

Geosciences@VT Newsletter

1 September 2014



Archean Long Lake magmatic complex in Beartooth Mountains, MT. This photo shows three chemically distinct magmas mingling together, providing a snapshot of the processes involved in the construction of our continent.

PHOTO (Victor Guevara, PhD candidate, VT Geosciences)

UPCOMING EVENTS

Department Seminar, 9/5: *Sedimentary reconstructions of extreme flooding to New York City: Lessons learned from Hurricane Sandy*

- **WHO:** Jon Woodruff (University of Massachusetts). Learn more about Dr. Woodruff and his research [here](#).
- **WHEN:** Friday, August 29, 4:00 pm. Refreshments served at 3:45 pm in the 4th floor lounge.
- **WHERE:** Room 4069, Derring Hall

Department of Geosciences River Day, 9/7

- **DESCRIPTION:** Come join us for a day at the New River near the Blue Ridge fault. More details and sign up sheet [here](#)!
- **WHEN:** Sunday, September 7, 12:00-6:00 pm.
- **WHERE:** Blue Cat on the New, 2800 Wysor Road (Rt. 100S), Draper, VA

ConocoPhillips recruiting session, 9/8-9/9

- **DESCRIPTION:** Aaron Berger and Mark Trees from ConocoPhillips will give an information session and interview students for internships on September 8 and 9. Free pizza at the information session!
- **WHEN:** Monday and Tuesday, September 8-9, Information session on September 8 from 5:30-6:30 pm
- **WHERE:** Room 4069, Derring Hall (information session), location of interviews TBD

NEWS AND ANNOUNCEMENTS

- **Rick Law** is giving an invited keynote talk on the Himalayan Main Central Thrust at the Himalayan-Karakorum Tibet Workshop in Lucca, Italy.
- The **Paleobiology and Geobiology** research group has a new fossil preparation lab in room 3065A that is near completion. This lab will be equipped to do mechanical preparation with pressurized tools, acid preparation, and molding and casting in order to get fossils in shape for research and display.
- **Geofair and Mineral Sale - CALL FOR PRESENTERS:** The Geofair and Mineral Sale will be taking place on Saturday, October 4 from 10 am to 4 pm at the Museum of Geosciences. This is a charter VT event of the first-ever Virginia Science Festival, which features interactive activities, exhibits, and programs throughout a number of venues on the VT campus. The goal of the Virginia Science festival is to fascinate families from all over the Commonwealth and provide hands-on, interactive inspiration at a time when STEM careers offer the most opportunity for future employment, social, and financial advancement. Our role will be to use museum facilities to educate families about the processes that have (and continue to) shape our planet (and others). Come out and represent VT Geosciences! Contact Llyn Sharp (llyn@vt.edu) for more information, or if you would like to volunteer.

AWARDS, HONORS, AND RESEARCH GRANTS

- **Neal Auchter** received a ConocoPhillips Graduate Fellowship
- **Chelsea Delsack** received a undergraduate research grant from the GSA SE section
- **Hannah King** was awarded a SEG/ExxonMobil Student Education Program travel grant to Denver, CO for the SEG/ExxonMobil Student Education Program annual meeting.
- **Rick Law** was elected Fellow of the Geological Society of America.
- **Emily Lessner** received a scholarship from the NSF to join **Sterling Nesbitt** and **Michelle Stocker** for fieldwork at Ghost Ranch, NM. An additional part of her internship involved posting updates about their fieldwork on twitter as the infamous @hokiesaurus.
- **Lindsay Sabey** won a Student Presentation Award at the Seismological Society of America meeting in Anchorage in late April. She will be honored in an upcoming issue of one of their journals.
- **Michelle Stocker** received a grant from the Jurassic Foundation for her fieldwork examining the tetrapod fauna in the Triassic Chugwater Group of Wyoming
- **Qing Tang** was awarded grants from the Palynological Society and IGCP 587 to support his project on Neoproterozoic paleobiology in North China.
- **Teddy Them** was awarded grants from the SEPM, International Association of Sedimentologists, a ConocoPhillips Graduate Fellowship, and the Make-a-Difference Scholarship from the VT College of Science
- **Brady Ziegler** was awarded 1st place for a VA American Water Works Association scholarship

