

**SIMONE REBECCA ALIN**  
**Curriculum Vitae**

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**RESEARCHER BIOGRAPHIES**

Blog profile, Chief Scientist of 2016 West Coast Ocean Acidification cruise, May 2016.

<http://westcoastoa.wordpress.com/simone-alin-noaa-pmel/>

Simone Alin: Understanding the ocean's changing chemistry. By Sarah Fesenmyer. NOAA Ocean & Atmospheric Research Communications, April 25, 2016.

<http://research.noaa.gov/News/NewsArchive/LatestNews/TabId/684/ArtMID/1768/ArticleID/11701/Simone-Alin-Monitoring-the-rapidly-changing-chemistry-of-the-ocean.aspx>

**EDUCATION**

**Ph.D. University of Arizona**, Department of Geosciences, Ph.D. Minor in the Department of Ecology and Evolutionary Biology—2001. *Dissertation*: Calibration and interpretation of Holocene paleoecological records of diversity from Lake Tanganyika, East Africa. *Major advisor*: Dr. Andrew Cohen

**B.S. Stanford University**, Department of Biological Sciences—1993, with departmental honors. *Departmental honors thesis*: Co-localization of calcium and calcium-activated potassium currents in molluscan neuronal somata.

**PROFESSIONAL EXPERIENCE**

***Supervisory Oceanographer***

Pacific Marine Environmental Laboratory, National Oceanic and Atmospheric Administration, Seattle, Washington, 2011–present

***Oceanographer***

Pacific Marine Environmental Laboratory, National Oceanic and Atmospheric Administration, Seattle, Washington, 2007–2011

***Affiliate Associate Professor***

School of Oceanography, University of Washington, Seattle, Washington, 2010–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

**MEDIA HIGHLIGHTS**

Earthzine Staff and Friends, All Brains Halloween: Women in STEM Edition,  
<http://earthzine.org/custom/halloween.html>

Jenny Woodman, September 7, 2016, “Searching for Answers at Sea: 2016 West Coast Ocean  
Acidification Cruise,” *Earthzine*. <http://earthzine.org/2016/09/07/searching-for-answers-at-sea-2106-west-coast-ocean-acidification-cruise/>

Natasha Geiling, October 28, 2015, “How Washington Transformed Its Dying Oyster Industry Into A  
Climate Success Story,” *ThinkProgress*. <http://thinkprogress.org/climate/2015/10/28/3713061/washington-oregon-ocean-acidification/>

Eric Holthaus, August 5, 2015, “The Point of No Return: Climate Change Nightmares Are Already Here,”  
*Rolling Stone* magazine, <http://www.rollingstone.com/politics/news/the-point-of-no-return-climate-change-nightmares-are-already-here-20150805>.

Eric Holthaus (host), “We are the people behind “The Point of No Return” climate change article in  
Rolling Stone, and here to talk about solutions. Ask Us  
Anything!” *reddit Ask Me Anything*, August 12, 2015.



[https://www.reddit.com/r/IAmA/comments/3gvy5e/we\\_are\\_the\\_people\\_behind\\_the\\_point\\_of\\_no\\_return/](https://www.reddit.com/r/IAmA/comments/3gvy5e/we_are_the_people_behind_the_point_of_no_return/)

Rolling Stone, August 14, 2015, “5 Things We Learned From the ‘Point of No Return’ Climate Solutions  
AMA,” *Rolling Stone* magazine, <http://www.rollingstone.com/politics/news/5-things-we-learned-from-the-point-of-no-return-climate-solutions-ama-20150814>.

Paige Cornwell and Sandi Doughton, July 30, 2015, “‘The Blob’ may warm Puget Sound’s waters, hurt marine life,” *The Seattle Times*, <http://www.seattletimes.com/seattle-news/weather/the-blob-warms-puget-sounds-waters-hurts-marine-life/>  
 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.

## HONORS & AWARDS

### Awards

National Oceanic and Atmospheric Administration (NOAA) Employee of the Month, October 2011  
 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

### 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

## PUBLICATIONS

### Peer-Reviewed Articles

Fassbender, A.J., **S.R. Alin**, R. Feely, A. Sutton, J. Newton, and R.H. Byrne (2016, in press). Estimating total alkalinity in the Washington State coastal zone: Complexities and surprising utility for ocean acidification research. *Estuaries and Coasts*, doi: 10.1007/s12237-016-0168-z. [PMEL #4473]  
 McClatchie, S., A. Thompson, **S. Alin**, S. Siedlecki, W. Watson, and S. Bograd (resubmitted). The influence of Pacific Equatorial Water on fish diversity in the southern California Current System. *Journal of Geophysical Research—Oceans*, 121(8), 4407, doi: 10.1002/2016JC011672. [PMEL Contribution #4407]  
 Bakker, D.C.E., B. Pfeil, C.S. Landa, N. Metzl, K.M. O'Brien, A. Olsen, K. Smith, C. Cosca, S. Harasawa, S.D. Jones, S.-I. Nakaoka, Y. Nojiri, U. Schuster, T. Steinhoff, C. Sweeney, T. Takahashi, B. Tilbrook, C. Wada, R. Wanninkhof, **S.R. Alin**, C.F. Balestrini, L. Barbero, N.R. Bates, A.A. Bianchi, F. Bonou, J. Boutin, Y. Bozec, E.F. Burger, W.-J. Cai, R.D. Castle, L. Chen, M. Chierici, K. Currie, W. Evans, C. Featherstone, R.A. Feely, A. Fransson, C. Goyet, N. Greenwood, L. Gregor, S. Hankin, N.J. Hardman-Mountford, J. Harlay, J. Hauck, M. Hoppema, M.P. Humphreys, C.W. Hunt, B. Huss, J.S.P. Ibáñez, T. Johannessen, R. Keeling, V. Kitidis, A. Körtzinger, A. Kozyr, E. Krasakopoulou, A. Kuwata, P. Landschützer, S.K. Lauvset, N. Lefèvre, C. Lo Monaco, A. Manke, J.T. Mathis, L. Merlivat, F.J. Millero, P.M.S. Monteiro, D.R. Munro, A. Murata, T. Newberger, A.M. Omar, T. Ono, K. Paterson, D. Pearce, D. Pierrot, L.L. Robbins, S. Saito, J. Salisbury, R. Schlitzer, B. Schneider, R. Schweitzer, R. Sieger, I. Skjelvan, K.F. Sullivan, S.C. Sutherland, A.J. Sutton, K. Tadokoro, M. Telszewski, M. Tuma, S.M.A.C. Van Heuven, D. Vandemark, B. Ward, A.J. Watson, and S. Xu (2016). A multi-decade record of high-

- quality fCO<sub>2</sub> data in version 3 of the Surface Ocean CO<sub>2</sub> Atlas (SOCAT). *Earth System Science Data*, 8, 383–413, doi: 10.5194/essd-8-383-2016. [PMEL Contribution #4441]
- Siedlecki, S.A., I.C. Kaplan, A.J. Hermann, T.T. Nguyen, N.A. Bond, J.A. Newton, G.D. Williams, W.T. Peterson, **S.R. Alin**, and R.A. Feely (2016): Experiments with Seasonal Forecasts of ocean conditions for the Northern region of the California Current upwelling system, *Scientific Reports*, doi: 10.1038/srep27203. [PMEL Contribution #4395]
- Chapa-Balcorta, C., J.M. Hernandez-Ayon, R. Durazo, E. Beier, **S.R. Alin**, and A. Lopez-Perez (2015): Influence of post-Tehuano oceanographic processes in the dynamics of the CO<sub>2</sub> system in the Gulf of Tehuantepec, Mexico. *J. Geophys. Res: Oceans*, 120, doi:10.1002/2015JC011249. [PMEL Contribution #4382]
- Alin, S.R.**, R.E. Brainard, N.N. Price, J.A. Newton, A. Cohen, W.T. Peterson, E.H. DeCarlo, E.H. Shadwick, S. Noakes, and N. Bednaršek (2015): Characterizing the natural system: Toward sustained, integrated coastal ocean health observing networks to facilitate resource management and decision support. *Oceanography*, 28(2): 92–107, <http://dx.doi.org/10.5670/oceanog.2015.34>. [PMEL contribution 4267.]
- Kealoha, A.K., S.S. Kahng, F.T. Mackenzie, **S.R. Alin**, R. Kosaki, R.E. Brainard, and C.D. Winn (2015): Latitudinal Trends and Drivers in the CO<sub>2</sub>-Carbonic Acid System of Papahānaumokuākea Marine National Monument. *Aquatic Geochemistry*, doi: 10.1007/s10498-015-9273-z. [PMEL contribution 4253.]
- Reum, J.C.P., **S.R. Alin**, C.J. Harvey, N. Bednaršek, W. Evans, R.A. Feely, B. Hales, N. Lucey, J.T. Mathis, P. McElhany, J. Newton, and C.L. Sabine (2016): Interpretation and design of ocean acidification experiments in upwelling systems in the context of carbonate chemistry co-variation with temperature and oxygen. *ICES J. Mar. Sci.*, doi: 10.1093/icesjms/fsu231. [PMEL contribution 4100.]
- Bednaršek, N., R.A. Feely, J.C.P. Reum, W. Peterson, J. Menkel, **S.R. Alin**, and B. Hales (2014): *Limacina helicina* shell dissolution as an indicator of declining habitat suitability due to ocean acidification in the California Current Ecosystem. *Proc. Roy. Soc. B*, 281, 20140123, doi: 10.1098/rspb.2014.0123.
- Reum, J.C.P., **S.R. Alin**, R. Feely, J. Newton, M. Warner, and P. McElhany (2014): Seasonal carbonate chemistry covariation with temperature, oxygen and salinity in a fjord estuary: Implications for the design of ocean acidification experiments. *PLoS ONE*, 9(2): e89619. Doi:10.1371/journal/pone.0089619.
- Ellis, E.E., A.E. Ingalls, J.E. Richey, R.G. Keil, G.M. Santos, L.T. Truxal, **S.R. Alin**, and E.R.M. Druffel (2013): Age of riverine carbon suggests rapid export of terrestrial primary production in tropics, *Geophysical Research Letters*, 40, 5687–5691, doi:10.1002/2013GL057450.
- Bakker, D.C.E., B. Pfeil, K. Smith, S. Hankin, A. Olsen, **S.R. Alin**, C. Cosca, S. Harasawa, A. Kozyr, K.M. O'Brien, U. Schuster, M. Telszewski, B. Tilbrook, C. Wada, J. Akl, L. Barbero, N. Bates, J. Boutin, W.-J. Cai, R.D. Castle, F.P. Chavez, L. Chen, M. Chierici, K. Currie, H.J.W. de Baar, W. Evans, R.A. Feely, A. Fransson, Z. Gao, B. Hales, N. Hardman-Mountford, M. Hoppema, W.-J. Huang, C.W. Hunt, B. Huss, T. Ichikawa, T. Johannessen, E.M. Jones, S.D. Jones, S. Jutterström, V. Kitidis, A. Körtzinger, P. Landschützer, S.K. Lauvset, N. Lefèvre, A.B. Manke, J.T. Mathis, L. Merlivat, N. Metzl, A. Murata, T. Newberger, T. Ono, G.-H. Park, K. Paterson, D. Pierrot, A.F. Ríos, C.L. Sabine, S. Saito, J. Salisbury, V.V.S.S. Sarma, R. Schlitzer, R. Sieger, I. Skjelvan, T. Steinhoff, K. Sullivan, H. Sun, A.J. Sutton, T. Suzuki, C. Sweeney, T. Takahashi, J. Tjiputra, N. Tsurushima, S.M.A.C. van Heuven, D. Vandemark, P. Vlahos, D.W.R. Wallace, R. Wanninkhof, and A.J. Watson (2014): An update to the surface ocean CO<sub>2</sub> atlas (SOCAT version 2). *Earth Syst. Sci. Data*, 6, 69–90, doi: 10.5194/essd-6-69-2014. [PMEL #4441]
- Pfeil, B., A. Olsen, D.C.E. Bakker, S. Hankin, H. Koyuk, A. Kozyr, J. Malczyk, A. Manke, N. Metzl, C.L. Sabine, J. Akl, **S.R. Alin**, N. Bates, R.G.J. Bellerby, A. Borges, J. Boutin, P.J. Brown, W.-J. Cai, F.P. Chavez, A. Chen, C. Cosca, A.J. Fassbender, R.A. Feely, M. González-Dávila, C. Goyet, B. Hales, N. Hardman-Mountford, C. Heinze, M. Hood, M. Hoppema, C.W. Hunt, D. Hydes, M. Ishii, T.

