

# Dr. Lori A. Ziolkowski

## CURRICULUM VITAE

### PERSONAL INFORMATION

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University of South Carolina  
School of the Earth, Ocean and Environment  
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### EDUCATIONAL BACKGROUND

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2009 Ph.D. **University of California Irvine**, Department of Earth System Science  
Thesis title: Radiocarbon of black carbon in marine dissolved organic matter

2000 M.Sc. **Dalhousie University**, Department of Oceanography  
Thesis title: Marine photochemical production of carbon monoxide

1998 B.Sc. **University of Waterloo**, Department of Chemistry

### PROFESSIONAL EXPERIENCE

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7/2013 - present **Assistant Professor**, University of South Carolina  
Joint appt: Dept of Earth and Ocean Sciences & Marine Science Program

10/2009 – 6/2013 **Post-doctoral Fellow**, McMaster University  
Origins Institute and School of Geography and Earth Sciences

2004 – 2009 **Graduate Research Assistant**, University of California Irvine  
Department of Earth System Science

2000 – 2004 **Research Technician**, Dalhousie University  
Department of Oceanography

1998 – 2000 **Graduate Research Assistant**, Dalhousie University  
Department of Oceanography

01/1997 – 08/1997 **Guest Student Investigator**, Woods Hole Oceanographic Institution  
Marine Chemistry and Geochemistry

#### Graduate Advisors:

M.Sc: Dr. William L. Miller, Dalhousie University, *now at* University of Georgia Athens

Ph.D.: Dr. Ellen R.M. Druffel, University of California Irvine

Postdoctoral Advisor: Dr. Gregory F. Slater, McMaster University

### GRANTS and AWARDS (>\$600K raised since arriving at USC in July 2013)

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#### Current:

Baillet Latour Antarctica Fellowship: Radiocarbon estimates of microbial activity and carbon accumulation surrounding the Princess Elisabeth Station (REMACA), funding for two field seasons at the Belgian Antarctic station, Lori Ziolkowski (sole PI), €150,000 12/2016-11/2018. Includes unfunded collaboration with Liane Benning (GFZ Potsdam)

NSF ANS Bioavailability of Arctic Soil Carbon: Examining the Relationship Between Chemical Composition and Lability During the Holocene, Lori Ziolkowski (sole PI), \$336,872, 08/01/2014-07/31/2018

University of South Carolina ASPIRE-I: Are Supraglacial Microbes Consuming Fossil Fuel Derived

Carbon? Lori Ziolkowski (sole PI), \$15,000, 07/01/2016 – 09/30/2017

University of South Carolina ASPIRE-III: Acquisition of Equipment for Preparing Compound Specific Radiocarbon Samples Lori Ziolkowski, Susan Lang and Ronald Benner (Ziolkowski is lead PI), \$76,338, 07/01-2016 – 9/30/2017

**Concluded:**

NSF EAR Early Career: Instrumentation and Technician Support for the Isotopic Analysis of Individual Organic Compounds in the Earth System, Susan Lang (PI), Ronald Benner (co-I) and Lori Ziolkowski (co-I), \$99,934, 05/01/2014 – 04/30/2015

**PUBLICATIONS (Peer reviewed)**

*Web of Science: Cited 394 times. h-index: 13. Average citations per item:20.74. Citation data: 9/15/2017*

*http://www.researcherid.com/rid/C-6752-2012 Google Scholar:566 citations, h-index 14, data accessed: 9/15/2017*

