

SIMONE REBECCA ALIN

Curriculum Vitae

National Oceanic and Atmospheric Administration
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EDUCATION

Ph.D. University of Arizona, Department of Geosciences, Ph.D. Minor in the Department of Ecology and Evolutionary Biology—2001.

B.S. Stanford University, Department of Biological Sciences—1993, with departmental honors.

PROFESSIONAL EXPERIENCE

Oceanographer

Pacific Marine Environmental Laboratory, National Oceanic and Atmospheric Administration, Seattle, Washington, October 2007–present

Research Associate

River Systems Research Group, School of Oceanography, University of Washington (carbon cycling in large tropical rivers), July 2003–October 2007

Alaska Salmon Program, School of Aquatic and Fishery Sciences, University of Washington (terrestrial inputs to Alaskan lakes), May 2006–October 2007

NOAA Climate and Global Change Postdoctoral Fellowship, Large Lakes Observatory, University of Minnesota Duluth (large lake carbon cycling), December 2001–June 2003

Instructor

Introduction to Environmental Science, The Colorado College (Colorado Springs, Colorado), Environmental Science Program, 1999–2000 (Blocks 4 and 6)

Graduate Teaching Associate

Analysis of Biological Diversification, University of Arizona, Departments of Geosciences and Ecology and Evolutionary Biology, 2000

Principles of Sedimentology and Stratigraphy, University of Arizona, Department of Geosciences, 1999

Analysis of Biological Diversification, University of Arizona, Departments of Geosciences and Ecology and Evolutionary Biology, 1998

Graduate Research Associate

University of Arizona, Department of Geosciences (paleoecology), 1997–1999

Life Sciences Technician

Stanford University, Hopkins Marine Station (molecular biology, neurobiology),
1992–1994

Student Researcher

Stanford University, Hopkins Marine Station (electrophysiology), 1990–1991

Research Assistant

Stanford University, Hopkins Marine Station (molecular biology, aquaculture), 1992

Stanford University, Hopkins Marine Station (marine ecology), 1991

Stanford University Medical Center, Developmental Biology Department (molecular
biology), 1989–1990

University of Nebraska at Lincoln, Tumor Biology Department (tumor biology),
1988

HONORS & AWARDS

Fellowships

NOAA Climate and Global Change Postdoctoral Fellowship, 2001–2003

Dean's Doctoral Fellowship, Graduate College, University of Arizona, 2000–2001

National Science Foundation Graduate Research Fellowship, 1995–1997, 1999–
2000

National Security Education Program Graduate International Fellowship, 1997–
1998

Analysis of Biological Diversification - Research Training Group Graduate
Fellowship, University of Arizona, 1994–1995

Awards

Top-50 Most Cited Papers award from the journal *Palaeogeography*,
Palaeoclimatology, *Palaeoecology*, 2003–2007

Best Sedimentology/Stratigraphy/Paleobiology Talk, GeoDaze Student Symposium,
University of Arizona, 2001

Biological Science Division, Second Place Poster, Student Showcase, University of
Arizona, 1995

FIELD EXPERIENCE

Shipboard

Inorganic carbon measurements, including spectrophotometric pH and underway
pCO₂ in Puget Sound, Washington, R/V *Thomas G. Thompson* (2/2008 – 2 days),
EPA Ocean Survey Vessel *Bold* (8/2008 – 5 days), R/V *Robertson* (9/2009 – 1
day)

Underway pCO₂ measurements, M/V *Cap Van Diemen*, New Zealand-Tahiti-U.S., 10/2008–11/2008 (15 days)
Dissolved inorganic carbon measurements, NOAA Ship *Ronald H. Brown*, CLIVAR cruise P18, leg 1, San Diego-Easter Island, 12/2007–1/2008 (36 days)
Geological coring and seismic surveys, R/V *Explorer*, Lake Tanganyika, East Africa, 1/1997–2/1997 (30 days)

Other

Field limnology and coring work on large lakes in Southwest Alaska, 2005–2007 (1.5 months)
Field research on river carbon cycling in the Mekong and Chao Phraya rivers at sites in three countries (Cambodia, Thailand, Lao PDR) in Southeast Asia, 2003–2004 (2 months)
Field research on river carbon cycling at four sites throughout the Amazon River basin in Brazil, 2004 (2 months)
SCUBA-based research on biodiversity in Lake Tanganyika, based at the Tanzanian Fisheries Research Institute in Kigoma, Tanzania, 1997–1998 (one year)