- Johannessen, S.D. Jones, R.M. Key, A. Körtzinger, P. Landschützer, S.K. Lauvset, N. Lefèvre, A. Lenton, A. Lourantou, L. Merlivat, T. Midorikawa, L. Mintrop, C. Miyazaki, A. Murata, A. Nakadate, Y. Nakano, S. Nakaoka, Y. Nojiri, A.M. Omar, X.A. Padin, G.-H. Park, K. Paterson, F.F. Perez, D. Pierrot, A. Poisson, A.F. Ríos, J. Salisbury, J.M. Santana-Casiano, V.V.S.S. Sarma, R. Schlitzer, B. Schneider, U. Schuster, R. Sieger, I. Skjelvan, T. Steinhoff, T. Suzuki, T. Takahashi, K. Tedesco, M. Telszewski, H. Thomas, B. Tilbrook, J. Tjiputra, D. Vandemark, T. Veness, R. Wanninkhof, A.J. Watson, R. Weiss, C.S. Wong, and H. Yoshikawa-Inoue (2013): A uniform, quality controlled surface ocean CO<sub>2</sub> atlas (SOCAT). *Earth Syst. Sci. Data*, 5, 125–143, doi: 10.5194/essd-5-125-2013.
- Sabine, C.L., S. Hankin, H. Koyuk, D.C.E. Bakker, B. Pfeil, A. Olsen, N. Metz, A. Kozyr, A. Fassbender, A. Manke, J. Malczyk, J. Akl, **S.R. Alin**, R.G.J. Bellerby, A. Borges, J. Boutin, P.J. Brown, W.-J. Cai, F.P. Chavez, A. Chen, C. Cosca, R.A. Feely, M. González-Dávila, C. Goyet, N. Hardman-Mountford, C. Heinze, M. Hoppema, C.W. Hunt, D. Hydes, M. Ishii, T. Johannessen, R.M. Key, A. Körtzinger, P. Landschützer, S.K. Lauvset, N. Lefèvre, A. Lenton, A. Lourantou, L. Merlivat, T. Midorikawa, L. Mintrop, C. Miyazaki, A. Murata, A. Nakadate, Y. Nakano, S. Nakaoka, Y. Nojiri, A.M. Omar, X.A. Padin, G.-H. Park, K. Paterson, F.F. Perez, D. Pierrot, A. Poisson, A.F. Ríos, J. Salisbury, J.M. Santana-Casiano, V.V.S.S. Sarma, R. Schlitzer, B. Schneider, U. Schuster, R. Sieger, I. Skjelvan, T. Steinhoff, T. Suzuki, T. Takahashi, K. Tedesco, M. Telszewski, H. Thomas, B. Tilbrook, D. Vandemark, T. Veness, A.J. Watson, R. Weiss, C.S. Wong, and H. Yoshikawa-Inoue (2013): Surface ocean CO<sub>2</sub> atlas (SOCAT) gridded data products. *Earth Syst. Sci. Data*, 5, doi: 10.5194/essd-5-145-2013, 145–153.
- Salimon, C., E. dos Santos Sousa, **S.R. Alin**, A.V. Krusche, and M.V. Ballester (2012): Seasonal variation in dissolved carbon concentrations and fluxes in the upper Purus River, southwestern Amazon. *Biogeochemistry*, doi: 10.1007/s10533-012-9806-0.
- Alin, S.R.**, R.A. Feely, A.G. Dickson, J.M. Hernández-Ayón, L.W. Juraneck, M.D. Ohman, and R. Goericke, 2012. Robust empirical relationships for estimating the carbonate system in the southern California Current System and application to CalCOFI hydrographic cruise data (2005–2011). *Journal of Geophysical Research—Oceans*, doi:10.1029/2011JC007511.
- Ellis, E.E., R.G. Keil, A.E. Ingalls, J.E. Richey, and **S.R. Alin**, 2012. Seasonal variability in the sources of particulate organic matter of the Mekong River as discerned by elemental and lignin analyses. *Journal of Geophysical Research—Biogeosciences*, doi:10.1029/2011JG001816.
- Salimon, C., E. dos Santos Sousa, **S.R. Alin**, A.V. Krusche, and M.V. Ballester, 2012. Seasonal variation in dissolved carbon concentrations and fluxes in the upper Purus River, southwestern Amazon. *Biogeochemistry*, doi: 10.1007/s10533-012-9806-0.
- Alin, S.R.**, M.F.F.L. Rasera, C.I. Salimon, J.E. Richey, G.W. Holtgrieve, A.V. Krusche, and A. Snidvongs, 2011. Physical controls on carbon dioxide transfer velocity and flux in river systems and implications for regional carbon budgets. *Journal of Geophysical Research—Biogeosciences*, doi:10.1029/2010JG001398.
- Aufdenkampe, A.K., E. Mayorga, P.A. Raymond, J. Melack, S.C. Doney, and **S.R. Alin**, 2011. Rivers key to coupling biogeochemical cycles between land, oceans and atmosphere. *Frontiers in Ecology and the Environment*, 9(1): 53–60.
- Borges, A., **Alin, S.**, Chavez, F., Vlahos, P., Johnson, K., Holt, J., Balch, W., Bates, N., Brainard, R., Cai, W., Chen, C., Currie, K., Dai, M., Degrandpre, M., Delille, B., Dickson, A., Evans, W., Feely, R., Friederich, G., Gong, G., Hales, B., Hardman-Mountford, N., Hendee, J., Hernandez-Ayon, J., Hood, M., Huertas, E., Hydes, D., Ianson, D., Krasakopoulou, E., Litt, E., Luchetta, A., Mathis, J., McGillis, W., Murata, A., Newton, J., Ólafsson, J., Omar, A., Perez, F., Sabine, C., Salisbury, J., Salm, R., Sarma, V., Schneider, B., Sigler, M., Thomas, H., Turk, D., Vandemark, D., Wanninkhof, R. and Ward, B., (2010). "A Global Sea Surface Carbon Observing System: Inorganic and Organic Carbon Dynamics In Coastal Oceans" in *Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society (Vol. 2)*,

- Venice, Italy, 21–25 September 2009, Hall, J., Harrison, D.E. & Stammer, D., Eds., ESA Publication WPP-306, doi:10.5270/OceanObs09.cwp.07.
- Feely, R.A., **S.R. Alin**, J. Newton, C.L. Sabine, M. Warner, C. Krembs, and C. Maloy, 2010. The combined effects of ocean acidification, mixing, and respiration on pH and carbonate saturation in an urbanized estuary. *Estuarine, Coast, and Shelf Science*, 88: 442–449, doi:10.1016/j.ecss.2010.05.004.
- 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 CO<sub>2</sub> 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 pCO<sub>2</sub> 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 <sup>14</sup>C and <sup>210</sup>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.

