

**GSA 2009 Annual Meeting**  
**Faculty and Student Submissions**

**Sunday, October 18<sup>th</sup>**

**Session No. 32 - Paper No. 32-13**

Paleontology: Paleoenvironments, Paleocommunities, Biogeography & Biostratigraphy (Posters)

**Josh Bonde, Presenting** (David Varrichio, and Frankie Jackson, Co-Authors)

A NEW DINOSAUR ASSEMBLAGE FROM THE LOWER CRETACEOUS (ALBIAN) OF SOUTHERN NEVADA

[Abstract](#)

**Sunday, October 18: 9:00am – 6:00pm**

Oregon Convention Center: Hall A

**Session No. 32 - Paper No. 32-15**

Paleontology: Paleoenvironments, Paleocommunities, Biogeography & Biostratigraphy (Posters)

**Aubrey Shirk, Presenting** (Josh Bonde, Peter Druschke, and Richard Hilton, Co-Authors)

TWO DISTINCT FROG DEATH ASSEMBLAGES FROM THE SHEEP PASS FORMATION (MAASTRICHTIAN-EOCENE), EAST-CENTRAL NEVADA

[Abstract](#)

**Sunday, October 18: 9:00am – 6:00pm**

Oregon Convention Center: Hall A

**Session No. 40 - Paper No. 40-9**

The Mesozoic and Cenozoic Tectonic Evolution of Northwestern Mexico and the Southwestern United States (Posters)

**Mengesha Beyene, Presenting** (Michael Wells, Thomas Hoisch, Jeff Vervoort, Sheena Styger, and Terry Spell, Co-Authors)

JURASSIC SHORTENING AND EPISODIC EXTENSION IN THE FUNERAL MOUNTAINS CORE COMPLEX, DEATH VALLEY, SOUTHEASTERN CALIFORNIA

[Abstract](#)

**Sunday, October 18: 9:00am – 6:00pm**

Oregon Convention Center: Hall A

**Session No. 1 - Paper No. 1-7**

Economic Geology I: Copper and Gold Transport in Crustal Fluids: New Advances from Field, Experimental, and Theoretical Studies; Magmatic Sulfide Ores; Porphyry Cu-Mo Ores; S Isotopes

**Adam Simon, Co-Author** (Mark Frank, Presenting; Thomas Pettke, Philip Candela, Philip Piccoli, and Christoph Heinrich, Co-Authors)

GOLD AND COPPER PARTITIONING IN SULFUR-BEARING VAPOR-BRINE-MELT SYSTEMS AT 800 °C AND 100 MPA

[Abstract](#)

**Sunday, October 18: 10:00 – 10:15am**

Oregon Convention Center: D137/138

**Session No. 61 - Paper No. 61-6**

Neoproterozoic through Cretaceous Evolution of the North American Cordilleran Margin: Contrasting Tectonics, Paleogeography, and Paleoenvironments

**Wanda Taylor, Co-Author** (Patricia Cashman, Presenting; James Trexler, Vladimir Davydov, and Walter Snyder, Co-Authors)

LATE PALEOZOIC CONTRACTIONAL TECTONICS ON THE WESTERN LAURENTIAN MARGIN: A PROGRESS REPORT

[Abstract](#)

**Sunday, October 18: 3:00 – 3:15pm**

Oregon Convention Center: B110/111/112

**Session No. 56 - Paper No. 56-6**

Paleoseismology, Arid-Region Soils, and Quaternary Geology: A Tribute to Michael Machette's 35 Years of Quaternary Research

**Brenda Buck, Co-Author** (Bruce Harrison, Presenting; Doug Merkler, and Leon Lato, Co-Authors)

CORRELATION AND RELATIVE DATING OF FAN SURFACES IN DEATH VALLEY USING SOIL PROPERTIES

[Abstract](#)

**Sunday, October 18: 3:00 – 3:15pm**

Oregon Convention Center: B114/115

**Session No. 56 - Paper No. 56-7**

Paleoseismology, Arid-Region Soils, and Quaternary Geology: A Tribute to Michael Machette's 35 Years of Quaternary Research

**Brenda Buck, Co-Author** (Amy Brock, Presenting)

GEOMORPHIC AND PALEOENVIRONMENTAL INTERPRETATIONS OF THE STAGE VI  
PETROCALCIC HORIZONS OF MORMON MESA, NEVADA, USA

[Abstract](#)