SYNERGISTIC ACTIVITIES

Committees/Leadership

Program Committee, North American Carbon Program Third All-Investigators Meeting, 2010–2011
Co-lead, North American Carbon Program Coastal Interim Synthesis Activity, 2009–present
Member, Surface Ocean CO₂ Atlas Coastal CO₂ Climatology Working Group, COST Action 735 (an EU initiative)
Conference Session Organizer/Chair (*Carbon Cycling in the Coastal Oceans and Great Lakes*, AGU Ocean Sciences, Feb. 2010; *NACP/OCB Coastal Interim Synthesis Activities*, Ocean Carbon and Biogeochemistry, Jul. 2009; *Carbon Cycling in the Coastal Ocean*, Fall AGU Meeting, Dec. 2008)
Member, Search Committee for Assistant Professor in Physical, Chemical or Biological Limnology/Oceanography, Large Lakes Observatory, 2002–2003
Member and Reviewer, Society for Conservation Biology Contributed Oral and Poster Presentations Committee for the 2003 Annual Meeting, 2002–2003
Organizing Committee, GeoDaze Student Symposium (Program and Abstracts Volume Czar), University of Arizona, 2000–2001
Treasurer, Sigma Gamma Epsilon/S.G.E., Inc. (departmental graduate student organization), University of Arizona, Department of Geosciences, 1999–2001

Reviews

Proposal Reviews (2000–2010)—NASA Terrestrial Ecology Program, National Fund for Scientific Research (Belgium), Katholieke Universiteit Leuven (Belgium), University of Alaska Fairbanks Global Change Research Grant

Competition, Washington Sea Grant pre-proposal review panel member, NSF Chemical Oceanography (2), National Environment Research Council (UK), NASA Carbon Cycle Science Program, Hollings Scholarship applications, International START Secretariat Doctoral Fellowship Program in Global Change Science, Lincoln Park Zoo Africa/Asia Conservation Fund

Journal Article Reviews (2001–2010)—*Oceanography, Biogeosciences, Estuaries and Coasts, Biogeochemistry, Limnology and Oceanography, Limnology and Oceanography: Methods, Ecohydrology, Ecology, Journal of Geophysical Research—Biogeosciences, Quaternary International, Journal of Paleolimnology*

Book/Guide Chapter Reviews (2001–2010)—EPOCA Ocean Acidification Best Practices Guide, SCOPE volume “Dynamics and Vulnerability of Semi-Enclosed Marine Systems: The Integrated Effects of Changes in Sediment and Nutrient Input from Land,” OceanObs’09 Community White Papers

Outreach

Workshop on ocean acidification—“*Carbonated oceans: will the clams still be happy?*” Expanding Your Horizons Conference for Middle School Girls (science/mathematics/technology), Bellevue College, Mar. 27, 2010.

Class lectures on ocean acidification—University of Washington (School of Marine Affairs, Fisheries and Aquatic Sciences, Program on Climate Change), Seattle University, Seattle Art Institute

Interviews with media—

The Reef Tank, *Ocean Acidification Q&A with PMEL*, Aug. 9, 2009,

www.thereeftank.com/blog/ocean-acidification-qa-with-pmel/

The Seattle Times, *Oysters in deep trouble: Is Pacific Ocean's chemistry killing sea life?* Jun. 14, 2009, seattletimes.nwsourc.com/html/localnews/2009336458_oysters14m.html

Exhibit preparation—Paleoenvironmental history of Lake Victoria, East Africa, Great Lakes Aquarium, Duluth, Minnesota, 2002

Science advising—Pangaea Exploration Marine Conservation Expedition, Atlantic and Pacific Oceans, 2009–2011

RESEARCH HIGHLIGHTS

Research Highlights section. 2007. “Carbon lost from lakes,” *Nature*, 448: 390.

Dispatches section. 2007. “Carbon balance of the world’s large lakes,” by K.P.

Mainali, *Frontiers in Ecology and the Environment*, 5(7): 348.