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- 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.
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### **Reports and Society Newsletters**

- Alin, S.**, A. Sutton, C. Sabine, S. Musielewicz, A. Devol, W. Ruef, J. Newton, J. Mickett, and R. Feely (2016): *Water quality—Puget Sound profiling buoys: Ocean and atmospheric CO<sub>2</sub> in PSEMP Marine Waters Workgroup, Puget Sound Marine Waters: 2015 Overview*. Moore, S.K., R. Wold, K. Stark, J. Bos, P. Williams, K. Dzinbal, C. Krembs, and J. Newton (eds.), NOAA Northwest Fisheries Science Center for the Puget Sound Ecosystem Monitoring Program's (PSEMP) Marine Waters Workgroup. URL: <http://www.psp.wa.gov/PSEMP/PSmarinewatersoverview.php>. PMEL contribution 4490.
- Alin, S.**, A. Sutton, C. Sabine, S. Musielewicz, J. Newton, J. Mickett, and R. Feely (2016): *Coastal ocean and Puget Sound boundary conditions: Ocean and atmospheric CO<sub>2</sub> in PSEMP Marine Waters Workgroup, Puget Sound Marine Waters: 2015 Overview*. Moore, S.K., R. Wold, K. Stark, J. Bos, P. Williams, K. Dzinbal, C. Krembs, and J. Newton (eds.), NOAA Northwest Fisheries Science Center for the Puget Sound Ecosystem Monitoring Program's (PSEMP) Marine Waters Workgroup. URL: <http://www.psp.wa.gov/PSEMP/PSmarinewatersoverview.php>. PMEL contribution 4490.
- Benway, H., **Alin, S.**, Boyer, E., Cai, W.-J., Coble, P., Cross, J., Friedrichs, M., Goñi, M., Griffith, P., Herrmann, M., Lohrenz, S., Mathis, J., McKinley, G., Najjar, R., Pilskaln, C., Siedlecki, S., Smith, R., 2016. [A Science Plan for Carbon Cycle Research in North American Coastal Waters](#). Report of the Coastal CARbon Synthesis (CCARS) community workshop, August 19-21, 2014, Ocean Carbon and Biogeochemistry Program and North American Carbon Program, 84 pp., [DOI 10.1575/1912/7777](https://doi.org/10.1575/1912/7777). [PMEL contribution #4419]
- Vargas, R., **S. Alin**, and G. Shrestha (2015): Integrating Carbon Cycle Research Into Decision-Making Processes. *Eos*, American Geophysical Union, 26 October 2015. URL: <https://eos.org/meeting-reports/integrating-carbon-cycle-research-into-decision-making-processes> [PMEL Contribution #4306]
- Reum, J.C.P., and **S.R. Alin** (2015): Carbonate chemistry co-variation with temperature and oxygen in coastal environments and the design of ecologically relevant ocean acidification experiments. *Ocean Carbon and Biogeochemistry News*, 8(1), Winter 2015. PMEL contribution 4300.
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- Alin, S.**, A. Sutton, C. Sabine, S. Musielewicz, J. Newton, J. Mickett, and R. Feely (2015): *Coastal ocean*

- and Puget Sound boundary conditions: Ocean and atmospheric CO<sub>2</sub> in PSEMP Marine Waters Workgroup, *Puget Sound Marine Waters: 2014 Overview*. Moore, S.K., K. Stark, J. Bos, P. Williams, J. Newton, and K. Dzinbal (eds.), NOAA Northwest Fisheries Science Center for the Puget Sound Ecosystem Monitoring Program's (PSEMP) Marine Waters Workgroup. URL: <http://www.psp.wa.gov/PSEMP/PSmarinewatersoverview.php>. PMEL contribution 4354.
- McLaughlin, K., S.B. Weisberg, **S. Alin**, A. Barton, T. Capson, A. Dickson, B. Eudeline, D. Gledhill, B. Hales, T. Martz, J. Salisbury. 2014. *Guidance Manual for Establishing a Land-Based Station for Measurement of Ocean Acidification Parameters*. California Current Acidification Network (C-CAN).
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- Alin, S.**, J. Mathis, C. Sabine, A. Sutton, S. Musielewicz, J. Newton, J. Mickett, 2014. *Water quality: Ocean and atmospheric CO<sub>2</sub>*, in PSEMP Marine Waters Workgroup. 2014. *Puget Sound marine waters: 2013 overview*. S.K. Moore, K. Stark, J. Bos, P. Williams, J. Newton and K. Dzinbal (Eds). URL: [http://www.psp.wa.gov/downloads/psemp/PSmarinewaters\\_2013\\_overview.pdf](http://www.psp.wa.gov/downloads/psemp/PSmarinewaters_2013_overview.pdf).
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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.

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**Carbon Data Sets—Please note that some of these data sets are duplicates of each other reflecting their presence on both NOAA/NCEI and CDIAC websites. Some changes are being effected in these databases, and the list below will be updated sometime after when those updates are complete.**

Surface Ocean CO<sub>2</sub> Atlas (SOCAT) version 3, [socat.info](http://socat.info). (See corresponding publications by Bakker et al. 2014, 2016; Pfeil et al. 2013; Sabine et al. 2013 in **Publications** section.)

**Alin, S.R.**; Newton, J.; Sutton, A.J.; Mickett, J. (2016). Dissolved inorganic carbon, total alkalinity, phosphate, silicate, and other variables collected from profile and discrete sample observations using CTD, Niskin bottle and other instruments in the northwest coast of the United States near the Cha Ba mooring off La Push, Washington from 2011-05-22 to 2014-10-24 (NCEI Accession 0145160). Version 1.1. NOAA National Centers for Environmental Information. Dataset.

Feely, R. A., **S. R. Alin**, B. Hales, G. C. Johnson, R. H. Byrne, W. T. Peterson, X. Liu, and D. Greeley (2015), Chemical and hydrographic profile measurements during the West Coast Ocean Acidification Cruise WCOA2013 (August 3-29, 2013), Carbon Dioxide Inf. Anal. Center, Oak Ridge Natl. Lab. US Dep. Energy, Oak Ridge, Tennessee, doi:10.3334/CDIAC/OTG.COAST\_WCOA2013.

Feely, Richard A.; Alin, Simone R.; Hales, Burke; Johnson, Gregory C.; Byrne, Robert; Peterson, William; Liu, Xuewu; and Greeley, Dana. (2015). Dissolved inorganic carbon, total alkalinity, pH and other variables collected from profile and discrete sample observations using CTD, Niskin bottle, and other instruments from R/V Fairweather and R/V Point Sur in the U.S. West Coast California Current System during the 2013 West Coast Ocean Acidification Cruise (WCOA2013) from 2013-08-05 to 2013-08-28 (NCEI Accession 0132082). Version 2.2. NOAA National Centers for Environmental Information. Dataset.

- Feely, R.A.; Alin, S.R.; Hales, B.; Johnson, G.C.; Juranek, L.W.; Byrne, R.; Peterson, W.T.; Goni, M.; Liu, X.; and Greeley, D. (2015). Dissolved inorganic carbon, total alkalinity, pH, temperature, salinity and other variables collected from profile and discrete sample observations using CTD, Niskin bottle, and other instruments from R/V *Wecoma* in the U.S. West Coast California Current System during the 2011 West Coast Ocean Acidification Cruise (WCOA2011) from 2011-08-12 to 2011-08-30 (NODC Accession 0123467). Version 2.2. National Oceanographic Data Center, NOAA. Dataset. doi:10.7289/V5JQ0XZ1.
- Feely, R., **S. Alin**, B. Hales, G. Johnson, L. Juranek, R. Byrne, W. Peterson, M. Goni, X. Liu, and D. Greeley. 2014. Carbon dioxide, hydrographic and chemical measurements onboard R/V *Wecoma* during the NOAA PMEL West Coast Ocean Acidification Cruise WCOA2011 (August 12 - 30, 2011). <http://cdiac.ornl.gov/ftp/oceans/WCOA2011/>. Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, US Department of Energy, Oak Ridge, Tennessee. doi: 10.3334/CDIAC/OTG.COAST\_WCOA2011
- Alin, Simone R.; Feely, Richard A.; Juranek, Lauren W.; Cosca, Catherine E. (2015). Partial pressure (or fugacity) of carbon dioxide, temperature, salinity and other variables collected from surface underway observations using carbon dioxide gas analyzer, shower head equilibrator and other instruments from R/V *Wecoma* in the U.S. West Coast California Current System during the 2011 West Coast Ocean Acidification Cruise (WCOA2011) from 2011-08-12 to 2011-08-30 (NODC Accession 0123607). Version 1.1. National Oceanographic Data Center, NOAA. Dataset. doi:10.7289/V51R6NGD.
- Alin, S.**, R. Feely, L. Juranek, and C. Cosca. 2014. Underway fCO<sub>2</sub> measurements from the 2011 West Coast Ocean Acidification Cruise (WCOA2011) aboard the R/V *Wecoma* (August 12 - 30, 2011). [http://cdiac.ornl.gov/ftp/oceans/WCOA2011/WCOA2011\\_UW](http://cdiac.ornl.gov/ftp/oceans/WCOA2011/WCOA2011_UW). Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, US Department of Energy, Oak Ridge, Tennessee. doi: 10.3334/CDIAC/OTG.COAST\_WCOA2011\_UW
- Feely, R., **S. Alin**, B. Hales, G. Johnson, L. Juranek, R. Byrne, W. Peterson and D. Greeley. 2014. Carbon dioxide, hydrographic and chemical measurements onboard R/V *Bell M. Shimada* during the NOAA PMEL West Coast Ocean Acidification Cruise WCOA2012 (September 4 - 17, 2012). <http://cdiac.ornl.gov/ftp/oceans/WCOA2012/>. Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, US Department of Energy, Oak Ridge, Tennessee. doi: 10.3334/CDIAC/OTG.COAST\_WCOA2012
- Feely, Richard A.; **Alin, Simone R.**; Hales, Burke; Johnson, Gregory C.; Juranek, Lauren W.; Peterson, William T.; Greeley, Dana (2014). Dissolved inorganic carbon, total alkalinity, temperature, salinity and other variables collected from discrete sample and profile observations using CTD, Niskin bottle, and other instruments from R/V *Bell M. Shimada* in the West Coast of the United States from 2012-09-04 to 2012-09-17 (NODC Accession 0123468). Version 1.1. National Oceanographic Data Center, NOAA. Dataset. doi:10.7289/V5DZ068J.
- Cosca, C., R. Feely, **S. Alin**, and G. Lebon. 2014. Sea Surface and Atmospheric fCO<sub>2</sub> measurements from the NOAA Ship *Bell M. Shimada* 2011 VOS project line. [http://cdiac.ornl.gov/ftp/oceans/VOS\\_Bell\\_Shimada/BS\\_2011](http://cdiac.ornl.gov/ftp/oceans/VOS_Bell_Shimada/BS_2011). Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, US Department of Energy, Oak Ridge, Tennessee. doi: 10.3334/CDIAC/otg.VOS\_Bell\_Shimada/BS\_2011
- Cosca, Catherine E.; Feely, Richard A.; **Alin, Simone R.**; Lebon, Geoffrey T. (2015). Partial pressure of carbon dioxide (pCO<sub>2</sub>), temperature, salinity and other variables collected from surface underway observations using shower head equilibrator, carbon dioxide gas detector, and other instruments from container ship *Cap Blanche* in the Pacific Ocean from 2014-02-01 to 2014-11-26 (NCEI Accession 0132047). Version 1.1. NOAA National Centers for Environmental Information. Dataset.

