

## Joseph Anton Resing

**Joint Institute for the Study of the Atmosphere and Ocean**  
Pacific Marine Environmental Laboratory  
and the University of Washington  
7600 Sand Point Way N.E. Seattle, WA. 98115  
resing@u.washington.edu  
W: 206-526-6184 H: 206-364-9583 Fax: 206- 526-6054

### PERSONAL

Date of Birth: September 17, 1964; Washington, D.C.  
Marital Status: Married, 2 Children

### EDUCATION

- 1997 Ph.D.: Chemical Oceanography**, University of Hawaii, Honolulu, Hawaii.  
*The chemistry of lava-seawater interactions at the shoreline of Kilauea Volcano*
- 1992 M.S.: Chemical Oceanography**, University of Hawaii, Honolulu, Hawaii.  
*Determination of manganese in seawater using flow injection analysis with online pre-concentration and spectrophotometric detection*
- 1986 B.S.: Chemistry**, DePaul University, Chicago Illinois.

### EXPERIENCE

- 2001-pres. **Affiliate Assistant Professor**, Department of Oceanography, University of Washington, Seattle.
- 1999-pres. **Research Scientist**, Joint Institute for the Study of the Atmosphere and Ocean, University of Washington and the Pacific Marine Environmental Laboratory (PMEL), Seattle, Washington.
- 1997-99. **National Research Council Post-Doctoral Fellow**. National Oceanographic Atmospheric Administration, PMEL , Seattle, Washington.
- 1988-96 **University of Hawaii at Manoa, Research Assistant**, Department of Oceanography.
- 1987 **Hazardous waste environmental assessment**. Pearl Harbor Public Works Facility.
- 1986-87 **Teaching Assistant**, University of Hawaii at Manoa, Department of Chemistry.
- 1985 **Summer Intern**, Harbor Branch Foundation, Inc., Fort Pierce Florida.
- 1984-86 **Research Assistant**, DePaul University, Department of Chemistry .
- 1983 **Marine Science Counselor**, SeaCamp, Big Pine Key Florida.
- 1982 **Research Apprentice**, Naval Research Laboratory, Washington, D.C..
- 1981 **N.S.F. Summer Science Institute**, Humboldt State University, Arcata, California.

### LEADERSHIP EXPERIENCE

- 2010-pres Theme Editor:** Assessing Magmatic, Neovolcanic, Hydrothermal, and Biological Processes along Intra-Oceanic Arcs and Back-Arcs, Geochemistry, Geophysics, Geosystems

**2011-pres** **Chair-** City of Lake Forest Park Transportation Commission  
**2008-pres** **Commissioner,** City of Lake Forest Park Transportation Commission  
**2009** **Co-chair Fall 2009 AGU Meeting:** “Submarine Volcanic Eruptions: Studies of Geological, Chemical, and Biological Processes ”  
**2007-10** **Advisory Committee,** NSF-Marine Geology and Geochemistry Data Systems  
**2006** **Co-Chair** Fall 2006 AGU Meeting: “Recent Deep-Sea Eruptions”  
**2006-09** **Steering Committee,** NSF-Ridge 2000  
**2002** **Convener:** 2002 Ocean Sciences Meeting: “Chemical Oceanography: Metals”  
**1995** **Vice President,** Oceanography student association, University of Hawaii  
**1990** **Student-Faculty Representative,** Dept. of Oceanography  
**1991** **President,** Oceanography student association

## PROFESSIONAL SOCIETIES

**American Geophysical Union**

### MANUSCRIPTS IN PREPARATION

Barrett, P., **Resing, J.A.**, Landing, W., Buck, N., Buck, C., (2011) The geochemistry of particulate matter in the North Atlantic: results from A16N. To be submitted to *Marine Chemistry*  
 Buck, C.S., W.M. Landing, **J.A. Resing**, (2011) Pacific Ocean Aerosols: Deposition and Solubility of Iron, Aluminum, and Other Trace Elements, to be submitted to *Geochem. Geophys. Geosyst.*  
**Resing, J.A.**, Baker, E.T., Embley, R. Lupton, J., Lilley, M., Rubin, K. Buck, N. The geochemical signature of a large Submarine Volcano in the NE Lau Basin: dome building and magmatic gas output. To be submitted to *Geochem. Geophys. Geosyst.*

### MANUSCRIPTS IN PROGRESS

Leybourne, M.I., U. Schwarz-Schampera, C.E.J. de Ronde, E.T. Baker, K. Faure, S.L. Walker, D.A. Butterfield, **J. Resing**, J. Lupton, M.D. Hannington, G.J. Massoth, M. Clark, C. Timm, I.J. Graham, and I.C. Wright (2012): Submarine magmatic-hydrothermal systems at the Monowai Volcanic Centre, Kermadec Arc. *Econ. Geol.* [Submitted July 2011; Revised February 2012]  
 Slemmons, L., B. Paul, J.A. Resing and J.W. Murray (2012) Particulate iron, aluminum, and manganese in the Pacific equatorial undercurrent and low latitude western boundary current sources. In revision for *Marine Chemistry*[Submitted September 2011; in Revision]

## PUBLICATIONS

61. **Resing, J. A.**, K.H. Rubin, R. Embley, J. Lupton, E. Baker, R. Dziak, T. Baumberger, M. Lilley, J. Huber, T.M. Shank, D. Butterfield, D. Clague, N. Keller, S. Merle, N.J. Buck, P.