PUBLICATIONS

Papers in Review or Revision

Alin, S.R., M.F.F.L. Rasera, C.I. Salimon, J.E. Richey, G.W. Holtgrieve, A.V. Krusche, and A. Snidvongs, in review. Physical controls on carbon dioxide transfer velocity and flux in river systems and implications for regional carbon budgets.

Submitted to *Journal of Geophysical Research—Biogeosciences*.

Aufdenkampe, A.K., E. Mayorga, P.A. Raymond, J. Melack, S.C. Doney, and **S.R. Alin**, in revision. Rivers key to coupling biogeochemical cycles between land, oceans and atmosphere. *Frontiers in Ecology and the Environment*.

Published Articles

Feely, R.A., **S.R. Alin**, J. Newton, C.L. Sabine, M. Warner, C. Krembs, and C. Maloy, in press. The combined effects of ocean acidification, mixing, and respiration on pH and carbonate saturation in an urbanized estuary. *Estuarine, Coast, and Shelf Science*.

Borges, A.V., **S.R. Alin**, F.P. Chavez, P. Vlahos, K.S. Johnson, J.T. Holt (lead authors) and 41 co-authors, in press. A global sea surface carbon observing system: inorganic and organic carbon dynamics in coastal oceans. Submitted as a Community White Paper to OceanObs'09.

Juranek, L.W., R.A. Feely, W.T. Peterson, **S.R. Alin**, J. Peterson, K. Lee, C.L. Sabine, and B. Hales, 2009. Robust determination of aragonite saturation state seasonal evolution near Newport, Oregon using simple algorithms with hydrographic data. *Geophysical Research Letters*, 36, doi:10.1029/2009GL040778.

Hauri, C., N. Gruber, G.-K. Plattner, **S. Alin**, R. A. Feely, B. Hales, and P.A. Wheeler, 2009. Ocean acidification in the California Current System. *Oceanography*, 22(4): 60–71.

Alin, S.R., R. Aalto, M. A. Goni, J. E. Richey, and W. E. Dietrich. 2008. Biogeochemical characterization of carbon sources in the Strickland and Fly rivers, Papua New Guinea. *Journal of Geophysical Research*, 113, F04S05, doi:10.1029/2006JF000625.

Goni, M.A., N. Monacci, R. Gisewhite, J. Crockett, C. Nittrouer, A. Ogston, **S.R. Alin**, and R. Aalto. Terrigenous organic matter in sediments from the Fly River Delta (Papua New Guinea). *Journal of Geophysical Research*, 113, F01S10, doi:10.1029/2006JF000653.

Rasera, M.F.F.L., M.V.R. Ballester, A.V. Krusche, C. Salimon, L.A. Montebelo, **S.R. Alin**, R.L. Victoria, and J.E. Richey. 2008. Estimating the surface area of small rivers in the southwestern Amazon and their role in CO₂ outgassing. *Earth Interactions*, 12: doi: 10.1175/2008EI257.1.

Sousa, E.S., C.I. Salimon, R.L. Victoria, A.V. Krusche, **S.R. Alin**, and N.K. Leite. 2008. Dissolved inorganic carbon and pCO₂ in two streams draining different soil types in the southwestern Amazon. *Revista Ambiente e Água*, 3(2): 37-50.

Alin, S.R., and T.C. Johnson. 2007. Carbon cycling in large lakes of the world: A synthesis of production, burial, and lake-atmosphere exchange estimates. *Global Biogeochemical Cycles*, 21, doi: 10.1029/2006GB002881.

O'Reilly, C.M., **S.R. Alin**, P.-D. Plisnier, and A.S. Cohen. 2006. The potential influence of climate change on productivity of the East African Rift Valley Lakes. Pgs. 73-83 in M. Kumagai and K. Ishikawa (Eds.), *World Lakes in the Global Environment*, Kokon-Shoin, Tokyo (in Japanese).