**Sunday, October 18: 3:15 – 3:30pm**

Oregon Convention Center: B114/115

**Monday, October 19<sup>th</sup>**

**Session No. 85 - Paper No. 85-3**

Advances in Understanding Metamorphic Processes: Nanoscale to Nappes I

**Michael Wells, Co-Author** (Eric Kelly, Presenting; Thomas Hoisch, Co-Author)

DISEQUILIBRIUM CRYSTALLIZATION OF GARNET CORES FOLLOWED BY EQUILIBRIUM RIM  
GROWTH: IMPLICATIONS FOR DETERMINING PRESSURE-TEMPERATURE PATHS, ALBION  
MOUNTAINS, IDAHO

[Abstract](#)

**Monday, October 19: 8:35 – 8:50am**

Oregon Convention Center: E143/144

**Session No. 135 - Paper No. 135-9**

Impact Cratering in the Solar System: Implications for Planetary Ages and Processes

**Audrey Rager, Presenting** (B.E. Scheu, Eugene Smith, and Donald Dingwell,  
Co-Authors)

THE EFFECT OF WATER CONTENT ON ROCK FRAGMENTATION DURING RAPID  
DECOMPRESSION: PRELIMINARY RESULTS AND POSSIBLE IMPLICATIONS FOR THE  
FORMATION OF FLUIDIZED EJECTA

[Abstract](#)

**Monday, October 19: 4:05 – 4:20pm**

Oregon Convention Center: A106

**Tuesday, October 20<sup>th</sup>**

**Session No. 188 - Paper No. 188-6**

Combining Geophysics and Geology: The George P. Woollard Award Session (Posters)

**Wanda Taylor, Co-Author** (Catherine Snelson, Presenting; Barbara Luke, Co-Author)

SEISMIC HAZARDS IN SOUTHERN NEVADA: WHAT WE HAVE LEARNED FROM CONTROLLED-SOURCE SEISMIC DATA

[Abstract](#)

**Tuesday, October 20: 9:00am – 6:00pm**

Oregon Convention Center: Hall A

**Session No. 178 - Paper No. 178-6**

Toward Integrating Cave and Karst Science (Posters)

**Matt Lachniet, Co-Author** (Victor Polyak, Presenting; Yemane Asmerom, Jessica Rasmussen, and Stephen Burns, Co-Authors)

DRY AND WARM MIDDLE HOLOCENE IN SOUTHWESTERN UNITED STATES FROM SPELEOTHEMS

[Abstract](#)

**Tuesday, October 20: 9:00am – 6:00pm**

Oregon Convention Center: Hall A

**Session No. 155**

Hydrothermal Systems and Volatile Emissions of Volcanic Arcs (*GSA Hydrogeology Division*)

**Adam Simon, Presiding** (with Cynthia Werner, Shaul Hurwitz, and Johan Varekamp)

**Tuesday, October 20: 8:00am – 12:00pm**

Oregon Convention Center: B117/118/119

**Session No. 184 - Paper No. 184-1**

Hydrothermal Systems and Volatile Emissions of Volcanic Arcs (Posters)

**Adam Simon, Presenting** (Kelly Robertson, Eugene Smith, Denise Honn, Alexey Kiryukhin, and Oleg Selyangin, Co-Authors)

VOLCANICALLY POWERED GEO/HYDROTHERMAL SYSTEMS: A CASE STUDY AT MUTNOVSKY VOLCANO, KAMCHATKA

[Abstract](#)

**Tuesday, October 20: 9:00am – 6:00pm**

Oregon Convention Center: Hall A

**Session No. 184 - Paper No. 184-8**

Hydrothermal Systems and Volatile Emissions of Volcanic Arcs (Posters)

**Kelly Robertson, Presenting** (Adam Simon, Oleg Selyangin, Lindsey Clark, Sean Mulcahy, and Eugene Smith, Co-Authors)

GEO THERMOMETRY OF MUTNOVSKY VOLCANO, RUSSIA, AND IMPLICATIONS FOR MAGMATIC EVOLUTION

[Abstract](#)

**Tuesday, October 20: 9:00am – 6:00pm**

Oregon Convention Center: Hall A

**Session No. 204 - Paper No. 204-5**

Magmas and Volatiles: Linking Granites, Volcanoes, Geothermal Systems, and Mineral Deposits II