- Feely, Richard A.; Cosca, Catherine E.; Alin, Simone R.; Lebon, Geoffrey T. (2015). Partial pressure of carbon dioxide (pCO<sub>2</sub>), temperature, salinity and other variables collected from surface underway observations using shower head equilibrator, carbon dioxide gas detector, and other instruments from container ship Cap Vilano in the Pacific Ocean from 2013-02-01 to 2013-06-06 (NCEI Accession 0132054). Version 1.1. NOAA National Centers for Environmental Information. Dataset.
- Cosca, Catherine E.; Feely, Richard A.; Alin, Simone R. (2016). Partial pressure of carbon dioxide (pCO<sub>2</sub>), temperature, salinity and other variables collected from surface underway observations using shower head equilibrator, carbon dioxide gas detector, and other instruments from 4 trans-Pacific crossings onboard container ship Cap Blanche in the Pacific Ocean from 2015-03-28 to 2015-12-04 (NCEI Accession 0141304). Version 1.1. NOAA National Centers for Environmental Information. Dataset.
- Cosca, C., R. Feely, S. Alin, and G. Lebon (2014). Partial pressure (or fugacity) of carbon dioxide, salinity and other variables collected from underway - surface observations using Barometric pressure sensor, Carbon dioxide (CO<sub>2</sub>) gas analyzer and other instruments from NOAA Ship Bell M. Shimada in the Coastal Waters of SE Alaska, Cordell Bank National Marine Sanctuary and others from 2012-02-20 to 2012-09-16 (NODC Accession 0115714). Version 1.1. National Oceanographic Data Center, NOAA. Dataset.
- Cosca, C., R. Feely, S. Alin, and G. Lebon (2014). Partial pressure (or fugacity) of carbon dioxide, salinity and other variables collected from underway - surface observations using Barometric pressure sensor, Carbon dioxide (CO<sub>2</sub>) gas analyzer and other instruments from NOAA Ship Bell M. Shimada in the Coastal Waters of SE Alaska, Cordell Bank National Marine Sanctuary and others from 2011-06-27 to 2011-08-31 (NODC Accession 0115710). Version 1.1. National Oceanographic Data Center, NOAA. Dataset.
- Cosca, C., R. Feely, S. Alin and G. Lebon (2013). Partial pressure (or fugacity) of carbon dioxide, salinity and other variables collected from underway - surface observations using Carbon dioxide (CO<sub>2</sub>) gas analyzer, Shower head chamber equilibrator for autonomous carbon dioxide (CO<sub>2</sub>) measurement and other instruments from the Natalie Schulte in the Bass Strait, North Pacific Ocean and others from 2010-10-01 to 2012-06-21 (NODC Accession 0108233). Version 2.2. National Oceanographic Data Center, NOAA. Dataset.
- Cosca, C., R. Feely, **S. Alin**, and G. Lebon. 2014. Sea Surface and Atmospheric fCO<sub>2</sub> measurements from the NOAA Ship Bell M. Shimada 2012 VOS project line.  
[http://cdiac.ornl.gov/ftp/oceans/VOS\\_Bell\\_Shimada/BS\\_2012](http://cdiac.ornl.gov/ftp/oceans/VOS_Bell_Shimada/BS_2012). Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, US Department of Energy, Oak Ridge, Tennessee. doi: 10.3334/CDIAC/otg.VOS\_Bell\_Shimada/BS\_2012

### ***Frequently Asked Questions (FAQs) and Guidance Documents***

- McLaughlin, K., S.B. Weisberg, **S. Alin**, A. Barton, T. Capson, A. Dickson, B. Eudeline, D. Gledhill, B. Hales, T. Martz, J. Salisbury. 2014. *Guidance Manual for Establishing a Land-Based Station for Measurement of Ocean Acidification Parameters*. California Current Acidification Network (C-CAN), <http://c-can.msi.ucsb.edu/c-can-documents/McLaughlin%20et%20al-%202014%20C-CAN%20How%20to%20make%20land%20based%20measuerements%20of%20OA%20Guidance%20Manual%20FINAL.pdf/view>. [PMEL #4393]
- Alin, S.**, 2013. A primer on pH. URL: <http://www.pmel.noaa.gov/co2/story/A+primer+on+pH>. Ocean Carbon and Biogeochemistry Ocean Acidification Subcommittee (of which S. Alin is a member), FAQs about ocean acidification, URL: <http://www.whoi.edu/OCB-OA/FAQs>.
- Cooley, S., J. Mathis, R. Feely, C. Turley, **S. Alin**, J. Orr, S. Dupont, and M. Chadsey (2013): 20 Facts about Ocean Acidification. U.S. Ocean Carbon and Biogeochemistry Program, URL: <http://www.whoi.edu/files/server.do?id=165564&pt=2&p=150429>.

**SYNERGISTIC ACTIVITIES*****Committees/Leadership***

North American Carbon Program (NACP) Scientific Leadership Committee Member, 2015–2017

Ocean Acidification Subcommittee, Ocean Carbon & Biogeochemistry Project, 2012–2015

Coastal Carbon Synthesis (CCARS) leadership committee member and West Coast synthesis co-lead,

North American Carbon Program Coastal Interim Synthesis Activity, 2009–present

Coastal Region co-lead, Surface Ocean CO<sub>2</sub> Atlas Project, 2012–present

Technical Advisory Committee, California Current Acidification Network (C-CAN), 2013–present

Scientific Program Committee Member, North American Carbon Program Sixth Principal Investigators Meeting, 2016–2017

Co-Chair, North American Carbon Program (NACP) Fifth Principal Investigators Meeting (Jan. 2015), 2014–2015

Chair, NACP/OCB Coastal Carbon Synthesis (CCARS) West Coast Regional Workshop, Mar. 2014

Chair, SOCAT Coastal Data QC meeting, Seattle, Oct. 2012

Science Steering Committee, Ocean Carbon & Biogeochemistry (OCB) Project, 2012–2014

Alternate Panel Member, Washington State Governor's Blue Ribbon Panel on Ocean Acidification, 2012

Planning Committee, NOAA Ocean Acidification Data Management Meeting (Seattle, WA, Mar. 2012), 2011–2012

Scientific Program Committee Member, North American Carbon Program Fourth All-Investigators Meeting, 2012–2013

Member, Blue Carbon Team, NOAA, 2011–present

Scientific Program Committee Member, North American Carbon Program Third All-Investigators Meeting, 2010–2011

Co-lead, North American Carbon Program Coastal Interim Synthesis Activity, 2009–2010

Member, Surface Ocean CO<sub>2</sub> Atlas Coastal CO<sub>2</sub> Climatology Working Group, COST Action 735 (an EU initiative)

Conference Session Organizer/Chair:

- NACP sessions 2017
- OCB OA PI meeting 2015 session chair
- NACP sessions 2015
- *Ecosystem Impacts of Change*, 4<sup>th</sup> All Investigators Meeting, North American Carbon Program, Albuquerque, NM, Feb. 2013
- *Ocean acidification and shellfish*, 2012 National Shellfisheries Association Annual Meeting, Seattle, WA, Mar. 2012
- *Ocean acidification in coastal and estuarine environments*, 2012 Ocean Sciences Meeting, Salt Lake City, UT, Feb. 2012
- *Frontiers in ocean acidification research: Responses of marine carbon cycling and ecosystems to ocean acidification*, ASLO, Feb. 2011
- *The linked carbon and water cycles: the atmosphere-land-ocean continuum*, NACP All Investigators Meeting 3, Feb. 2011
- *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–present)**—California Sea Grant, NSF CAREER Program, Oregon Sea Grant, 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, 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–present)**—*Journal of Geophysical Research—Oceans*, *Bulletin of the American Meteorological Society*, *State of the Climate in 2014*, *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*, *Global Change Biology*

**Book/Guide Chapter Reviews (2001–present)**—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 presentations, blogs, workshops, and partnerships**

**Cruise blog**, 2016 West Coast Ocean Acidification cruise, <http://westcoastoa.wordpress.com>, May–June 2016.

**Career panelist for Seattle Youth Climate Action Network**, hosted by the Seattle Zoo at University of Washington, Seattle, Washington, August 23, 2016.

**Public presentation at Exploratorium**, “2016 West Coast Ocean Acidification Cruise,” San Francisco, California, May 21, 2016.

**Partnership with Seattle Aquarium**, to develop middle-school education module responsive to Next Generation Science Standards as part of their grant from IMLS, 2014–2016.

**Partnership with Seattle Aquarium**, to develop short-format outreach module on ocean acidification as part of their grant from NOAA Office of Education, 2014–2016.

**Data visualization workshop participant**, “Presenting data and information” by Edward Tufte, Seattle, WA, August 4, 2015 (one-day training).

**Panel member**, “What we know about ocean acidification on the West Coast,” Indicators of Climate Change in California Workshop, CalEPA, Sacramento, CA, June 16-17, 2015.

**Cross-agency collaboration/communication on regional ocean acidification efforts**, “NOAA’s Pacific Northwest Ocean Acidification Monitoring and Research,” EPA Region 10 Headquarters meeting, Seattle, Washington, 11 May 2015.

**Adaptation workshop presentation and participation**, “Ocean acidification and Hood Canal: What will the future hold?” Hood Canal Coordinating Council, Bremerton, Washington, **May 7, 2015**.