Cohen, A.S., M.R. Palacios-Fest, J. McGill, P. Swarzenski, D. Verschuren, R. Sinyinza, T. Songori, B. Kakagozo, M. Syampila, C. O'Reilly, and **S.R. Alin**. 2005. The Lake Tanganyika Biodiversity Project's Paleolimnological Investigations of

- Anthropogenic Environmental Change in Lake Tanganyika: I. An introduction to the project. *Journal of Paleolimnology* 34: 1-18.
- McKee, B.A., A.S. Cohen, D.L. Dettman, M.R. Palacios-Fest, **S.R. Alin**, and G. Ntungumburanye. 2005. The Lake Tanganyika Biodiversity Project's Paleolimnological Investigations of Anthropogenic Environmental Change in Lake Tanganyika: III. Geochronologies and mass sedimentation rates based on ^{14}C and ^{210}Pb data. *Journal of Paleolimnology* 34: 19-29.
- Palacios-Fest, M.R., **S.R. Alin**, A.S. Cohen, B. Tanner, and H. Heuser. 2005. The Lake Tanganyika Biodiversity Project's Paleolimnological Investigations of Anthropogenic Environmental Change in Lake Tanganyika: IV. Lacustrine paleoecology. *Journal of Paleolimnology* 34: 51-71.
- Cohen, A.S. M.R. Palacios-Fest, E.S. Msaky, **S.R. Alin**, B. McKee, C. O'Reilly, D.L. Dettman, H. Nkotagu, and K.E. Lezzar. 2005. The Lake Tanganyika Biodiversity Project's Paleolimnological Investigations of Anthropogenic Environmental Change in Lake Tanganyika: IX. Summary of paleorecords of environmental change and catchment deforestation at Lake Tanganyika and impacts on the Lake Tanganyika ecosystem. *Journal of Paleolimnology* 34: 125-145.
- Alin, S.R.**, and A.S. Cohen. 2004. The live, the dead, and the very dead: taphonomic calibration of the recent record of paleoecological change in Lake Tanganyika, East Africa. *Paleobiology* 30(1): 44-81.
- O'Reilly, C.M., P.-D. Plisnier, A.S. Cohen, and **S.R. Alin**. 2004. Reply to Climate change effect on Lake Tanganyika? *Nature* doi 10.1038/nature02737.
- Alin, S.R.**, and A.S. Cohen. 2003. Lake-level history of Lake Tanganyika, East Africa, for the past 2500 years based on ostracode-inferred water-depth reconstruction. *Palaeogeography, Palaeoclimatology, Palaeoecology* 199: 31-49.
- O'Reilly, C.M., **S.R. Alin**, P.-D. Plisnier, A.S. Cohen, and B.A. McKee. 2003. Climate warming decreases aquatic ecosystem productivity of Lake Tanganyika, Africa. *Nature* 424: 766-768.
- Alin, S.R.**, C.M. O'Reilly, A.S. Cohen, D.L. Dettman, M.R. Palacios-Fest, and B.A. McKee. 2002. Effects of land-use change on aquatic biodiversity: a view from the paleorecord at Lake Tanganyika, East Africa. *Geology* 30: 1143-1146.
- Alin, S.R.**, A.S. Cohen, R. Bills, M.M. Gashagaza, E. Michel, J.J. Tiercelin, K. Martens, P. Coveliers, S. Mboko, K. West, M. Soreghan, S. Kimbadi, and G. Ntakimazi. 1999. Effects of landscape disturbance on animal communities in Lake Tanganyika, East Africa. *Conservation Biology* 13: 1017-1033.

Reports

- Alin, S.R.**, J. Day, G. McKinley, C. Stow, M. Baker, E. Brody, R. Bohne, T. Nalepa, T. Heatlie, A.J. Sutton, and R.A. Feely, 2010. Chapter 7: Great Lakes Region Ocean Acidification Research Plan, in NOAA Ocean Acidification Steering Committee, *NOAA Ocean and Great Lakes Acidification Research Plan*, NOAA Special Report, 140 pp.
- McElhany, P., **S.R. Alin**, D.S. Busch, R. Pavia, K. Higgason, S. Katz, J. Phinney, A.J. Sutton, R.A. Feely, J. Stein, M.S. Brancato, E. Bowlby, J. Roletto, and L. Etherington, 2010. Chapter 3: West Coast Region Ocean Acidification Research Plan, in NOAA

Ocean Acidification Steering Committee, *NOAA Ocean and Great Lakes Acidification Research Plan*, NOAA Special Report, 140 pp.