22. Bradford, L.M., **L.A. Ziolkowski**, C. Goad, L.A. Warren, G.F. Slater, Elucidating Carbon Sources Driving Microbial Metabolism During Oils Sands Reclamation, *Journal of Environmental Management*, 188, 246-254, **2017**.
21. Trumbore, S.E., X. Xu, G.Sm Santos, C.I. Czimczik, S.R. Beupre, M.A. Pack, F.M. Hopkins, A. Stills, M. Lupascu, **L.A. Ziolkowski**, Preparation for Radiocarbon Analysis, book chapter in “Radiocarbon and Climate Change”, Springer International, 275-315, **2016**.
20. Druffel, E.R.M, S.R. Beupre, L.A. Ziolkowski, Radiocarbon in the Ocean, book chapter in “Radiocarbon and Climate Change”, Springer International, 139-166, **2016**.
19. Coppola, A.I., **L.A. Ziolkowski**, C. Masiello and E.R.M. Druffel, Aged black carbon in marine sediments and sinking particles, *Geophysical Research Letters*, 41, 7, 2427-2433, **2014**.
18. **Ziolkowski, L.A.**, J. Wierzchos, A.F. Davila and G.F. Slater. Radiocarbon evidence of active endolithic microbial communities in the hyper-arid core of the Atacama Desert. *Astrobiology*, 13(7), 607-616, **2013**.
17. Coppola, A.I., **L.A. Ziolkowski** and E.R.M. Druffel, Extraneous carbon corrections for radiocarbon measurements of black carbon in sediments using the benzene polycarboxylic acid method. *Radiocarbon*. 55 (2-3), 1631-1640, **2013**.
16. **Ziolkowski, L.A.**, N. Mykczynuk, C.R. Omelon, L. Whyte and G.F. Slater, Arctic gypsum endoliths: a biogeochemical characterization of a viable and active microbial gypsum community. *Biogeosciences* 10, 7661-7675, **2013**.
15. Mailloux, B. J., A. Dochenetz, M.E. Bishop, H. Dong, **L.A. Ziolkowski**, K.E. Wommack, E. G. Sakowski, T.C. Onstott and G.F. Slater. A Carbon Free Filter for Collection of Large Volume Samples of Cellular Biomass from Oligotrophic Waters. *Journal of Microbiological Methods*. 90(3) pg 145-151. doi:10.1016/j.mimet.2012.04.016, **2012**.
14. Druffel, K.C., D. Vetter, S.M. Griffin, E.R.M. Druffel, R.B. Dunbar, D.A. Mucciarone, **L.A. Ziolkowski** and J. Sanchez-Cabez, Radiocarbon and stable isotopes in Palmyra corals during the past century, *Geochimica et Cosmochimica Acta*, pg 154-162, 10.1016/j.gca.2010.11.028, **2012**.
13. **Ziolkowski, L.A.**, J. Greaves, A.R. Chamberlin, E.R.M. Druffel. Quantification of black carbon in marine systems using the polycarboxylic acid method: a mechanistic and yield study. *Limnology and Oceanography Methods*, 9, pg 140-149, 2011.
12. Harvey, M.J., C.S. Law, M.J. Smith, J.A. Hall, E.R. Abraham, C.L. Stevens. M.G. Hadfield, D.T. Ho, B. Ward, S.D. Archer, J.M. Caine, K.I. Currie, D.Devries, M.J. Ellwood, P. Hill, G.B. Jones, D. Katz, J. Kuparinen, B. Muscaskill, W. Main, A. Marriner, J. McGregor, C. McNeil, P.J. Minnett, S.D. Nodder, J.Peloquin, S. Pickmere, M.H. Pinkerton, K.A. Safi, R. Thompson, M. Walkington, S.W. Wright and **L.A. Ziolkowski**. The SOLAS air-sea gas exchange experiment (SAGE) 2004, *Deep Sea Research II*, 58(6), pg 753-763, **2011**.