**Jean Cline, Presenting** (John Muntean, Anthony Longo, and Adam Simon, Co-Authors)

ORIGIN OF CARLIN-TYPE GOLD DEPOSITS

[Abstract](#)

**Tuesday, October 20: 2:35 – 2:50pm**

Oregon Convention Center: E143/144

**Wednesday, October 21<sup>st</sup>**

**Session No. 231**

New Developments in Understanding the Mesozoic Cordilleran Orogen: Linking Forearc, Arc, and Backarc Processes (GSA Structural Geology and Tectonics Division; GSA Sedimentary Geology Division; GSA Geophysics Division)

**Michael Wells, Presiding** (with Mihai Ducea)

**Wednesday, October 21: 8:00am – 12:00pm**

Oregon Convention Center: A107/108/109

**Session No. 231 - Paper No. 231-4**

New Developments in Understanding the Mesozoic Cordilleran Orogen: Linking Forearc, Arc, and Backarc Processes

**Michael Wells, Presenting** (Thomas Hoisch, Alicia Cruz-Urbe, and Jeff Vervoort, Co-Authors)

GEODYNAMICS OF SYNCONVERGENT EXTENSION AND TECTONIC MODE SWITCHING: CONSTRAINTS FROM THE SEVIER-LARAMIDE OROGEN

[Abstract](#)

**Wednesday, October 21: 8:55 – 9:10am**

Oregon Convention Center: A107/108/109

**Session No. 263**

Economic Geology II: Metamorphic, Granite Sn-Ta Associated, Coeur D'Alene Ag, Carlin Au, Epithermal, MVT, U, and Industrial Minerals

**Anthony Longo, Presiding** (with Robert Creaser)

**Wednesday, October 21: 1:30 – 5:30pm**

Oregon Convention Center: D137/138

**Session No. 263 - Paper No. 263-6**

Economic Geology II: Metamorphic, Granite Sn-Ta Associated, Coeur D'Alene Ag, Carlin Au, Epithermal, MVT, U, and Industrial Minerals

**Jean Cline and Anthony Longo, Co-Authors** (John Muntean, Presenting; Michael Cassinerio, Greg Arehart, and Kenneth Hickey, Co-Authors)

FLUID PATHWAYS AT THE TURQUOISE RIDGE CARLIN-TYPE GOLD DEPOSIT, GETCHELL DISTRICT, NEVADA

[Abstract](#)

**Wednesday, October 21: 2:45 – 3:00pm**

Oregon Convention Center: D137/138

**Session No. 263 - Paper No. 263-7**

Economic Geology II: Metamorphic, Granite Sn-Ta Associated, Coeur D'Alene Ag, Carlin Au, Epithermal, MVT, U, and Industrial Minerals

**Anthony Longo, Presenting** (Jean Cline, and John Muntean, Co-Authors)

TRACKING EVOLVING ORE FLUIDS WITH PYRITE IN CARLIN-TYPE GOLD DEPOSITS AT THE TURQUOISE RIDGE MINE, GETCHELL, NEVADA

[Abstract](#)

**Wednesday, October 21: 3:15 – 3:30pm**

Oregon Convention Center: D137/138

**Session No. 267 - Paper No. 267-9**

Stratigraphy: A Global Perspective

**Adam Zeiza, Presenting**

FORMATION OF CARBONATE CYCLES AND STACKING PATTERNS IN THE LATE CAMBRIAN CARBONATE PLATFORM, CENTRAL NEVADA AND WESTERN UTAH

[Abstract](#)

**Wednesday, October 21: 3:50 – 4:05pm**

Oregon Convention Center: E145

**Session No. 267 - Paper No. 267-13**

Stratigraphy: A Global Perspective

**Ganqing Jiang, Co-Author** (Ryan McKenzie, Presenting; Nigel Hughes, Paul Myrow, Noah Planavsky, and Shuhai Xiao, Co-Authors)

PRELIMINARY CHRONOSTRATIGRAPHIC CONSTRAINTS ON PROTEROZOIC SUCCESSIONS OF THE INNER LESSER HIMALAYAN SEDIMENTARY BELT OF NORTH INDIA

[Abstract](#)

**Wednesday, October 21: 4:50 – 5:05pm**

Oregon Convention Center: E145