Feely, R.A., C. Sabine, R. Wanninkhof, **S.R. Alin**, E. Jewett, D.K. Gledhill, J. Dunne, P. McElhany, A.J. Sutton, D.S. Busch, F. Arzayus, B. Sunda, J. Geubtner, J. Hare, O. Vetter, and S. Hankin, 2010. Chapter 1: Rationale and Strategy for a National Ocean Acidification Program, in NOAA Ocean Acidification Steering Committee, *NOAA Ocean and Great Lakes Acidification Research Plan*, NOAA Special Report, 140 pp.

Alin, S.R., R.A. Feely, S.C. Hankin, C.L. Sabine, R. Wanninkhof, J.-Z. Zhang, T.-H. Peng, C. Langdon, B. Hales, and W.J. Cai, 2009. Final report for *Coastal CO₂ measurements and databases for the North American Carbon Program*, NOAA Global Carbon Cycle Program grant GC05-288.

Papers in Preparation

Alin, S.R., J.E. Richey, D.E. Lockwood, A. Snidvongs, P.D. Quay, A.K. Aufdenkampe, and L.E. McGeoch. Seasonal dynamics of the sources and isotopic composition of carbon dioxide outgassed from large tropical river systems: the Mekong and Chao Phraya rivers of Southeast Asia. To be submitted to *Global Biogeochemical Cycles*.

J.E. Richey, **Alin, S.R.**, L.E. McGeoch, A. Snidvongs, R. Keil, and A.K. Aufdenkampe. Elevational and seasonal trends in the composition of particulate organic matter transported by large tropical river systems: the Mekong and Chao Phraya rivers of Southeast Asia. To be submitted to *Global Biogeochemical Cycles*.

Alin, S.R., D.E. Schindler, A.E. Ingalls, P.J. Lisi, and P. Leavitt. Reconstruction of terrestrial inputs to salmon-bearing lakes in Southwest Alaska using tetraether lipids and lignin phenols. To be submitted to *Limnology and Oceanography*.

PRESENTATION ABSTRACTS

Alin, S., J. Barth, A. Dickson, W. Evans, R. Feely, M. Goeckede, M. Goni, N. Gruber, B. Hales, M. Hernandez, D. Ianson, L. Juranek, B. Law, C. Maloy, J. Newton, G.-K. Plattner, C. Sabine, K. Shearman, P. Strutton, P. Tortell, V. Tunnicliffe, and A. Vander Woude, 2009. Recent (and Future) Advances in Carbon Cycle Synthesis along the North American Pacific Coast. Plenary presentation at *North American Carbon Program 2nd All-Investigators Meeting and Ocean Carbon & Biogeochemistry Summer Workshop*.

Alin, S., A. Vander Woude, B. Hales, and P. Strutton, 2009. Seasonal evolution of carbon sources and sinks along the western continental margin of North America. Presented at *North American Carbon Program 2nd All-Investigators Meeting, Ocean Carbon & Biogeochemistry Summer Workshop*, and *2010 Ocean Sciences Meeting*.

Alin, S.R., R.A. Feely, C.L. Sabine, G.C. Johnson, L.W. Juranek, A.G. Dickson, K. Lee, and A. Fassbender, 2008. Reconstructing aragonite saturation states along the California coastline using chemical and hydrographic data. *Eos Trans. AGU*, 89(53): Fall Meet. Suppl., Abstract OS53C-1328.