**Plenary speaker at international ocean acidification observing network planning meeting**, “U.S. National Ocean Acidification Monitoring & Research Efforts.” Presented at the MEOPAR Ocean Acidification Expert Forum, Victoria, BC, February 17-18, 2015.

**Public presentation**, “How are changes in ocean chemistry changing sea life in Puget Sound?” Northwest Maritime Center, Port Townsend, Washington, Oct. 7, 2014.

**Webinar for Interagency Blue Carbon working group**, “Coastal Carbon Synthesis (CCARS) Community Workshop: An Overview of the CCARS Effort 2008–2014,” Oct. 6, 2014.

**Webinar for Collaborative on Health and the Environment**, *Climate Change: What’s New and What To Do?* “Oysters and ocean acidification in the Pacific Northwest,” Sep. 18, 2014 ([http://www.healthandenvironment.org/partnership\\_calls/15233](http://www.healthandenvironment.org/partnership_calls/15233)).

**COMPASS Ocean Acidification Advanced Policy Training** (webinar-based), Fall 2014.

**COMPASS Ocean Acidification Media Training Workshop**, Oahu, Hawaii, Feb. 20–22, 2014.

**Partnership with Seattle Aquarium**, to develop interpretive material on ocean acidification in Puget Sound for the Seattle Aquarium web site based on the data we have been collecting there since 2012, 2012–present.

**Public presentations**—“*The Scientist is In: Ocean Acidification*,” Smithsonian National Museum of Natural History, Washington, DC, 18 July 2012.

**Workshops** on ocean acidification for middle school girls—“*Carbonated oceans: will the clams still be happy?*” Expanding Your Horizons Conference for Middle School Girls (science/technology/engineering/mathematics), Bellevue College, Mar. 27, 2010; Mar. 24, 2012; Mar. 23, 2013.

“*Ocean acidification and being an oceanographer with NOAA*,” Seattle Girls School, Apr. 4, 2012.

**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, Bush School science class, Q&A with Ocean Acidification Expert for *Humans and a Changing Ocean* undergraduate class at University of Texas Austin (Professor Dong-Ha Min)

**Interviews with media**—

The Reef Tank, *Ocean Acidification Q&A with PMEL*, Aug. 9, 2009, [www.thereeftank.com/blog/ocean-acidification-qaa-with-pmel/](http://www.thereeftank.com/blog/ocean-acidification-qaa-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](http://seattletimes.nwsourc.com/html/localnews/2009336458_oysters14m.html)

The Spokane Spokesman-Review, *Tribes discuss climate change*, Jul., 19, 2012, [www.spokesman.com/stories/2012/jul/19/tribes-discuss-climate-change/](http://www.spokesman.com/stories/2012/jul/19/tribes-discuss-climate-change/)

**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

## FIELD EXPERIENCE

### **Cruise leadership**

Led the organization and served as Chief Scientist for Leg 1 (17 days) of the 2016 West Coast Ocean Acidification cruise, NOAA Ship *Ronald H. Brown*, 34 days (5/2016 – 6/2016).

Led the organization of the 2013 West Coast Ocean Acidification cruise (Washington to California), NOAA Ship *Fairweather* and *R/V Point Sur*, 15 days (8/2013 – 9/2013).

Led the organization of the 2012 West Coast Ocean Acidification cruise (Washington to northern California), NOAA Ship *Bell M. Shimada*, 15 days (9/2012).

Co-led the organization of the 2011 West Coast Ocean Acidification cruise (Washington to southern California), UNOLS Ship *Oceanus*, 23 days (8/2011 – 9/2011).

**Shipboard**

Inorganic carbon measurements, including spectrophotometric pH and underway pCO<sub>2</sub> 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 pCO<sub>2</sub> 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)

**PRESENTATIONS**

Chapa, C., E. Beier, R. Durazo, J.M. Herndandez-Ayon, **S.R. Alin**, and A. Lopez-Perez, 2016. Wind-driven Ocean Circulation and the Spatial-temporal Variability of Dissolved Inorganic Carbon in the Gulf of Tehuantepec, North Eastern Tropical Pacific. AGU Fall Meeting, San Francisco, CA. Presentation # OS51A-2028.

Hayes, D.J., R. Vargas, **S.R. Alin**, R.T. Conant, L. Hutyra, A.R. Jacobson, W.A. Kurz, S. Liu, A.D. McGuire, B. Poulter, C.W. Woodall, 2016. The North American Carbon Budget Past, Present and Future. AGU Fall Meeting, San Francisco, CA. Presentation # GC23K-04.

Megonigal, P., L. Windham-Myers, W.-J. Cai, C. Hopkinson, A.Z. Wang, A.J. Andersson, A. Hinson, D. Lagomasino, D.M. Peteet, C.P. Giri, J. Howard, J. Tang, J. Crosswell, J.M. Herndandez-Ayon, K.H. Dunton, K.D., Kroeger, M.-L. Paulsen, M.A. Allison, S.A. Siedlecki, **S.R. Alin**, X. Hu, M. Tzortziou, R. Najjar, and K.V. Schafer, 2016. Coastal Carbon Dynamics as a New Chapter in SOCCR2: *Tidal Wetlands and Estuaries*. AGU Fall Meeting, San Francisco, CA. Presentation # GC23K-13.

Fennel, K., **S.R. Alin**, L. Barbero, W. Evans, J.M. Herndandez-Ayon, X. Hu, S.E. Lohrenz, F.E. Muller-Karger, R. Najjar, L.L. Robbins, E.H. Shadwick, S.A. Siedlecki, N. Steiner, D. Turk, P. Vlahos, and A.Z. Wang, 2016. Carbon fluxes in North American coastal and shelf seas: Current status and trends. AGU Fall Meeting, San Francisco, CA. Presentation # GC23K-14.

Moore, D.J., S.R. Cooley, **S.R. Alin**, M.E. Brown, D.E. Butman, N.H.F. French, Z.I. Johnson, G. Keppel-Aleks, S.E. Lohrenz, I. Ocko, E.H. Shadwick, A.J. Sutton, C.S. Potter, and R.M.S. Yu, 2016. State of the Carbon Cycle - Consequences of Rising Atmospheric CO<sub>2</sub>. AGU Fall Meeting, San Francisco, CA. Presentation # GC23K-16.

Shea, M., **S.R. Alin**, W. Evans, A. Sutton, B.R. Hales, J. Newton, and R.A. Feely, 2016. Use of a Land-Based, Dual-Parameter Analyzer for Tracking Ocean Acidification in Nearshore Coastal Habitats. AGU Fall Meeting, San Francisco, CA. Presentation # OS24A-08.

Siedlecki, S.A., **S.R. Alin**, R.A. Feely, A.J. Hermann, N. Bednarsek, T. Nguyen, S. Officer, I. Kaplan, N. Bond, J. Newton, J.L. Fisher, C. Morgan, and C. Saenger, 2016. Forecasting Ocean Acidification in the

- coastal waters of the Pacific Northwest. AGU Fall Meeting, San Francisco, CA. Presentation # OS42A-02.
- Brainard, R., B. Vargas-Ángel, I. Williams, T. Oliver, J. Rooney, P. Edwards, J. Kimball, A. Cohen, J. Smith, R. Toonen, N. Price, R. Feely, **S. Alin**, A. Sutton, D. Manzello, I. Enochs, N. Knowlton, G. Paulay, and F. Rohwer, 2016. Large-scale, long-term interdisciplinary ecosystem assessment and monitoring of the U.S. Pacific Islands to support ecosystem-based management and conservation. 13<sup>th</sup> International Coral Reef Symposium, Honolulu, Hawaii, June 19-24, 2016.
- Alin, S.R.**, A.J. Fassbender, B. Curry, R.A. Feely, J. Newton, A. Devol, and W. Ruef, 2016. Reconstructing carbonate chemistry in deep waters of the southern Salish Sea. 2016 Salish Sea Ecosystem Conference, Vancouver, BC.
- Fassbender, A.J., **S.R. Alin**, C. Krembs, R. Feely, J. Newton, and A. Sutton, 2016. Mapping the present to recognize the future: the magnitude and frequency of pH and  $\Omega_{ar}$  variability in Washington State. 2016 Salish Sea Ecosystem Conference, Vancouver, BC.
- Feely, R.A., **S. Alin**, B. Carter, and N. Bednarsek, 2016. Determination of the anthropogenic carbon signal in the coastal upwelling region along the Washington-Oregon-California continental margin. 2016 Salish Sea Ecosystem Conference, Vancouver, BC.
- Bos, J., C. Krembs, S. Albertson, M. Keyzers, L. Hermanson, C. Maloy, A. Fassbender, and **S. Alin**, 2016. Predictable spatial and seasonal patterns of pH within Ecology's long-term marine monitoring station network: understanding basic estuarine relationships in the Southern Salish Sea. 2016 Salish Sea Ecosystem Conference, Vancouver, BC.
- Keyzers, M., G. Pelletier, C. Krembs, M. Roberts, and **S. Alin**, 2016. Seasonal variation in aragonite saturation state in surface waters of Puget Sound – A pilot study. 2016 Salish Sea Ecosystem Conference, Vancouver, BC.
- Alin, S.R.**, B. Curry, J. Newton, R.A. Feely, and A. Sutton, 2016. Factors influencing the formation of corrosive conditions in Puget Sound and the extreme conditions observed during summer 2015 associated with the NE Pacific warm anomaly (a.k.a. The Blob). Ocean Sciences 2016, New Orleans, LA.
- Oliva, N.L., J.M. Hernandez-Ayon, R. Durazo, E. Santamaria-del-Angel, J.A. Valencia Gasti, **S.R. Alin**, and R.A. Feely, 2016. Dynamic of aragonite saturation horizon in waters of Baja California, Mexico. Ocean Sciences 2016, New Orleans, LA. Abstract #AH24A-0035.
- Cosca, C.E., R.A. Feely, and **S.R. Alin**, 2016. Data Management and Preservation: It Starts in the Field. Ocean Sciences 2016, New Orleans, LA. Abstract #90431.
- Fassbender, A.J., **S.R. Alin**, A. Sutton, and J. Newton, 2016. Estimating Total Alkalinity in the Coastal Zone: Considerations, Complexities, and the Surprising Utility for Ocean Acidification Research. Ocean Sciences 2016, New Orleans, LA. Abstract #90524
- Okazaki, R.R., A. Sutton, R.A. Feely, A.G. Dickson, **S.R. Alin**, C.L. Sabine, P.M.E. Bunge, and J.I. Virmani, 2016. Experimental Design Considerations in Measuring pH for the Wendy Schmidt Ocean Health XPRIZE Competition to Improve pH-sensing Technologies. Ocean Sciences 2016, New Orleans, LA. Abstract # 92863
- Sutula, M., J.C. McWilliams, C.A. Deutsch, R.F. Ambrose, **S.R. Alin**, N. Bednarsek, D. Bianchi, R.A. Feely, F. Kessouri, M. Gold, K. McLaughlin, L. Ohlsson, L. Renault, and S. Weisberg, 2016. Integrated Model of Ocean Acidification and Hypoxia to Support Ecosystem Prediction and Environmental Management in the California Current Ecosystem. Ocean Sciences 2016, New Orleans, LA. Abstract #93859.