11. **Ziolkowski, L.A.** and E.R.M. Druffel. Aged black carbon identified in marine dissolved organic matter, *Geophysical Research Letters*, 37, L16601, **2010**.
10. Santos, G.M., J. R. Southon, N. J. Drenzek, **L. A. Ziolkowski**, E. R.M. Druffel, X. Xu, D. Zhang, S.E. Trumbore, T.I. Eglinton and K.A. Hughen. Blank assessment for ultra-small samples: chemical extraction and separation vs. AMS, *Radiocarbon*, 52(3), 1322-1335, **2010**.
9. Druffel, E.R.M., D. Zhang, X. Xu, **L.A. Ziolkowski**, J.R. Southon, G.M. Santos, S.E. Trumbore. Compound specific radiocarbon analyses of phospholipid fatty acids, alkanes and black carbon in oceanic sediments, *Radiocarbon*, 52(3) 1215-1223, **2010**.
8. **Ziolkowski, L.A.** and E.R.M. Druffel. Quantification of extraneous carbon during the radiocarbon analysis of black carbon, *Analytical Chemistry*, 81(24), 10156-10161, **2009**. doi:10.1021/ac901922s.
7. **Ziolkowski, L.A.** and E.R.M. Druffel. Feasibility of isolating and detecting fullerenes and carbon nanotubes using the benzene polycarboxylic acid method, *Marine Pollution Bulletin*, 59, 126-131, **2009**. doi:10.1016/j.marpolbul.2009.04.018.
6. **Ziolkowski, L. A.** and W. L. Miller. Variability of the apparent quantum efficiency of CO photoproduction in the Gulf of Maine and Northwest Atlantic Ocean. *Marine Chemistry*, **2007**. doi:10.1016/j.marchem.2007.02.004.
5. Bouillon, R.C., W.L. Miller, M. Levasseur, M. Scarratt, A. Michaud, and **L. Ziolkowski**. The effects of mesoscale iron enrichment on the marine photochemistry of dimethylsulfide in the NE subarctic Pacific, *Deep-Sea Research Part II – Topical studies in Oceanography*, 53(20-22): 2384-2397, **2006**. doi:10.1016/j.dsr2.2006.05.024.
4. Clark, C.D., W.T. Hiscock, F.J. Millero, G. Hitchcock, L. Brand, W.L. Miller, **L. Ziolkowski**, R.F. Chen and R.G. Zika, **2004**. CDOM distribution and CO<sub>2</sub> production on the southwest Florida shelf, *Marine Chemistry* 89(1-4): 145-167.
3. Xie, H., S.S. Andrews, W.R. Martin, J. Miller, **L. Ziolkowski**, C.D. Taylor, and O.C. Zafriou, **2002**. Validated methods for sampling and headspace analysis of carbon monoxide in seawater, *Marine Chemistry* 77(2-3), 93-108.
2. **Ziolkowski, L.**, K. Vinodgopal, and P.V. Kamat, 1997. Photostabilization of organic dyes on poly(styrenesulfonate)-capped TiO<sub>2</sub> nanoparticles, *Langmuir*, 13(12): 3214-3128.
1. Bourbonniere, R.A., S.L. Telford, **L.A. Ziolkowski**, J. Lee, M.S. Evans and P.A. Meyers, **1997**. Biogeochemical marker profiles in cores of dated sediments from large North American lakes, *Molecular Markers in Environmental Geochemistry*, ACS Symposium Series, 671, 133-150.

## TEACHING EXPERIENCE

### University of South Carolina

Fall 2017	Instructor	Processes of Global Environmental Change Geology/Marine Science 335, 29 students
Fall 2017	Instructor	Oceans and Society, Marine Science 210, 234 students
Fall 2016	Instructor	Organic Geochemistry Geology/Marine Science 717, MSCI 599, 13 students Overall Instructor Evaluation: 4.9, Dept Average: 4.5
Spring 2016	Instructor	Processes of Global Environmental Change Geology/Marine Science 335, 36 students Overall Instructor Evaluation: 4.8, Dept Average: 4.3

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Fall 2015	Instructor	Oceans and Society, Marine Science 210, 376 students Overall Instructor Evaluation: 4.7, Dept Average: 4.3
Spring 2015	Instructor	Processes of Global Environmental Change Geology/Marine Science 335, 40 students Overall Instructor Evaluation: 4.7, Dept Average: 4.6
Fall 2014	Instructor	Oceans and Society, Marine Science 210, 306 students Overall Instructor Evaluation: 4.2, Dept Average: 4.4
Fall 2013	Instructor	Oceans and Society, Marine Science 210 Honors, 23 students Overall Instructor Evaluation: 4.3, no Dept Average available

**Teaching at Other institutions**

Sept 2012	Instructor	Astrobiology module Planetary Short Course University of Western Ontario
2007-2009	Instructor	Radiocarbon in Ecology and Earth System Science University of California Irvine, Short Course
2006-2008	Instructor	Teaching Assistant Professional Development Program University of California Irvine
2005, 2007	Teaching Assistant	Introduction to Earth System Science, ESS 25 University of California Irvine
2006	Teaching Assistant	Organic Biogeochemistry, ESS 53 University of California Irvine