- Caves, J., C. Sabine, W.-J. Cai, and **S. Alin**, 2008. Large temporal variations in air-sea CO₂ flux off the coast of Georgia. *Eos Trans. AGU*, 89(53): Fall Meet. Suppl., Abstract OS53C-1323.
- Feely, R.A., B. Hales, C. Sabine, D. Greeley, K. Lee, **S. Alin**, and L. Juranek, 2008. A new proxy method for estimating the aragonite saturation state of coastal waters using chemical and hydrographic data. *Eos Trans. AGU*, 89(53): Fall Meet. Suppl., Abstract OS33E-03.
- Hales, B., **S. Alin**, R.A. Feely, M. Hernandez-Ayon, R. Letelier, P.G. Strutton, and C. Cosca, 2008. Examination of air-sea CO₂ fluxes from the low-latitude coastal Eastern Pacific: Application of predictive algorithms to new VOS observations. *Eos Trans. AGU*, 89(53): Fall Meet. Suppl., Abstract OS44A-06.
- Juranek, L.W., R.A. Feely, C.L. Sabine, P.D. Quay, D. Ianson, and **S.R. Alin**, 2008. Determination of biological carbon uptake on the North American West Coast using dissolved oxygen isotopes and the O₂/Ar gas ratio. *Eos Trans. AGU*, 89(53): Fall Meet. Suppl., Abstract OS44A-05.
- Alin, S.R.**, D.E. Schindler, and A.E. Ingalls. 2007. Estimating the importance of terrestrial inputs to lake ecosystems in Southwest Alaska using the BIT index and lignin phenols. *American Society for Limnology and Oceanography Aquatic Sciences Meeting Abstracts*.
- Holtgrieve, G.W., D.E. Schindler, P.D. Quay, J.W. Moore, and **S.R. Alin**. 2007. Marine-derived nutrients and ecosystem metabolism: reconsidering the role of salmon in streams. *American Society for Limnology and Oceanography Aquatic Sciences Meeting Abstracts*.
- Alin, S.R.**, C. Salimon, J. Richey, A. Krusche, G. Holtgrieve, and V. Neu. 2006. Carbon dioxide flux and transfer velocity measurements in the Amazon (Brazil) and Mekong (Southeast Asia) river basins. *Eos Transactions, AGU*, 87(52): Abstract B31C-1135.
- Ellis, E.E., J.E. Richey, A.K. Aufdenkampe, P.D. Quay, A.V. Krusche, and **S.R. Alin**. 2006. Factors controlling respiration rates and respired carbon dioxide signatures in riverine ecosystems of the Amazon Basin. *Eos Transactions, AGU*, 87(52): Abstract B31C-1129.
- Ballester, V.M., M.F. Rasera, A.V. Krusche, C.I. Salimon, L.A. Montebelo, **S. Alin**, R.L. Victoria, and J.E. Richey. 2006. Role of CO₂ outgassing from small rivers in local and regional net carbon emission in the southwestern Amazon River Basin. *Eos Transactions, AGU*, 87(52): Abstract B33E-06.
- Holtgrieve, G.W., D.E. Schindler, and **S.R. Alin**. 2006. Marine-derived nutrients and ecosystem metabolism: reconsidering what salmon do to streams. *North American Benthological Society*.
- Alin, S.**, C. Salimon, J. Richey, A. Krusche, N. Leite, S. Neto, M. Rasera, K. Munhoz, H. da Cunha, A. Montebelo, and B. Gomes. 2005. Carbon dioxide evasion from large tropical rivers: measurements from the Amazon and Mekong River basins. 37th International Liège Colloquium on Ocean Dynamics "Gas Transfer at Water Surfaces," Liège, Belgium.
- Alin, S.R.**, S.D. Miller, A.V. Krusche, J.E. Richey, and H. Freitas. 2004. Pilot experiments on air-water exchange of carbon dioxide in the Amazon Basin. *III LBA Scientific Conference*, Brasilia, Brazil.