- Siedlecki, S.A., P. MacCready, R. McCabe, R.A. Feely, **S.R. Alin**, and J. Newton, 2016. Ocean Acidification of the Pacific Northwest Coastal Waters: A Modeling Study. Ocean Sciences 2016, New Orleans, LA. Abstract # 92711
- Feely, R.A., **S.R. Alin**, B. Carter, and N. Bednarsek, 2015. Chemical and Biological Impacts of Ocean Acidification Along the West Coast of North America. AGU Fall Meeting, San Francisco, CA. Abstract #74770.
- Cross, J.N., B.R. Carter, S.A. Siedlecki, **S.R. Alin**, A.G. Dickson, R.A. Feely, J.T. Mathis, R.H. Wanninkhof, A.M. Macdonald, S. Mecking, and L.D. Talley, 2015. Decadal Variability of Total Alkalinity in the North Pacific Ocean. AGU Fall Meeting, San Francisco, CA. Abstract # 93397
- Siedlecki, S., and **S.R. Alin**, 2015. Coastal Carbon Synthesis for the Continental Shelf of the North American Pacific Coast (NAPC). AGU Fall Meeting, San Francisco, CA. Abstract #GC13F-1223.
- Benway, H., S. Siedlecki, R. Najjar, E. Boyer, W.-J. Cai, P. Coble, J. Cross, M. Friedrichs, M. Goni, P. Griffith, M. Herrmann, S. Lohrenz, J. Mathis, G. McKlinley, C. Pilskaln, R. Smith, and **S. Alin**, 2015. Closing the North American Carbon Budget: Continental Margin Fluxes Matter! AGU Fall Meeting, San Francisco, CA. Abstract #GC13F-1219.
- Feely, R., S. Alin, B. Carter, and N. Bednarsek, 2015. Chemical and biological impacts of ocean acidification along the West Coast of North America. AGU Fall Meeting, San Francisco, CA. Abstract #OS22A-04.
- Alin, S.R.**, B. Curry, J. Newton, R.A. Feely, and A. Sutton, 2015. Factors influencing the formation of corrosive conditions in Puget Sound. Coastal & Estuarine Research Federation 23<sup>rd</sup> Biennial Conference: "Grand Challenges in Coastal & Estuarine Science: Securing Our Future," Portland, OR, 8-12 November 2015.
- Feely, R.A., **S. Alin**, B. Carter, B. Hales, F. Chan, T. Hill, N. Bednarsek, D. Greeley, and L. Juranek, 2015. The anthropogenic carbon signal in the coastal upwelling region along the Washington-Oregon-California continental margin. Coastal & Estuarine Research Federation 23<sup>rd</sup> Biennial Conference: "Grand Challenges in Coastal & Estuarine Science: Securing Our Future," Portland, OR, 8-12 November 2015.
- Alin, S.**, and B. Curry, 2015. "Seasonal ocean acidification dynamics in Puget Sound." Washington Ocean Acidification Center Symposium, Center for Urban Horticulture, Seattle, WA, June 26, 2015.
- Alin, S.**, R. Feely, J. Newton, A. Fassbender, B. Curry, and D. Greeley, "Proxy relationships for carbonate chemistry: applications in Washington State marine waters," 3<sup>rd</sup> US Ocean Acidification PI Meeting, Woods Hole Oceanographic Institution, June 9-11, 2015.
- Alin, S.**, R. Feely, B. Carter, T. Hill, F. Chan, and D. Greeley. "What we know about ocean acidification on the West Coast," Indicators of Climate Change in California Workshop, CalEPA, Sacramento, CA, June 16-17, 2015.
- Alin, S.R.**, "Ocean acidification and Hood Canal: What will the future hold?" Hood Canal Climate Adaptation Workshop, Bremerton, Washington, 7 May 2015.
- Alin, S.R.**, R.A. Feely, A. Sutton, B. Carter, and C. Sabine. "NOAA's Pacific Northwest Ocean Acidification Monitoring and Research," EPA Region 10 Headquarters meeting, Seattle, Washington, 11 May 2015.
- Alin, S.R.**, R.A. Feely, A. Sutton, B. Carter, and C. Sabine. "Ocean acidification: recent insights from the open ocean to the Pacific Northwest," The 7<sup>th</sup> International Symposium on Gas Transfer at Water Surface, Seattle, Washington, May 18-21, 2014.
- Alin, S.R.**, "Carbon and ocean acidification data in the Salish Sea and boundary waters: A preliminary look," 2014 Puget Sound Marine Waters Overview Workshop," Seattle, WA, 1 April 2015.
- Alin, S.**, R. Feely, A. Sutton, C. Sabine, J. Mathis, 2015. U.S. National Ocean Acidification Monitoring & Research Efforts. Presented at the MEOPAR Ocean Acidification Expert Forum, Victoria, BC, February 17-18, 2015.

- Alin, S.**, 2015. *Opening remarks (including a brief history of US Global/North American Carbon Cycle research and programs)*. Presented at the North American Carbon Program 5<sup>th</sup> Principal Investigators Meeting, Washington, DC, January 26-29, 2015.
- Siedlecki S., **S. Alin**, B. Hales, J. Mathis, W. Evans, M. Stukel, J. Fiechter, C. Deutsch, J. Bishop, G. Gaxiola, J. Hernandez, L. Juranek, M. Goni, G. Turi, J. Needoba, E. Mayorga, Z. Lochkar, N. Gruber, J. Hartmann, N. Moosdorf, J. Largier, F. Chavez, L. Aluwihare, F. Chan, A. Devol, D. Ianson, R. Feely, 2015. *Coastal Carbon Synthesis for the Continental Shelf of the North American Pacific Coast (NAPC): Preliminary Results*. Presented at the North American Carbon Program 5<sup>th</sup> Principal Investigators Meeting, Washington, DC, January 26-29, 2015 (poster).
- Najjar, R., J. Mathis, G. McKinley, **S. Alin**, S. Siedlecki, P. Coble, S. Lohrenz, W.-J. Cai, M. Friedrichs, M. Herrmann, H. Benway, P. Griffith, 2015. *An update on the North American Coastal CARbon Synthesis (CCARS)*. Presented at the North American Carbon Program 5<sup>th</sup> Principal Investigators Meeting, Washington, DC, January 26-29, 2015.
- Alin, S.**, R. Feely, A. Sutton, C. Sabine, and J. Mathis, 2014. *PMEL's Ocean Acidification Research Program*. Presented at the *Pacific Marine Environmental Laboratory Five-Year Review*, Seattle, Washington, Sep. 10, 2014.
- Alin, S.**, S. Siedlecki, and 24 other contributors, 2014. *Regional Coastal Carbon Budgets: Existing Gaps and Potential New Approaches—West Coast*. Presented at *Coastal Carbon Synthesis (CCARS) Community Workshop*, Woods Hole Oceanographic Institution, Woods Hole, Aug. 19–21, 2014
- Alin, S.R.**, R.A. Feely, J. Newton, C. Krembs, A. Devol, W. Ruef, P. MacCready, J. Reum, A. Siedlecki, G. Holtgrieve, M. Warner, and D. Greeley, 2014. Attribution of corrosive bottom-water conditions to ocean acidification and other estuarine drivers in Puget Sound: an updated analysis. Presented at the *2014 Salish Sea Ecosystem Conference*, Seattle, Washington, May 1, 2014.
- Feely, R.A., **S.R. Alin**, J. Newton, C. Krembs, A. Devol, W. Ruef, P. MacCready, J. Reum, A. Siedlecki, G. Holtgrieve, M. Warner, and D. Greeley, 2014. The impacts of upwelling, ocean acidification, and respiration on aragonite saturation along the Washington continental margin. Presented at the *2014 Salish Sea Ecosystem Conference*, Seattle, Washington, May 1, 2014.
- Reum, J.C., **S. Alin**, N. Bednarsek, W. Evans, R. Feely, B. Hales, J. Mathis, P. McElhany, J. Newton, and C. Sabine, 2014. Carbonate chemistry covariation with temperature and oxygen in the Salish Sea and California Current Ecosystems: implications for the design of ocean acidification experiments. Presented at the *2014 Salish Sea Ecosystem Conference*, Seattle, Washington, May 1, 2014.
- Bednarsek, N., R. Feely, J. Reum, B. Peterson, **S. Alin**, and B. Hales, 2014. Vulnerability and adaptation strategies of pteropods in the California Current Ecosystem. Presented at the *2014 Salish Sea Ecosystem Conference*, Seattle, Washington, May 1, 2014.
- Alin, S.**, 2014. *West Coast Coastal Carbon Synthesis: Introduction*, *West Coast Coastal Carbon Synthesis Workshop*, University of Washington, Seattle, Washington, Mar. 19–21, 2014.
- Alin, S.R.**, R.A. Feely, J. Newton, C. Krembs, A. Devol, W. Ruef, P. MacCready, J. Reum, A. Siedlecki, G. Holtgrieve, M. Warner, and D. Greeley, 2014. Attribution of corrosive bottom-water conditions to ocean acidification and other estuarine drivers in Puget Sound: an updated analysis. Presented at the *2014 Ocean Sciences Meeting*, Honolulu, Hawaii, February 23–28, 2014.
- Ballard, J., T. Martz, and **S. Alin**, 2014. Calcium anomalies in the northern California Current System. Presented at the *2014 Ocean Sciences Meeting*, Honolulu, Hawaii, February 23–28, 2014.
- Reum, J.C., **S. Alin**, N. Bednarsek, R. Feely, and B. Hales, 2014. Carbonate chemistry covariation with temperature and oxygen in coastal regions: implications for the design of ocean acidification experiments. Presented at the *2014 Ocean Sciences Meeting*, Honolulu, Hawaii, February 23–28, 2014.
- Siedlecki, S., A. Hermann, N. Bond, **S. Alin**, R. Feely, B. Hales, and J. Newton, 2014. Hypoxia and Ocean Acidification of the coastal waters of the Pacific Northwest: Evaluation of seasonal predictions of