**SEMINARS and INVITED TALKS**

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2017	Chesapeake Biological Laboratory, University of Maryland
2016	Department of Geology and Geophysics, Louisiana State University
2016	School of Public Health, University of South Carolina
2015	International Conference of Biology and Biotechnology of Thermophilic Bacteria, Yerevan, Armenia
2015	International Conference of Biology and Biotechnology of Thermophilic Bacteria, Tblisi, Georgia
2015	Department of Geology, University of Buffalo
2015	Department of Earth System Science, University of California Irvine
2015	DISCCRS Next Generation Polar Researcher Meeting
2014	Department of Chemistry, University of Bristol, UK
2014	Nerd Nite Honolulu
2013	Large Lakes Observatory, University of Minnesota Duluth
2013	Department of Civil and Environmental Engineering & Earth Sciences, Notre Dame
2013	Marine Science Program, University of South Carolina
2013	Marine Sciences, University of Georgia Athens

- 2012 Department of Earth Sciences, Carleton University  
2012 Department Earth and Atmospheric Sciences, University of Alberta  
2012 Department of Earth and Environmental Sciences, University of Waterloo  
2012 Department of Geologic Sciences, University of Cincinnati  
2011 Bigelow Institute for Ocean Sciences  
2011 Origins Institute, McMaster University  
2011 Department of Earth Sciences, McGill University

**CONTRIBUTED ABSTRACTS** (only first author contributions are listed pre-USC, \*=trainee)

**Ziolkowski, L.A.**, C.I. Czimczik, T.C. Onstott, and G.F. Slater, Arctic soil carbon: does permafrost carbon matter for future climate feedbacks?, Goldschmidt meeting, Paris, France, August 2017.

McCrimmon D.(\*) and **L.A. Ziolkowski**, Cryoconite Carbon: Why local geology matters, Goldschmidt meeting, Paris, France, August 2017.

Schorer, W., C. Benitez-Nelson, E. Smith, and **L. Ziolkowski**, South Carolina Stormwater Detention Ponds: Sediment Accumulation and Nutrient Sequestration, South Carolina Water Resources Conference, Dec 2016.

McCrimmon, D.(\*) A. Holland (\*) and **L.A. Ziolkowski**, Modern Microbial and Old Carbon Coexist on Glacier Surfaces, AGU Fall Meeting, San Francisco, CA, Dec 2016.

**Ziolkowski, L. A.**, H. Li(\*), Nitrogen controls the lability of Alaskan Arctic soil carbon, AGU Fall Meeting, San Francisco, CA, Dec 2016.

Perler, F., E. Becraft, J. Bird, D. McCrimmon(\*), D. Polosukhina, R. Ramaley, J. Spear, W. Swingley, **L. Ziolkowski**, T.A. Vishnivetskaya, International Workshop and Evaluation of Science in Countries of the Caucasus Region, American Society of Microbiology, Boston, USA, June 2016.

**Ziolkowski, L.A.**, C. Czimczik, S. Holden, H. Li(\*), T.C. Onstott, G. Slater, A. Townsend-Small, Variability of Microbial Soil Carbon Usage: Implications for Climate Feedback, International Conference on Permafrost, Potsdam, Germany, June 2016.

Holland, A.(\*) and **L.A. Ziolkowski**, Organic Geochemical Variability of Dark Snow on Two Alaskan Glaciers, SE GSA Meeting, Columbia, SC, March 2016.

McCrimmon, D.(\*) and **L.A. Ziolkowski**, Characterization of Microbial Carbon in Cryoconite Holes of Two Alaskan Glaciers, SE GSA Meeting, Columbia, SC, March 2016.

Schroer, W.F., C. Benitez-Nelson, E. Smith and **L.A. Ziolkowski**, South Carolina Stormwater Detention Ponds: Sediment Accumulation and Nutrient Sequestration, SE GSA, Columbia, SC, March 2016.

Bostic, J.(\*), C.M. Reddy, C. Aeppeli, R. Swarthout and **L.A. Ziolkowski**, How Bioavailable is Highly Weathered Deepwater Horizon Oil? Ocean Sciences Meeting, New Orleans, Feb 2016.

