[Processes and Products of the Marine Alamo Impact Event, Central Great Basin, Western USA](#) [#3038]
A wide variety of impact processes and resulting products are summarized in the context of genetic depositional realms proposed for the marine, Late Devonian Alamo Impact Event, central Great Basin, western USA.
- 11:45 a.m. Giuli G. * Eeckhout S. G. Cicconi M. R. Koeberl C. Glass B. P. Pratesi G. Paris E.
[North-American Microtektites are More Oxidized Compared to Tektites](#) [#3044]
We studied a group of North-American (NA) microtektites from five DSDP sites by Fe K-edge XANES in order to obtain information on the Fe oxidation state. $\text{Fe}^{3+}/\text{Fe}_{\text{tot}}$ ratios vary from 0 to 45% for NA microtektites, whereas is almost 0 in NA tektites.