- hypoxia and pH. Presented at the *2014 Ocean Sciences Meeting*, Honolulu, Hawaii, February 23–28, 2014.
- McElhany, P., T. Ladd, T. Khangaonkar, and **S. Alin**, 2014. Modeling complex movement of zooplankton in a dynamic carbon chemistry environment. Presented at the *2014 Ocean Sciences Meeting*, Honolulu, Hawaii, February 23–28, 2014.
- Brainard, R.E., C. Young, M. Timmers, A. Cohen, N. Price, C. Richards, B. Vargas-Angel, R.A. Feely, **S. Alin**, D. Manzello, I. Enochs, D. Gledhill, A. Cohen, J. Smith, N. Knowlton, C. Meyer, and G. Paulay, 2014. Monitoring Ecological Impacts of Ocean Acidification on Pacific Reefs. Presented at the *2014 Ocean Sciences Meeting*, Honolulu, Hawaii, February 23–28, 2014.
- Alin, S.R.**, R.A. Feely, B. Hales, L.W. Juranek, J. Reum, S. Siedlecki, D. Ianson, J. Peterson, W. Peterson, J. Newton, D. Greeley, and C. Hunt, 2013. How well do empirical relationships for estimating carbonate system parameters in the California Current System work in the Salish Sea? *22<sup>nd</sup> Biennial Conference of the Coastal and Estuarine Research Foundation (CERF2013)*, San Diego, CA, November 3–7, 2013.
- Siedlecki, S., A. Hermann, N. Bond, **S. Alin**, R. Feely, B. Hales, and J. Newton, 2013. Hypoxia and Ocean Acidification of the coastal waters of the Pacific Northwest: Evaluation of seasonal predictions from a regional model forced with the Coupled Forecast System (CFS). *22<sup>nd</sup> Biennial Conference of the Coastal and Estuarine Research Foundation (CERF2013)*, San Diego, CA, November 3–7, 2013.
- Feely, R.A., **S.R. Alin**, J.T. Mathis, L. Juranek and B. Hales, 2013. The Combined Impacts of Ocean Acidification, Upwelling and Respiration on Aragonite Saturation State Along the Washington-Oregon-California Continental Shelf Margin in Late Summer Months of 2011 and 2012, 2013. *The 9th International Carbon Dioxide Conference (ICDC9)*, Beijing, China, June 7, 2013.
- Alin, S.R.**, R.A. Feely, L.W. Juranek, and B. Hales, 2013. Empirical relationships for estimating carbonate system parameters in the northern California Current System. *North American Carbon Program 4<sup>th</sup> All Investigators Meeting*, Albuquerque, NM, February 4–7, 2013.
- Feely, R.A., **S.R. Alin**, B. Hales, L. Juranek, and D. Greeley, 2013. The extent of ocean acidification on aragonite saturation state along the Washington-Oregon continental shelf margin in late summer 2012. *American Geophysical Union (AGU), Annual Fall Meeting*, San Francisco CA, 03–07 December 2012.
- Alin, S.**, B. Allen, A. Suhrbier, J. Davis, R. Feely, J. Newton, A. Devol, C. Sabine, B. Peabody, B. Hales, B. Eudeline, D. Cheney, and C. Krembs, 2012. Water chemistry, larval oysters, and ocean acidification in South Puget Sound. *2012 South Sound Science Symposium*, Shelton, WA, October 30, 2013 (invited).
- Alin, S.R.**, R.A. Feely, L.W. Juranek, B. Hales, W.T. Peterson, J.O. Peterson, J.A. Newton, C. Krembs, E. Bowlby, P. A'Hearn, L. Antrim, G. Galasso, R. Fletcher, and D. Ianson, 2012. Empirical relationships for estimating carbonate system parameters in the northern California Current System. Presented at *Oceans in a High-CO<sub>2</sub> World III*, Monterey, CA, 23–27 September.
- Feely, R.A., **S.R. Alin**, L.W. Juranek, B. Hales, R.H. Byrne, and M. Patsavas, 2012. The impacts of ocean acidification, upwelling, and respiration processes on aragonite saturation and pH along the Washington-Oregon-California continental margin in late summer 2011. Presented at *Oceans in a High-CO<sub>2</sub> World III*, Monterey, CA, 23–27 September.
- Alin, S.**, B. Allen, A. Suhrbier, J. Davis, R. Feely, J. Newton, A. Devol, C. Sabine, B. Peabody, B. Hales, B. Eudeline, D. Cheney, and C. Krembs, 2012. Water chemistry, larval oysters, and ocean acidification in a complex, urbanized estuary (Puget Sound, Washington). Presented at the *2012 National Shellfisheries Association Annual Meeting*, Seattle, WA, 26–29 March.
- Friedman, C.S., B. Vadopalas, E. Dorfmeier, L. Crosson, S. Brombacker, S. White, J. Bouma, **S. Alin**, and R. Feely, 2012. Effects of ocean acidification on the health of Washington state pinto abalone.

- Presented at the *2012 National Shellfisheries Association Annual Meeting*, Seattle, WA, 26–29 March.
- Alin, S.R.**, R.A. Feely, L.W. Juranek, B. Hales, D. Ianson, W.T. Peterson, J.O. Peterson, J.A. Newton, E. Bowlby, and M.S. Brancato, 2012. Empirical relationships for estimating the state of the carbonate system under hypoxic conditions in the northern California Current System. Presented at *Ocean Sciences 2012*, Salt Lake City, UT, 20–24 February.
- Feely, R.A., **S.R. Alin**, L.W. Juranek, and B. Hales, 2012. The impacts of upwelling, ocean acidification and respiration on aragonite saturation along the Washington-Oregon-California continental margin in late summer 2011. Presented at *Ocean Sciences 2012*, Salt Lake City, UT, 20–24 February.
- Hales, B., **S. Alin**, W.J. Cai, P. Coble, S. Lohrenz, J. Mathis, G. McKinley, and R. Najjar, 2012. Carbon cycling in ocean margins: a tutorial. Presented at *Ocean Sciences 2012*, Salt Lake City, UT, 20–24 February.
- Juranek, L.W., R.A. Feely, **S.R. Alin**, C. Meinig, and S.E. Stalin, 2012. Evaluating the seasonal and event-scale effects of upwelling, biological production, and hypoxia on central Oregon margin carbon chemistry using a coastal shallow water glider. Presented at *Ocean Sciences 2012*, Salt Lake City, UT, 20–24 February.
- Alin, S.**, B. Allen, A. Suhrbier, J. Davis, R. Feely, J. Newton, A. Devol, C. Sabine, B. Peabody, and B. Hales, 2011. Water chemistry and larval oyster success in Puget Sound as impacted by ocean acidification. Presented at the *2011 Salish Sea Ecosystem Conference*, Vancouver, BC, 25–27 Oct.
- Goñi, M., R. Aalto, **S. Alin**, A. Aufdenkampe, A. Kurtz, W. Lauer, E. Moore, C. Nittrouer, and E. Portier, 2011. Sources, Distribution and Fate of Particulate Organic Matter along the Fly River-Gulf of Papua land-ocean continuum. Presented at the *2011 Geological Society of America Annual Meeting*, Minneapolis, Minn., 9-12 Oct.
- Alin, S.**, R. Feely, A. Dickson, M. Hernandez-Ayon, L. Juranek, M. Ohman, and R. Goericke, 2011. Robust predictive relationships for pH and carbonate saturation in the southern California Current System using oxygen and temperature data. Presented at the *Pacific Coast Shellfish Growers Association 65th Annual Conference*, Salem, Oreg., 19-22 Sept.
- Newton, J., **S. Alin**, R. Feely, C. Sabine, A. Devol, A. Suhrbier, D. Cheney, B. Eudeline, J. Davis, B. Allen, B. Peabody, and C. Krembs, 2011. Ocean acidification in Puget Sound: recent observations on water chemistry and implications for larval oyster success. Presented at the *2<sup>nd</sup> Annual Pacific Northwest Climate Science Conference*, Seattle, Wash., 13-14 Sept.
- Alin, S.**, R. Feely, A. Dickson, M. Hernandez-Ayon, L. Juranek, M. Ohman, and R. Goericke, 2011. Robust predictive relationships for pH and carbonate saturation in the southern California Current System using oxygen and temperature data. Presented at the *World University Network Ocean Acidification Workshop*, Friday Harbor, Wash., 28 Aug.-2 Sept.
- Brainard, R.E., C. Young, C. Richards, M. Timmers, B. Vargas-Angel, R.A. Feely, **S. Alin**, A. Cohen, N. Price, J. Smith, D. Gledhill, C. Meyer, and G. Paulay, 2011. Monitoring ecological and biodiversity impacts of ocean acidification on coral reefs across the Pacific. Presented at the *22<sup>nd</sup> Pacific Science Congress*, Kuala Lumpur, Malaysia, 14-18 Jun.
- Martz, T., K. Johnson, U. Send, Y. Takeshita, B. Peterson, H. Jannasch, J. Plant, V. Elrod, L. Colletti, and **S. Alin**, 2011. pH Sensor Inter-comparisons. Presented at the *Ocean Carbon & Biogeochemistry Summer Workshop*, Woods Hole, Mass., 18-21 Jul.
- Martz, T. R., K. S. Johnson, U. Send, **S. Alin**, H. Jannasch, J. Plant, V. Elrod, L. Coletti, Y. Takeshita, and B. Peterson, 2011. Operational capabilities of autonomous pH sensors: reducing key uncertainties in environmental properties. Presented at *ASLO Aquatic Sciences Meeting*, San Juan, Puerto Rico, Abstract ID 7742, 13-18 February.
- Hernandez, J.M., R. Lara-Lara, G. Gaxiola, G. Cervantes-Diaz, F. Chavez, **S. Alin**, R.A. Feely, C.L. Sabine, L. Linacre, and R. Durazo, 2011. Temporal variability of the physicochemical water characteristics at a