Onstott, T.C., B. Stackhouse, L. Whyte, S. Myneni and **L.A. Ziolkowski**, Long Term Thawing Experiments of Intact Cores of Arctic Mineral Cryosols: Implications for Greenhouse Gas Feedbacks

from Global Warming, AGU Fall Meeting, San Francisco, Dec 2015. LZ delivered the talk

Li, H. (\*) and **L.A. Ziolkowski**, Alaskan Arctic soils: relationship between microbial carbon usage and soil composition, AGU Fall Meeting, San Francisco, Dec 2015.

Tibbet, E.J.(\*), H. Li(\*) and **L.A. Ziolkowski**, Latitudinal Study of the Geochemical Biomarkers in Alaskan Arctic Soils, AGU Fall Meeting, San Francisco, Dec 2015

**Ziolkowski, L.A.**, Insights into organic matter dynamics: a coupled chemical and radiocarbon perspective on stability, SOM6, October 2014. Poster.

**Ziolkowski, L.A.**, What's causing "dark snow"? Let's collaborate and find out! International Glaciology Society British Branch Meeting (IGSBBM), September 2014. Talk.

**Ziolkowski, L.A.**, G.F. Slater, T.C. Onstott, L.G. Whyte and A. Townsend-Small, Bioavailability and Chemistry of Arctic Soil Carbon, Goldschmidt Meeting, Sacramento, June 2014. Poster.

**Ziolkowski, L.A.**, G.F. Slater, T.C. Onstott, L.G. Whyte and A. Townsend-Small, Microbes residing in young organic rich Alaskan soils contain older carbon than those residing in old mineral high Arctic soils, AGU Fall Meeting, San Francisco, Dec 2013. Poster.

**Ziolkowski, L.A.**, B.T. Stackhouse, L.G. Whyte, T.C. Onstott and G.F. Slater, Using radiocarbon to examine microbial carbon cycling in permafrost. AGU Fall Meeting, San Francisco, CA, Dec 2012. Talk.

**Ziolkowski, L.A.** and G.F. Slater, Contemporary microbes in hypersaline springs that contain fossil carbon, *AGU Fall Meeting*, San Francisco, CA. Dec 2011. Talk

**Ziolkowski, L.A.**, G.F. Slater and E.R.M. Druffel, Quantifying extraneous carbon added during GC preparation of CSRA samples, <sup>14</sup>C small sample workshop, ETH Zurich, Switzerland, Sept 2011. Talk

**Ziolkowski, L.A.**, G.F. Slater, A. F. Davila and J. Wierzchos, Constraining carbon sources and cycling in endolithic microbial communities in the Atacama Desert, *AGU Fall Meeting*, San Francisco, CA. Dec 2010. Talk

**Ziolkowski, L.A.** and E.R.M. Druffel, Black carbon in marine dissolved organic matter, *Ocean Sciences*, Portland, OR. Feb 2010. Poster

**Ziolkowski, L.A.**, Black magic: can we make carbon disappear? UC Irvine, Half-Baked Seminar. Feb 2009. Talk

**Ziolkowski, L.A.** and E.R.M. Druffel, Radiocarbon values of black carbon using the Benzene Polycarboxylic Acid Method, *AGU Fall Meeting*, San Francisco, CA. Dec 2008. Poster

**Ziolkowski L.A.** and C. Gardiner, The Professional Utility of Teaching Assistant Training beyond the Classroom, *Lilly West*, Pomona, CA. Mar 2008. Talk

**Ziolkowski, L.A.** and E.R.M. Druffel. Black carbon measurements using a revised BPCA method. *EGU*, Vienna, Austria. Apr 2007. Talk

**Ziolkowski, L.A.**, E.R.M. Druffel and S. Griffin, Progress Towards an Estimate of the Radiocarbon Content of Black Carbon in Marine Organic Matter, *AGU Ocean Sciences*, Hawaii. Feb 2006. Poster

**Ziolkowski, L.A.**, C.S. Law and W.L. Miller, Investigation of the Marine Photochemical Production of Carbon Monoxide in the Waters South-East of New Zealand, *IGAC Conference*, Christchurch, N.Z. Sept 2004. Poster

