

## Selected Highlight 2014 Publications of CSU Geosciences

*CSU Faculty, students, and staff indicated in **bold**. Student authors are indicated with asterisks.*

Carbon storage in mountainous headwater streams: the role of old-growth forest and logjams.

**N. Beckman\***, **E. Wohl**

*Water Resources Research*, 50, 2376-2393, DOI: 10.1002/2013WR014167, 2014.

The crustal thickness of West Antarctica

J. Chaput\*, **R.C. Aster**, **A. Huerta**, X. Sun, A. Lloyd\*, D. Wiens, A. Nyblade, S.

Anandakrishnan, J.P. Winberry, T. Wilson

*Journal of Geophysical Research*, 119, 10.1002/2013JB010642, 2014.

Traces in the dark – Sedimentary processes and facies gradients in the Upper Devonian – Lower Mississippian Upper Bakken Shale Member of the Bakken Formation, Williston basin, USA – Reply. **S. Egenhoff**, N. Fishman

*Journal of Sedimentary Research*, 84, 839-841, 2014.

The role of mudstone baffles in controlling fluid pathways in a fluvial sandstone: a study in the Pennsylvanian-Permian Fountain Formation, Northern Colorado, U.S.A.

**I.M. Hogan\***, **S.J. Sutton**

*Journal of Sedimentary Research*, 84, 1064-1078, 10.2110/jsr.2014.81, 2014.

Geophysical constraints on deep weathering and water storage potential in the Southern Sierra Critical Zone Observatory

W.S. Holbrook, C.S. Riebe, J. Hayes, **D. Harry**, K. Reeder, A. Malazian, A. Dosseto, B. Jessup, P. Hartsough, and J. Hopmans,

*Earth Surface Processes and Landforms*, 39, 366-380, 10.1002/esp.3502, 2014.

Adakites in the Truong Son and Loei fold belts, Thailand and Laos: genesis and implications for geodynamics and metallogeny

T. Kamvong, K. Zaw, S. Meffre, R. Maas, **H. Stein**, C.-K. Lai

*Gondwana Research*, 26, 165-184, <http://dx.doi.org/10.1016/j.gr.2013.06.011>, 2014.

[[www.airieprogram.org](http://www.airieprogram.org)].

Estimating fluvial wood discharge using timelapse photography with varying sampling intervals.

**N. Kramer\***, **E. Wohl**

*Earth Surface Processes and Landforms*, 39, 844-852, DOI: 10.1002/esp.3540, 2014.

Seismic tomography of the Colorado Rocky Mountains upper mantle from CREST:

Lithosphere–asthenosphere interactions and mantle support of topography

J.K. MacCarthy\*, **R.C. Aster**, K. Dueker, S. Hansen, B. Schmandt, K. Karlstrom

*Earth and Planetary Science Letters*, 402, 107-119, 2014.

Improved oxygen isotope temperature calibrations for cosmopolitan benthic foraminifera  
T.M. Marchitto, W.B. Curry, J. Lynch-Stieglitz, **S.P. Bryan**, K.M. Cobb, D.C. Lund  
*Geochimica et Cosmochimica Acta*, 130, 1-11

Antarctic icequakes triggered by the 2010 Maule earthquake in Chile  
Z. Peng, J.I. Walter, **R.C. Aster**, A. Nyblade, D.A. Wiens, S. Anandakrishnan  
*Nature Geoscience*, 7, 677–681, 10.1038/ngeo2212, 2014.

Dating and Tracing the History of Ore Formation

**H.J. Stein**

*Treatise on Geochemistry*, H.D. Holland, K.K. Turekian (eds.), Second edition, Oxford: Elsevier, 13, 87-118, <http://dx.doi.org/10.1016/B978-0-08-095975-7.01104-9>, 2014.  
[www.airieprogram.org].

Rhenium-Osmium geochronology – sulfides, shales, oils, and mantle

**H. Stein, J. Hannah**

*Earth Sciences Series, Encyclopedia of Scientific Dating Methods*, J. Rink, J. Thompson (eds.), Springer, 25 p, 2014, DOI 10.1007/978-94-007-6326-5\_36-1, 2014.  
[www.airieprogram.org].

A geomorphic classification of ephemeral channels in a mountainous, arid region, southwestern Arizona, USA.

**N.A. Sutfin\***, J. Shaw, **E. Wohl**, D. Cooper

*Geomorphology*, 221, 164-175, [doi:10.1016/j.geomorph.2014.06.005](https://doi.org/10.1016/j.geomorph.2014.06.005), 2014.

Re-Os age and depositional environment for black shales from the Cambrian-Ordovician boundary, Green Point, western Newfoundland

**G.R. Tripathy, J.L. Hannah, H.J. Stein, G. Yang**

*Geochemistry, Geophysics, Geosystems*, 15, 1021-1037, doi: 10.1002/2013GC005217, 2014.  
[www.airieprogram.org].

Evidence for exsolution of Au-ore fluids from granites crystallized in the mid-crust, Archean Louis Lake Batholith, Wyoming.

**E. Vaughn\*** and **J. Ridley**

*Special Publication Geological Society*, 402, 103-120, 2014.

*Showcasing Geologic Resources Inventory Digital Map Products: Grand Canyon National Park*

**D. Witt, J. Chappell, S. O'Meara**, R. Karpilo, 2014.

[Geological Resources Inventory Group;

[http://ngmdb.usgs.gov/Info/dmt/docs/DMT14\\_Witt.pdf](http://ngmdb.usgs.gov/Info/dmt/docs/DMT14_Witt.pdf)].

Cause of Upper Triassic climate crisis revealed by Re-Os geochemistry of Boreal black shales

**G. Xu, J.L. Hannah, H.J. Stein**, A. Mørk, J.O. Vigran, B. Bingen, **D. Schutt**, B.A. Lundschiem  
*Palaeogeography, Palaeoclimatology, Palaeoecology*, 395, 222-232,

[doi.org/10.1016/j.epsl.2009.10.022](https://doi.org/10.1016/j.epsl.2009.10.022), 2014.

[www.airieprogram.org].

Results of pilot Re-Os dating of sulfides from the Sukhoi Log and Olympiada orogenic gold deposits, Russia

A. Yakubchuk, **H. Stein**, A. Wilde

*Ore Geology Reviews*, 59, 21-28, <http://dx.doi.org/10.1016/j.oregeorev.2013.12.003>, 2014. [www.airieprogram.org].

Re-Os geochronology of the El Salvador porphyry Cu-Mo deposit, Chile: tracking analytical improvements in accuracy and precision over the past decade

**A. Zimmerman**, **H. Stein**, **J.W. Morgan**, **R.J. Markey**, Y. Watanabe

*Geochimica et Cosmochimica Acta*, 131, 13-32, [doi.org/10.1016/j.gca.2014.01.016](http://dx.doi.org/10.1016/j.gca.2014.01.016), 2014. [www.airieprogram.org].