- Alin, S.R.,** R. Aalto, S.M. Remington, and J.E. Richey. 2003. Preliminary characterization of organic geochemistry in the Fly–Strickland river system, Papua New Guinea. *Eos Transactions, AGU*, 84(46): Abstract OS12A-0186.
- Alin, S.R.,** and T.C. Johnson. 2003. Carbon cycle dynamics in large lakes of the world: production, evasion, and burial. *Third International Limnogeology Congress*, Tucson, Arizona.
- Alin, S.R.,** and T.C. Johnson, 2003. Carbon storage and evasion rates in large lakes. *American Society for Limnology and Oceanography Aquatic Sciences Meeting Abstracts*: p. 19.
- O'Reilly, C.A., **S.R. Alin**, P.D. Plisnier, A.S. Cohen, and B.A. McKee, 2003. Climate warming decreases aquatic ecosystem productivity of Lake Tanganyika, East Africa. *American Society for Limnology and Oceanography Aquatic Sciences Meeting Abstracts*: p. 100.
- Alin, S.R.,** and A.S. Cohen, 2002. High-resolution geochemical and paleoecological records of climate change since the Late Glacial at Lake Tanganyika, East Africa. *Eos Transactions, AGU*, 83(47): Abstract PP72A-0422.
- Alin, S.R.,** 2002. Carbon cycles of large lakes. *NOAA Postdoctoral Program in Climate and Global Change, 5th Summer Institute*, Steamboat Springs, Colorado.
- Alin, S.R.,** and A.S. Cohen. 2002. Little Ice Age drought history in East Africa. *American Quaternary Association, 17th Biennial Meeting*, Anchorage, Alaska.
- Alin, S.R.** 2002. Little Ice Age drought history at Lake Tanganyika: lake level reconstruction using ostracods. *Limnology 2002*, Brainerd, Minnesota.
- Alin, S.,** A. Cohen, H.D. Heuser, and M. Palacios-Fest. 2001. Late Holocene records of invertebrate diversity and turnover from Lake Tanganyika, East Africa, and their conservation implications. *PaleoBios (North American Paleontological Convention Program and Abstracts)* 21: 22.
- Alin, S.,** A. Cohen, and M. Palacios-Fest. 2001. Paleoecology, biodiversity, and human impact: ostracods as indicators in Lake Tanganyika, East Africa. *Society for Conservation Biology 15th Annual Meeting Abstracts*: 6.
- Alin, S.** 2001. A tale of two watersheds: sonnets for our spineless friends. *GeoDaze 2001 Student Symposium Abstract Volume*, University of Arizona.
- Alin, S.R.,** A.S. Cohen, M. Palacios-Fest, E. Msaky, D. Dettman, and B. McKee. 2000. A multi-indicator study of watershed disturbance and paleoecological change in Lake Tanganyika, East Africa, through c. 500 years. *Eos Transactions, AGU*, 81(48): Abstract B12D-12.
- Alin, S.R.,** and A.S. Cohen. 2000. Calibrating the paleoecological record of diversity turnover in Lake Tanganyika, East Africa. *8th International Paleolimnology Symposium*, Kingston, Ontario, Canada.
- Alin, S.** 2000. Life, death, and the sweet hereafter: a study of the spatiotemporal vagaries of life in an ostracod community, in four acts. *GeoDaze 2000 Student Symposium Abstract Volume*, University of Arizona.
- Zolot, A.M., **S. Alin**, L.I. Sharp, and P.V. Schwartz. 2000. Structural investigation of ostracod (Arthropoda:Crustacea) carapaces. *Pittcon 2000, 51st Annual Pittsburg Conference on Analytical Chemistry and Applied Spectroscopy*, New Orleans, LA March 12-17, Poster 2114P.

- Alin, S.R.**, M.R. Palacios-Fest, and A.S. Cohen. 1999. The live, the dead, and the very dead: translating live ostracod assemblages into the fossil record in Lake Tanganyika, East Africa. *Geological Society of America Abstracts with Programs* 31(7): 438.
- Alin, S.** 1999. Effects of landscape disturbance on animal communities in Lake Tanganyika, East Africa. *Research Training Grant in the Analysis of Biological Diversification Symposium*, University of Arizona.
- Heuser, H., G. Gelsey, A. Cohen, M. Palacios, B. Tanner, E. Msaky, D. Dettman, **S. Alin**, and B. McKee. 1999. A paleolimnological study of lacustrine-deltaic sediments at Lake Tanganyika, Africa: implications for the effects of human habitation. *GeoDaze 1999 Student Symposium Program and Abstracts*, University of Arizona.
- Zolot, A.M., **S. Alin**, L.I. Sharp, and P.V. Schwartz. 1999. Structural investigation of ostracod (Arthropoda:Crustacea) carapaces, *Rocky Mountain Chapter of the American Vacuum Society 1999 Annual Symposium*, Arvada, Colorado.
- Alin, S.**, A. Cohen, and D. Dettman. 1998. A high-resolution paleoecological study of ostracod diversity in Lake Tanganyika, East Africa. *Geological Society of America Penrose Conference "Linking Spatial and Temporal Scales in Paleoecology and Ecology,"* Solomons, Maryland.
- Alin, S.R.**, A.S. Cohen, R. Bills, and M.M. Gashagaza. 1996. Evaluation of a rapid assessment technique for monitoring sedimentation impacts on biodiversity (fish, molluscs, and ostracodes) in Lake Tanganyika, East Africa. *Bulletin of the Ecological Society of America*, 77(3): A7.
- Cohen, A.S., **S.R. Alin**, E. Michel, and K. West. 1996. Linking ecological and paleoecological data across spatial and temporal scales; lessons from the evolutionary ecology of rift lakes. *Geological Society of America Abstracts with Program*, 28(7): 177.
- Alin, S.R.**, A.S. Cohen, R. Bills, M.M. Gashagaza, E. Michel, J.J. Tiercelin, K. Martens, M. Soreghan, P. Coveliers, K. West, G. Ntakimazi, S. Mboko and S. Kimbadi. 1995. Biodiversity analysis of fish, ostracode, and mollusc census data from Lake Tanganyika with relation to sediment disturbance level. *Symposium for Lake Tanganyika Research Abstracts*, Kuopio, Finland.
- Thompson, S.H., and **S. Alin**. 1994. Localized Ca accumulations subjacent to the membrane explain patch variability in Ca current inactivation in molluscan neurons. *Society for Neuroscience Abstracts*, 20(1-2): 898.
- Alin, S.R.** 1990. Ionic currents in nudibranch mollusc (*Doriopsilla albopunctata*) neurons investigated using electrophysiological methods. *China Point Symposium*, Hopkins Marine Station, Pacific Grove, California.