**Ziolkowski, L.A.** and W.L. Miller, U.V. Optical Properties During the Evolution of a Phytoplankton Bloom (SERIES), *ASLO/TOS Ocean Sciences*, Hawaii. Feb 2004. Talk

**Ziolkowski, L. A.** and W.L. Miller, Spatial and Temporal Variation of CDOM Fading Efficiency, *AGU Ocean Sciences*, Hawaii. Feb 2002. Poster

**Ziolkowski, L. A.**, W.L. Miller, H. Xie and O.C. Zafiriou, Efficiency Spectra for the Marine Photochemical Production of Carbon Monoxide Determined Using a Solar Simulator, *ASLO*, New Mexico. Feb 2001. Talk

### PERSONNEL SUPERVISED

Presently:

Natalie Tyler	Masters student, USC Geology	08/2017 - present
Peyton Moore	Undergraduate student, Marine Sci, USC	01/2016 – present

Previously:

Drake McCrimmon	Masters student USC Geology REU MSCI student, Chemistry, LSU	08/2015 – 7/2017 Summer 2014
Emily Burch	Undergraduate student, Geology, USC	08/2016 – 12/2016
Bryan Benitez-Nelson	Laboratory Technician	3/2016 – 11/2016
Joel Bostic	Masters USC Marine Science <i>Now at U. Maryland Ph.D. student</i> <i>Current NSF GRFP recipient</i>	08/2014 – 6/2016
Alexandra Holland	Undergraduate student, Geology USC <i>Now at Bristol University Ph.D. student</i>	08/2014 – 5/2016
Christian Pullano	Undergraduate student, Geology, USC <i>Now at Clemson University, M.S. student</i>	09/2015 – 5/2016
Dr. Hongyu Li	Postdoctoral Researcher <i>Now at ECI Pharmaceuticals</i>	09/2014 – 3/2016
Karlee Liddy	Undergraduate student, Env. Sci, USC	01/2014 – 12/2015
Emily Tibbett	REU student, Soil Science, UC Davis <i>Now at U. Southern California, Ph.D. student</i>	Summer 2015
Jamie Clark	Undergraduate student, Marine Science, USC	01/2014 – 5/2015
Jane Gracie Van Adzin	REU student, Earth System Science, Cornell University	Summer 2014

### FELLOWSHIPS

2011	NSERC Postdoctoral Fellowship: The impact of climate change on the carbon cycle. Quantifying the potential carbon release from thawing permafrost in the Canadian high Arctic 2 years, \$80,000
2009	Canadian Astrobiology Training Program & Origins Institute Postdoctoral Fellowship 2 years, \$80,000
2008	UC Irvine School of Physical Sciences Faculty Endowed Fellowship
2006	Pedagogical Fellowship, University of California Irvine, 3 years
2004	Jenkins Graduate Fellowship, University of California Irvine, 2 years

### OTHER ACADEMIC HONOURS AND AWARDS

2017	U. South Carolina, Break Through Rising Star
2015	Invited participant, Next Generation Polar Researcher (May 2015)
2010	Invited participant, DISCO XXII (October 2010)
2009	Isocompound Meeting, Young Investigator Award

- 2009 UC Irvine Earth System Science Outstanding Contributions to the Department  
 2008 Outstanding Presentation Award, Institute of Geophysics and Planetary Physics UCI

**SYNERGISTIC ACTIVITIES**

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**Reviewing efforts**

- Editorial:* Associate Editor, Marine Chemistry, October 2015 – present
- Grants:* ACS Petroleum Research Fund NSF Environmental Chemistry  
 National Geographic Society NSF Ocean Technology &  
 NASA Habitable Worlds Interdisciplinary Coordination  
 NSF Polar Programs DOE Genomics  
 NSF Chemical Oceanography
- Journals* Aqueous Geochemistry Journal of Chromatography A  
 Aquatic Microbial Ecology Limnology and Oceanography  
 Biogeosciences Marine Chemistry  
 Deep Sea Research PNAS  
 Environmental Research Letters Radiocarbon  
 Environmental Science & Technology Rapid Comm. in Mass Spectrometry  
 Frontiers in Biogeosciences Science of the Total Environment
- Other:* AGU Geophysical Monograph Series  
 Climate Literacy and Energy Awareness Network

Number of external documents reviewed annually:

