

**Tuesday, August 9, 2016**  
**POSTER SESSION: IMPACTS II**  
**5:30 p.m. Poster Area**

Bender Koch C.

[\*New Informations on Impactite Processes from FeNi Metal Spheres\*](#) [#6497]

The morphology and structure of metal spheres from impactite bombs has been studied suggesting that new information can be obtained.

Povenmire H. Davis R.

[\*A Spectacular Dumbbell Shaped Tektite from Houston, Co., GA\*](#) [#6046]

A spectacular dumbbell shaped Georgia tektite found, expanding the known strewn field from south central Georgia.

Jensen E. D. Garde A. A.

[\*Parent Rock and Secondary Structures in Muong Nong-Type Tektites: In-Situ Melting by a Comet Maser?\*](#) [#6065]

Well-preserved primary sedimentary structures and adherent laterite with sintered vents in Muong-Nong tektites show that they are sedimentary rocks that were heated in situ and not ejected.

Hoehnel D. Tagle R. Hofmann A. Reimold W. U. Mohr-Westheide T. Fritz J. Altenberger U.

[\*Micro-XRF Analysis of Archean Spherule Layers and Host Rocks from the CT3 Drill Core, Barberton Greenstone Belt, South Africa\*](#) [#6202]

Spherule layers and host rock samples from the Barberton Greenstone Belt were studied with a  $\mu$ -XRF spectrometer. Elemental distribution maps indicate distinct folding that had been recognized neither by visual inspection nor by petrographic analysis.

Pietrek A. Kenkmann T. Hergarten S.

[\*Understanding the Dynamics of Long Runout Mass Movements of Impact Crater Ejecta Blankets and Landslides Through Morphometric Analysis\*](#) [#6294]

The morphometric study and comparison of longitudinal grooves and ridges on landslide and impact crater ejecta deposits has the aim to determine if a similar formation mechanism can be established.

Skála R. Jonášová Š. Žák K. Ďurišová J. Brachaniec T. Magna T.

[\*A New Moldavite Sub-Strewn Field in Lower Silesia, Poland\*](#) [#6406]

The moldavites found close to Strzegom (Poland) represent the Central European tektites most distant (~475 km) from the source crater, the Ries impact structure. They were redeposited from yet unknown sub-strewn field north of the Sudetic Mountains.

Siegert S. Hecht L.

[\*Geochemical Studies on Suvite from the Ries Crater \(Germany\)\*](#) [#6484]

The chemical composition of suvite from the Ries Crater is heterogeneous and reflects the origin and probably emplacement dynamics of the rock.

King D. T. Jr. Petruny L. W. Cornec J. H. Rochette P. Milham D.

[\*Petrography of some Belize Tektites\*](#) [#6505]

Petrographic analysis of doubly polished thin sections of three Belize tektites in this study shows rare grains of lechatelierite and quartz, plus rare opaque grains. Numerous very small bubbles closely attend some impact-affected quartz grains.

Mížera J. Řanda Z. Kameník J. Klokočník J. Kostelecký J.

[\*Hypothetical Source Crater for Australasian Tektites: Moving from Indochina to Northwest China?\*](#) [#6532]

We argue against the generally accepted hypothetical location of the unknown source crater for Australasian tektites to Indochina, and present a hypothesis of a possible location of the AAT source crater in deserts of NW China.

Giuli G. Pratesi G. Paris E. Cibin G.

[Iron Oxidation State in Fulgurite Glass](#) [#6546]

XAS data of both fulgurite samples are consistent with Fe being mostly divalent, similar to tektite glasses. whereas the unmolten sand enclosed in the tube fulgurite does not show any sign of reduction, Fe being mostly trivalent in the sand.

Rochette P. Moustard F. Devouard B. Cornec J. King Jr. D. T. Milham D. Andrieu C.

[Expanding the Belize Glass Field, in the Physical, Chemical and Geographic Spaces](#) [#6216]

We present distribution of physical properties (magnetism, porosity, size) and chemical composition of Belize glass. We also explore extension of the strewfield into Guatemala.

Maziviero M. V. Crósta A. P. Hauser N. Góes A. M. Vasconcelos M. A. R. Dias A. N. Reimold W. U.

[Dating the Araguainha Impact Structure with Thermochronologic Methods](#) [#6493]

We have employed fission track and (U-Th)/He methods to test their applicability to obtain ages for the Araguainha (40 km diameter) impact structure, for comparison with the ages previously obtained.

Holm-Alwmark S. Alwmark C. Lindström S. Ferrière L. Scherstén A. Masaitis V. L.

Mashchak M. S. Naumov M. V.

[An Early Jurassic  \$^{40}\text{Ar}/^{39}\text{Ar}\$  Age for the Puchezh-Katunki Impact Structure \(Russia\) — No Causal Link to an Extinction Event](#) [#6171]

We propose a revised age of  $192.0 \pm 0.8$  Ma for the formation of the Puchezh-Katunki impact structure, Russia, based on  $^{40}\text{Ar}/^{39}\text{Ar}$  step-heating analyses of five impact melt rock samples. This age does not correlate with any known extinction event.