- coastal monitoring observatory: Station ENSENADA in Baja California, Mexico. Presented at the 3<sup>rd</sup> *North American Carbon Program All-Investigators Meeting*, New Orleans, Louisiana, 31 Jan.-4 Feb.
- Alin, S.**, H. Benway, W.-J. Cai, P. Coble, P. Griffith, *S. Lohrenz (presenter)*, J. Mathis, G. McKinley, R. Najjar, 2011. The North American Carbon Program (NACP) Coastal Interim Synthesis Activity: Carbon and Nutrient Exchanges and Transformations at the Land-Ocean Continuum. Presented at the 3<sup>rd</sup> *North American Carbon Program All-Investigators Meeting*, New Orleans, Louisiana, 31 Jan.-4 Feb.
- Alin, S.R.**, R.A. Feely, A. Dickson, M. Hernandez, L.W. Juranek, M. Ohman, and R. Goericke, 2010. Predictive relationships for pH and carbonate saturation in the southern California Current System using oxygen and temperature data. Abstract OS23A-1570 presented at *2010 Fall Meeting, AGU*, San Francisco, Calif., 13-17 Dec.
- Juranek, L.W., R.A. Feely, **S.R. Alin**, S.R. Emerson, and P. Quay, 2010. Robust Prediction of pH and Carbonate Mineral Saturation State in the North Pacific Ocean Using Empirical Relationships with Hydrographic Data. Abstract OS21D-1540 presented at *2010 Fall Meeting, AGU*, San Francisco, Calif., 13-17 Dec.
- Aufdenkampe, A., E. Mayorga, **S.R. Alin**, P. Raymond, J.M. Melack, and S.C. Doney, 2010. Spatially and temporally distributed re-evaluation of global CO<sub>2</sub> outgassing from inland waters: The tropics dominate global fluxes. Abstract B24A-02 presented at *2010 Fall Meeting, AGU*, San Francisco, Calif., 13-17 Dec.
- Alin, S.R.**, R.A. Feely, A. Dickson, M. Hernandez, L.W. Juranek, M. Ohman, and R. Goericke, 2010. Predictive relationships for pH and carbonate saturation in the southern California Current System using oxygen and temperature data. Presented at the *2010 CalCOFI Conference*, San Diego, Calif., 6-8 Dec.
- Feely, R.A., L. Juranek, **S. Alin**, B. Hales, C.L. Sabine, D. Greeley, and K. Lee, 2010. Ocean acidification estimates based on hydrographic data from the U.S. North American west coast. Presented at the *2010 CalCOFI Conference*, San Diego, Calif., 6-8 Dec.
- Hernandez-Ayon, J.M., G. Gaxiola, R. Lara-Lara, F. Chavez, R.A. Feely, **S.R. Alin**, C.L. Sabine, K. Barbeau, and R. Durazo, 2010. Influence of the oxygen minimum zone (OMZ) on the carbon dioxide system along the Pacific Mexican coast. Presented at the *2010 CalCOFI Conference*, San Diego, Calif., 6-8 Dec.
- Alin, S.**, B. Allen, D. Cheney, J. Davis, A. Devol, R. Downey, R. Feely, C. Krembs, J. Newton, B. Peabody, C. Sabine, 2010. Monitoring water chemistry and oyster settlement for ocean acidification impacts in Puget Sound. *Pacific Coast Shellfish Growers Association 64<sup>th</sup> Annual Conference*, Tacoma, Washington, September 2010.
- R.A. Feely, **S.R. Alin**, J. Newton, C.L. Sabine, M. Warner, A. Devol, C. Krembs, and C. Maloy, The Combined Effects of Ocean Acidification, Mixing, and Respiration on pH and Carbonate Saturation in an Urbanized Estuary, *Pacific Coast Shellfish Growers Association 64<sup>th</sup> Annual Conference*, Tacoma, Washington, September 2010.
- Peabody, B., R. Feely, **S. Alin**, C. Sabine, J. Newton, D. Cheney, B. Allen, J. Davis, A. Devol, C. Krembs, R. Downey, Potential impacts of ocean acidification on oyster recruitment in Puget Sound, *Pacific Coast Shellfish Growers Association 64<sup>th</sup> Annual Conference*, Tacoma, Washington, September 2010.
- Alin, S.R.**, R.A. Feely, L.W. Juranek, W. Peterson, J. Peterson, M.S. Brancato, E. Bowlby, C.L. Sabine, B. Hales, and D. Ianson, 2010. Predictive Relationships for Ocean Acidification Conditions in the Northern California Current System Using Oxygen and Temperature Data. *1<sup>st</sup> Annual Pacific Northwest Climate Change Conference*, Portland, Oregon, June 2010.
- R.A. Feely, **S.R. Alin**, J. Newton, C.L. Sabine, M. Warner, A. Devol, C. Krembs, and C. Maloy, The Combined Effects of Ocean Acidification, Mixing, and Respiration on pH and Carbonate Saturation

- in an Urbanized Estuary, *Pacific Northwest Climate Science Conference, Portland State University, Portland, OR, 15-16 June 2010.*
- 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. *2010 Ocean Sciences Meeting, Portland, Oregon, February 2010.*
- Sabine, C.L., R. A. Feely, C. Cosca, **S. Alin**, NOAA Buoy and Underway measurements, *CO<sub>2</sub> System and SOCAT Symposium, JAMSTEC Tokyo Office, Tokyo, Japan, 8-12 February 2010.*
- Alin, S.R.**, The North American Carbon Program (NACP) Coastal Interim Synthesis Activity: Carbon Synthesis Along North American Margins, Keynote presentation at *First Mexican Carbon Symposium, Ensenada, Mexico, Oct. 7-9, 2009.*
- 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 2<sup>nd</sup> All-Investigators Meeting.*
- 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 2<sup>nd</sup> All-Investigators Meeting, Ocean Carbon & Biogeochemistry Summer Workshop.*
- 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 CO<sub>2</sub> 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 CO<sub>2</sub> 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 O<sub>2</sub>/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. Raseira, A.V. Krusche, C.I. Salimon, L.A. Montebelo, **S. Alin**, R.L. Victoria, and J.E. Richey. 2006. Role of CO<sub>2</sub> 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. 37<sup>th</sup> 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, 5<sup>th</sup> Summer Institute*, Steamboat Springs, Colorado.
- Alin, S.R.**, and A.S. Cohen. 2002. Little Ice Age drought history in East Africa. *American Quaternary Association, 17<sup>th</sup> 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 15<sup>th</sup> 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. *8<sup>th</sup> 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, 51<sup>st</sup> 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

- 2016 "Reconstructing carbonate chemistry in deep waters of OCNMS," Olympic Coast National Marine Sanctuary (OCNMS) Sanctuary Advisory Council annual science meeting, Seattle, Washington, September 23.
- 2013 Ocean acidification in coastal ecosystems: what we are learning about 'drivers' in the California Current System and Salish Sea. *University of Washington Program on Climate Change 2013 Summer Institute "Climate Forcing of Marine Ecosystems: Causes and Consequences,"* Friday Harbor Lab, San Juan Island, WA, September 11–13, 2013.
- 2013 Ocean acidification and Puget Sound: From water chemistry to larval oysters. *2013 University of Washington Water Center Symposium*, Seattle, WA, April 30, 2013.
- 2013 *Outreach lecture:* Ocean acidification and Washington's coastal ecosystems. *Bellevue College Earth Week 2013, 14<sup>th</sup> Annual—"Living in a Changing Climate,"* Bellevue, WA, April 22–26, 2013.
- 2012 *Plenary panel presentation:* Ocean acidification and West Coast ecosystems, *First Stewards: Coastal Peoples Address Climate Change* symposium, Washington, DC, 17–20 July.



- 2012 *Science-policy panel presentation*: Introduction to ocean acidification and the status of conditions in Pacific Northwest ecosystems. Washington State Blue Ribbon Panel on Ocean Acidification, Seattle, Washington, 30 March 2012.
- 2011 *Seminar*: Ocean acidification & the California Current System, Chemistry Department Seminar Series, University of Montana, Missoula, MT, 5 Dec. 2011.
- 2011 *Plenary session*: Ocean acidification in coastal waters, Human Impacts on the Aquatic Environment, *Joint Meeting of the Phycological Society of America, International Society of Protistologists & Northwest Algal Symposium*, Seattle, WA, 12-16 July.
- 2011 *Outreach lecture*: Ocean acidification & Puget Sound, *Volunteer Aquarium Docents Training Lecture Series*, Seattle Aquarium, Seattle WA, 2 Nov. 2011.
- 2010 *Public science lecture*: Ocean acidification: Impacts of 'the other CO<sub>2</sub> problem' on Puget Sound, *NOAA Science in the Pacific Northwest* lecture series, Pacific Science Center, Seattle, WA, 10 November 2010.
- 2010 *Opening gala for the Science on a Sphere exhibit*: A brief overview of global ocean acidification patterns from pre-industrial to 2100, Pacific Science Center, Seattle, WA, 26 October 2010.
- 2010 *Seminar*: Ocean Acidification and Puget Sound, Washington Department of Fish and Wildlife, Climate Change Seminar, Olympia, WA, 6 October 2010.
- 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.

**LANGUAGES & CERTIFICATIONS**

French, scientific reading proficiency

Portuguese, scientific reading proficiency

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

NAUI Open Water I and II Scuba Diving Certification