Year	Manuscripts	Proposals
2017	5	3
2016	9	6 (+DOE + NASA panels)
2015	6	1
2014	9	6 (+ one NSF panel)
2013	9	3
2012	5	5
2011	3	2

**University of South Carolina:**

- 2013-present Graduate Program Committee, Marine Science Program  
 2017 Undergraduate Curriculum Committee, Geoscience Program, SEOE  
 2014-2017 Faculty Senate Representative for the Department of Earth and Ocean Sciences
- 2014 Peer Review Committee, Department of Earth and Ocean Sciences

**Broader Community:**

Dr. Lori A. Ziolkowski

- 2017 Session chair: Geochemistry of the Cryosphere, Goldschmidt, Paris, France
- 2016 Westwood High School talked with Grade 9 World Geography Students about Climate Change (four class visits)
- 2015 Session co-chair: Arctic Climate Change: Paleoclimate and Paleohydrology Perspectives, Fall AGU, San Francisco, CA
- 2014 Session co-chair: Climate and Biogeochemistry of Cryosphere Environments, Goldschmidt, Sacramento, CA
- 2014 Meeting mentor in the Multicultural Program at the Ocean Sciences Meeting
- 2012 Session co-chair: Water, elements and life in early-Earth and Mars analogs, Goldschmidt, Montreal, QC
- 2012 U.S. GEOTRACES Arctic Implementation workshop participant
- 2011-2012 McMaster University Origin Institute Colloquium committee
- 2011 McMaster University Women in Science and Engineering (WISE) Panel member
- 2010 McMaster University Women in Science and Engineering (WISE) workshop leader: Negotiating your way to success
- 2010 Session co-chair: Radiocarbon insights into the global carbon cycle, Ocean Sciences meeting, Portland, Oregon
- 2007-2009 AGU Education and Human Resources Student Advisory Board Member
- 2007-2009 UC Irvine Earth System Science Journal Club Coordinator
- 2006-2008 Science Fair Judge, California State Science Fair
- 2005-2006 UC Irvine Earth System Science Departmental Graduate Student Representative

## FIELD EXPERIENCE

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*Cruise (~300 days at sea):*

**R/V Tangaroa (March 2004)** Performed photochemical measurements in Southern Ocean during an iron addition experiment

**CCGS Martha Black (July 2003)** Collected in-situ optical data in North Atlantic

**R/V Pelican, (August 2002)** Collected in-situ optical data in the Gulf of Mexico

**R/V El Puma, (July 2002)** Collected in-situ optical data and performed photochemical measurements at station Papa in North Pacific during an iron addition experiment

**R/V Pelican (August 2001)** Collected in-situ optical data in the Gulf of Mexico

**R/V Pelican (April 2001)** Collected in-situ optical data in the Gulf of Mexico

**R/V Endeavor (March 2000)** Performed photochemical measurements in the Sargasso Sea

**R/V Endeavor (August 1999)** Performed photochemical measurements in the Sargasso Sea

**R/V Endeavor (July 1999)** Performed photochemical measurements in the Gulf of Maine

**R/V New Horizon (April 1997)** Collected samples for trace gas analysis in the Southern California Bight

*Other field experience: (~150 days in the field)*

**Queen Maud Land, Antarctica (2017)** four weeks collecting samples in East Antarctica to study microbial activity and carbon accumulation

**Mount Baker, WA, USA (2016)** *American Alpine Institute:* Crevasse Rescue and Glacier Travel training

**Svalbard (2016)** Survey of permafrost and periglacial landscapes in Isfjorden

**Mountain Glaciers, Alaska (2015, 2016)** sampling glaciers for cryoconite and combustion derived material in the ablation zone of Matanuska, Spencer, Mendenhall and Gulkana glaciers

**North Slope, AK (2014, 2015, 2016)** sampling Arctic soils between Fairbanks and Deadhorse

**Expedition Fjord, NU, Canada (2010)** sampling hypersaline springs, endoliths and sediments

**Thompson, MB, Canada, NASA BOREAS (1993, 1994, 1995)** collection of beaver pond water

**AFFILIATIONS**

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American Geophysical Union (AGU)

Earth Science Women's Network (ESWN)

Geochemical Society