ALUMNI NEWS:

- We deeply regret that the Geosciences Faculty/Alumni Day scheduled for September 6, 2014, had to be cancelled due to an unusually low response. We are taking this opportunity to evaluate the timing and our marketing efforts for this reunion to determine the reason for this, with a goal of scheduling another gathering in the coming year. We look forward to seeing you back on campus in the future and sharing the many exciting things taking place in the department. As we begin this planning process, we welcome your feedback.
- **Dwight Holland (MS '86 GEOP)**, has been elected as the President of the Aerospace Human Factors Association, and has moved as the Senior Reservist at the USAF Test Pilot School, to the same job at the Warfighter Readiness Research Division in the 711th Human Performance Wing at Wright-Patterson AFB, CA., and is still serving on the Test Pilot School Faculty as an attached instructor there. He teaches skiing at Vail, CO during the XMAS Holidays and Spring break.

VT GEOSCIENCES PUBLICATIONS:

- Ashley, K.T.**, Carlson, W.D., **Law, R.D.**, and **Tracy, R.J.**, 2014, Ti resetting in quartz during dynamic recrystallization: Mechanisms and significance, *American Mineralogist*, DOI: <http://dx.doi.org/10.2138/am-2014-4943>.
- Cortijo, I., Cai, Y., Hua, H., Schiffbauer, J.D., and **Xiao, S.**, 2014, Life history and autecology of an Ediacaran index fossil: Development and dispersal of *Cloudina*: *Gondwana Research*, DOI: 10.1016/j.gr.2014.05.001.
- Dahl, T. W., Boyle, R. A., Canfield, D. E., Connelly, J. N., **Gill, B. C.**, Lenton, T. M., & Bizzarro, M., 2014. Uranium isotopes distinguish two geochemically distinct stages during the later Cambrian SPICE event. *Earth and Planetary Science Letters*, 401, 313–326. doi:10.1016/j.epsl.2014.05.043
- Gibbs, G. V.**, **Ross, N. L.**, Cox, D. F., Rosso, K. M., Iversen, B. B., and Spackman, M. A., 2014, Pauling bond strength, bond length and electron density distribution: *Physics and Chemistry of Minerals*, v. 41, no. 1, p. 17-25.
- King, S.D.** & **C. Adam**, 2014. Hotspot swells revisited, *Phys. Earth Planet. Int.*
- Lamadrid, H. M.**, Lamb, W. M., Santosh, M., and **Bodnar, R. J.**, 2014, Raman spectroscopic characterization of H₂O in CO₂-rich fluid inclusions in granulite facies metamorphic rocks: *Gondwana Research*, v. 26, no. 1, p. 301-310.
- Peng, Y., Bao, H., Pratt, L.M., Kaufman, A.J., Jiang, G., Boyd, D., Wang, Q., Zhou, C., Yuan, X., **Xiao, S.**, and Loyd, S., 2014, Widespread contamination of carbonate-associated sulfate by present-day secondary atmospheric sulfate: Evidence from triple oxygen isotopes: *Geology*, v. 42, p. 815-818.
- Rygel, M.C., Sheldon, E.P., Stimson, M.R., Calder, J.H., **Ashley, K.T.**, and Salg, J., in press, The Pennsylvanian Springhill Mines Formation: Sedimentological framework of a portion of the Joggins Fossil Cliffs UNESCO World Heritage Site. *Atlantic Geology*.
- Samuel H & **S.D. King**, 2014. The combined effect of plate motions and small-scale convection on mantle stirring efficiency, *Nature Geosciences*, 7, 602-605, doi:10.1038/NGEO2208
- Snoke, J. A.**, Warren, L.W., and James, D. E., 2014. High-resolution phase-velocity maps using data from an earthquake recorded at regional distances by a dense broad-band seismic network, *Geophys. J. Int.* 198 (3): 1504–1513 doi:10.1093/gji/ggu215.

Have a picture and short caption, or news that you want to send for next week's newsletter? Email your news items to Victor Guevara at vguevara@vt.edu by Friday, Sept. 5, 2014