

Richard P Fiorella

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EDUCATION

- 2015 Ph.D. (anticipated), Earth and Environmental Sciences, University of Michigan, Ann Arbor, MI
2012 M.S., Earth and Environmental Studies, University of Michigan, Ann Arbor, MI
2009 B.S., Chemistry and B.A. Environmental Studies, University of Pittsburgh, Pittsburgh, PA

PROFESSIONAL POSITIONS

- 2010 Part-time Visiting Faculty, Dept. of Chemistry, University of Pittsburgh

RESEARCH EXPERIENCE

- 2010-present Climate Change Research Lab, University of Michigan
2007-2009 Rosi Materials Research Laboratory, University of Pittsburgh

PUBLICATIONS

Submitted or In Review (1)

- 2015 **Fiorella, R.P.**, Poulsen, C.J., Pillco Zolá, R.S., Jeffery, L.J. and Ehlers, T.A. (*in revision*), Persistent evaporation of central Andean surface waters promotes overestimates of Neogene surface uplift. *Earth and Planetary Science Letters*.

Peer-Reviewed Journals (3)

- 2015 **Fiorella, R.P.**, Poulsen, C.J., Pillco Zolá, R.S., Barnes, J.B., Tabor, C.R. and Ehlers, T.A., Spatiotemporal variability of modern precipitation $\delta^{18}\text{O}$ in the Central Andes and Implications for Paleoclimate and Paleoaltimetry Estimates. *Journal of Geophysical Research - Atmospheres*. doi: 10.1002/2014JD022893.
- 2013 **Fiorella, R.P.** and Poulsen, C.J. Dehumidification over tropical continents reduces climate sensitivity and inhibits snowball Earth initiation. *Journal of Climate*, 26, pp. 9677-9695. doi: 10.1175/JCLI-D-12-00820.1.
- 2009 An, J., **Fiorella, R.P.**, Geib, S.J., and Rosi, N.L. Synthesis, structure, assembly and modulation of the CO₂ adsorption properties of a zinc-adeninate macrocycle. *Journal of the American Chemical Society*, 131(24), pp. 8401-8403.

AWARDS AND HONORS

- 2011 National Science Foundation Graduate Research Fellow
- 2010 BP Geosciences Fellowship

GRANTS AND FUNDING

- 2015 Graduate Student Research Fellowship, U. Michigan Biological Station
- 2013 Geological Society of America Graduate Student Research Grant
Scott Turner Award, U. Michigan Dept. of Earth and Environmental Sciences
- 2012 Rackham Graduate School Graduate Student Research Grant, U. Michigan
Scott Turner Award, U. Michigan Dept. of Earth and Environmental Sciences
Rackham International Research Award, U. Michigan
- 2011 Scott Turner Award, U. Michigan Dept. of Earth and Environmental Sciences
Rackham Graduate School Graduate Student Research Grant, U. Michigan

INVITED TALKS

- 2015 University of Utah, Department of Geology and Geophysics
- 2012 Altiplano Hydrology Conference, Oruro, Bolivia

CONFERENCE ABSTRACTS

- 2015 Sheldon, N.D., **Fiorella, R.P.**, and Domagal-Goldman, S. A Terrestrial Perspective on Archean and Proterozoic Habitability on Earth. In *Astrobiology Science Conference*, Abstract #7546. Chicago, IL. June 15-19. LPI Contribution No. 1842, Lunar and Planetary Institute, Houston.
- 2014 Poulsen, C.J., Feng, R., and **Fiorella, R.P.** The Role of Topography on Continental Water Cycling and Water Stable Isotope Compositions over Geological Time Scales. *Oral Presentation, American Geophysical Union Fall Meeting, San Francisco, CA. December 15-19.*
Fiorella, R.P., Poulsen, C.J., Pillco Zolá, R.S., Jeffery, M.L., and Ehlers, T.A. Incorporating Evaporation Histories into Paleoaltimetry Reconstructions: An Andean Case-Study. *Oral Presentation, Geological Society of America Annual Meeting, Vancouver, BC, Canada. October 19-22.*
Hyland, E.G., **Fiorella, R.P.**, and Sheldon, N.D. Reexamining Causal Mechanisms for the Early Eocene Climatic Optimum. *Oral Presentation, Geological Society of America Annual Meeting, Vancouver, BC, Canada. October 19-22.*
Sheldon, N.D. and **Fiorella, R.P.** Mesoproterozoic Climate – Equability in the Absence of High CO₂. *Goldschmidt Conference, Sacramento, CA. June 8-13.*
- 2013 **Fiorella, R.P.** and Poulsen, C.J. Paleogeographic controls on climate sensitivity and feedback strength and their impacts on snowball Earth initiation. *Poster, AGU Fall Meeting, San Francisco, CA.*
Poulsen, C.J. and **Fiorella, R.P.** Climate sensitivity in the pre-Cenozoic World. *STRATA, série 1, vol. 14. Pre-Cenozoic Climate Workshop, Toulouse, France, 17-19 June.*
- 2012 **Fiorella, R.P.**, Poulsen, C.J., Ehlers, T.A., Jeffery, M.L., and Pillco Zolá, R.S.

- Exceptional isotopic variability in stream waters of the Central Andes: large scale or local controls? *Talk, 2012 AGU Fall Meeting, San Francisco, CA.*
- Link, P., Goldner, A., Whadcoat, S., and **Fiorella, R.P.** Variability of oceanic and terrestrial water vapor sources in the Amazon Basin: An investigation using TES satellite and MERRA reanalysis at varying temporal resolutions. *AGU Chapman Conference on Remote Sensing of the Terrestrial Water Cycle, Kona, HI.*
- 2011 **Fiorella, R.P.**, Poulsen, C.J., Jablonowski, C., and Bitz, C.M. Resistance to Snowball Earth Initiation in the CAM3.1 Slab Ocean Model. *Poster, AGU Fall Meeting, San Francisco, CA.*

TEACHING EXPERIENCE

University of Michigan

- 2013 Fossil and Sustainable Energy: Options and Consequences, Camp Davis Rocky Mountain Field Station
- 2011 Introductory Geology, Camp Davis Rocky Mountain Field Station
Global Change 2: The Sustainability Challenge

University of Pittsburgh

- 2010 General Chemistry
- 2009 Honors Organic Chemistry Laboratory (as an undergraduate)
- 2008 General Chemistry (as an undergraduate)

PROFESSIONAL SERVICE

Reviewer for: *Journal of Hydrology*; *Journal of Geophysical Research-Atmospheres*

DEPARTMENTAL SERVICE

Graduate Student Publications Database Director, Dept. of Earth and Environmental Sciences, University of Michigan

PROFESSIONAL AFFILIATIONS

American Geophysical Union
Geological Society of America
Sigma Xi
Phi Beta Kappa