INVITED PRESENTATIONS

- 2010 *Seminar*: Interaction of ocean acidification & hypoxia in Pacific Northwest marine ecosystems: A case study from Puget Sound. Oregon State University, Biogeochemistry Seminar Series, College of Oceanic and Atmospheric Sciences, Mar. 11, 2010.

- 2009 *Seminar*: Ocean acidification: emerging impacts on North American coastal ecosystems. Rice University, Earth Science Department Seminar Series, Nov. 19, 2009.
- 2009 *Keynote talk*: The North American Carbon Program (NACP) Coastal Interim Synthesis Activity: Carbon Synthesis Along North American Margins, First Mexican Carbon Symposium, Ensenada, Mexico, Oct. 7–9, 2009.
- 2007 *Seminar*: Connecting the dots: freshwater ecosystems link the carbon cycles of land, air, and sea, NOAA Pacific Marine Environmental Laboratory.
- 2007 *Seminar*: Connecting the dots: freshwater ecosystems link the carbon cycles of land, air, and sea, University of Alaska Fairbanks, School of Ocean and Fishery Sciences.
- 2006 *Seminar*: Carbon cycling in large tropical rivers: A tale of three basins. Department of Geography, University of Oregon.
- 2003 *Conference symposium “Limnogeology: Carbon in Lake Systems” invited speaker*: Organic carbon in large lakes of the world: estimates of production, burial, and lake-atmosphere exchange, Geological Society of America annual meeting.
- 2003 *Conference symposium “Bridging the Gap: Ostracodes in the Earth Sciences” invited speaker*: Ostracode-inferred lake-level history of Lake Tanganyika, East Africa, for the past 2500 years, Geological Society of America annual meeting.
- 2003 *Seminar*: “The live, the dead, and the very dead: biodiversity patterns across time scales at Lake Tanganyika, East Africa,” Large Lakes Observatory, University of Minnesota, Duluth.
- 2003 *Seminar*: “Characterizing carbon cycles in large lakes around the world,” Chemical Oceanography Program, School of Oceanography, University of Washington.
- 2003 *Seminar*: “Carbon cycles in large lakes of the world,” Department of Geology, University of Minnesota, Duluth.
- 2002 *Seminar*: “Calibration and interpretation of paleoecological records of biodiversity from Lake Tanganyika, East Africa,” Quaternary Paleoecology Program, University of Minnesota, Twin Cities.
- 2001 *Conference Symposium “New Uses for the Dead: Paleobiological Contributions to Conservation Biology,”* North American Paleontological Convention, Berkeley, California.
- 1998 *Guest Lectures*: The Nyanza Project (a research training program in tropical limnology), University of Arizona and UNDP/GEF Lake Tanganyika Biodiversity Project, Kigoma, Tanzania.

SOCIETY MEMBERSHIPS

American Geophysical Union, 2000–present

American Society of Limnology and Oceanography, 2002–present

LANGUAGES & CERTIFICATIONS

French, scientific reading proficiency

Portuguese, scientific reading proficiency

Swahili, Advanced Oral Proficiency Certification (American Council on the Teaching of Foreign Languages), 1998

Oxygen First Aid Certification (Divers Alert Network), 1997

Open Water II Scuba Diver Certification (National Association of Underwater Instructors), 1991