Cohen B. E. Mark D. F. Lee M. R. Simpson S. L.

[A revised  \$^{40}\text{Ar}/^{39}\text{Ar}\$  Age for the Rochechouart Impact Structure: Not Coincident with the Triassic-Jurassic Boundary](#) [#6172]

Our high precision age for Rochechouart structure shows that this impact event predates the Triassic/Jurassic boundary.

Kring D. A. Shaulis B. J. Schmieder M. Lapen T. J.

[U-Th-Pb Systematics in Zircon and Apatite from the Chicxulub Crater, Mexico](#) [#6308]

We probe the U-Th-Pb systematics in zircon and apatite to determine if post-impact hydrothermal activity produced discernible effects that are related to the duration, thermal evolution, and chemistry of the hydrothermal system.

Jaret S. J. Hemming S. R. Rasbury E. T. Glotch T. D. Thompson L. M.

[An Assessment of Shock- and Impact-Resetting of Argon Ages at the Manicouagan Impact Structure, Canada](#) [#6468]

$^{40}\text{Ar}/^{39}\text{Ar}$  argon analyses of shocked feldspars from Manicouagan show that maskelynite is partially reset and yields an age that reflects neither the impact nor the target age.

Schwarz W. H. Breutmann G. Schmitt A. K. Trieloff M. Ludwig T. Hanel M. Buchner E.

Schmieder M. Pesonen L. J. Moilanen J.

[U/Pb Dating of Zircon from the Suvasvesi Impact Structures, Finland](#) [#6297]

The two Suvasvesi impact structures (Finland), both covered by lakes, forming an apparent crater doublet, were analysed by in-situ U/Pb dating of zircon grains, concluding that the two craters were formed in separate events, ~600 Ma apart.

Buchner E. Schmieder M.

[Discovery of Possible Meteoritic Matter on Shatter Cones — 2. Clearwater East Impact Structure, Québec, Canada](#) [#6028]

In the frame of the “Shatter Cone Coatings Project”, we investigated shatter cones from the Clearwater East impact structure that contain several Fe-Ni-Co metal and metal oxide particles (kamacite and taenite) and a sulfide particle (troilite?).

Schmieder M. Buchner E.

[Discovery of Possible Meteoritic Matter on Shatter Cones — 3. Marquez Dome, Texas, USA](#) [#6029]

In the frame of the “Shatter Cone Coatings Project,” we investigated shatter cones from the Marquez Dome impact structure that contain Fe-Ni-Co particles (kamacite); the composition of a Fe-sulfide particle suggests the particle is troilite.

Garde A. A. Klausen M. B.

[The Vredefort Pseudotachylytes: A Centennial Reappraisal of S. J. Shand \(1916\). Shaken, not Stirred by Meteorite Impacting](#) [#6063]

The famous pseudotachylytes in the Vredefort Dome were formed by impact-induced seismic shaking, a common but overlooked deformation process in terrestrial cratering. Seismic shaking is a fundamental geophysical process and well-known from the moon.

Sahoui R. Belhai D.

[Impact Metamorphism of Sandstones at Amguid Crater, Algeria](#) [#6106]

Amguid is a 450 m diameter sample crater; it is emplaced in Lower Devonian sandstones. We have carried out a petrographic study in order to investigate shock effects recorded in these sandstones and define shock stages in Amguid.

El Kerni H. Chennaoui Aoudjehane H. Marjanac T.

[The Agoudal \(High Atlas Mountains, Morocco\) Shattered Limestone: Petrographical and Geochemical Studies and Additional Evidence of Impact](#) [#6110]

Agoudal impact structure shattered limestone and breccia are well studied and described using petrographical observations and geochemical analyses, and a new discovery of the magnesiowustite mineral as a further evidence of impact event.

Poesges G. A.

[First Description of Genuine Shatter Cones in Upper Jurassic Limestone Clasts from the Bunte Breccia Impactites of the Ries Crater](#) [#6252]

The Ries crater produced a wealth of lithologies that host shatter cones. This study reviews the occurrence of shatter cones in the Ries crater and reports the first finds of shatter cones in Upper Jurassic limestone clasts within the Bunte Breccia.

Yin F. Chen M.

[Shocked Amphibole at the Xiuyan Crater, China](#) [#6048]

This abstract introduced shock metamorphic features of the amphiboles under different shock stages in the Xiuyan crater, China.

Simms M. J.

[A Buried Precambrian Impact Crater in Scotland](#) [#6090]

Field evidence indicates that the source of the Stac Fada impact deposit (Mesoproterozoic) in NW Scotland was to the east, and that the now buried crater is represented by the 40+ km diameter Lairg Gravity Low.