- Michael, A. Soule, D. Caress, S. Walker, R. Davis, J. Cowen, A-L. Reysenbach, and H. Thomas, (2011) Active Submarine Eruption of Boninite at West Mata Volcano in the Extensional NE Lau Basin, *Nature Geosciences*, 10.1038/ngeo1275.
60. Baker, E.T., Lupton, J.E., J.A. **Resing**, S.L. Walker, T. Baumberger, M. Lilley, K. Rubin. (2011) Unique event plumes from a 2008 eruption on the Northeast Lau Spreading Center, *Geochem. Geophys. Geosyst.*, 12, Q0AF02, doi: 10.1029/2011GC003725, 21 pp.
  59. Butterfield, D.A., K. Nakamura, B. Takano, M.D. Lilley, J.E. Lupton, J.A. **Resing**, and K.K. Roe (2011): High SO<sub>2</sub> flux, sulfur accumulation and gas fractionation at an erupting submarine volcano. *Geology*, 39, 803-806, doi:10.1130/G31901.1.
  58. Baker, E.T., F. Martinez, J.A. **Resing**, S.L. Walker, N. Buck, and M.H. Edwards (2010): Hydrothermal cooling along the Eastern Lau Spreading Center: No evidence for discharge beyond the neovolcanic zone. *Geochem. Geophys. Geosyst.*, 11, Q08004, doi: 10.1029/2010GC003106.
  57. Slemons, L.O., J.W. Murray, J.A. **Resing**, B. Paul, P. Dutrieux, (2010), Western Pacific coastal sources of iron, manganese and aluminum to the Equatorial Undercurrent, *Global Biogeochem. Cycles*, 24, GB3024, doi: 10.1029/2009GB003693, 16 pp.
  56. Buck, C.S., W.M. Landing, J.A. **Resing**. (2010) Particle size and aerosol iron solubility: A high-resolution analysis of Atlantic aerosols, *Mar. Chem.*, doi:10.1016/j.marchem.2008.11.002.
  55. Buck, C.S., W.M. Landing, J.A. **Resing**, C.I. Measures. (2010) The solubility and deposition of aerosol Fe and other trace elements in the North Atlantic Ocean: Observations from the A16N CLIVAR/CO<sub>2</sub> repeat hydrography section, *Mar. Chem.*, doi:10.1016
  54. Chadwick, W., R. Embley, E. Baker, J. **Resing**, J. Lupton, K. Cashman, R. Dziak, V. Tunnicliffe, D. Butterfield, and Y. Tamura (2010): Spotlight 10: NW Rota-1 Seamount. *Oceanography*, 23, NO.1, 182- 183.
  53. Ranville, M.A., G.A. Cutter, C.S. Buck W.M. Landing, L.S. Cutter, J.A. **Resing**, A.R. Flegal (2010) Aeolian contamination of Se and Ag in the North Pacific from Asian fossil fuel combustion, *Environmental Science and Technology*, 44, 1587-1593.
  52. **Resing, J.A.**, R. W. Embley, K.H. Rubin, (2009) Eruptions in the NE Lau Basin, *MARGINS Newsletter*, No. 23, Fall 2009, 12-15.
  51. **Resing, J.A.**, E.T. Baker, J.E. Lupton, S.L. Walker, D.A. Butterfield, G. J. Massoth, K. Nakamura, (2009), Chemistry of hydrothermal plumes above submarine volcanoes of the Mariana Arc, *Geochem. Geophys. Geosyst.*, 10, Q02009, doi:10.1029/2008GC002141.
  50. Love, B. A., J. A. **Resing**, J. P. Cowen, J. E. Lupton, D. J. Fornari, T. M. Shank, and D. Biller (2008), Methane, manganese, and helium in hydrothermal plumes following volcanic eruptions on the East Pacific Rise near 9°50'N, *Geochem. Geophys. Geosyst.*, 9, Q06T01, doi:10.1029/2008GC002104.
  49. Baker, E.T., R.M. Haymon, J.A. **Resing**, S.M. White, S.L. Walker, K.C. Macdonald, and K. Nakamura (2008). High-resolution surveys along the hot spot-affected Galápagos Spreading Center: 1. Distribution of hydrothermal activity. *Geochem. Geophys. Geosyst.*, 9(9), doi: Q09003, doi:10.1029/2008GC002028.
  48. White, S. M., J. D. Meyer, R. M. Haymon, K. C. Macdonald, E. T. Baker, and J. A. Resing (2008). High-resolution surveys along the hot spot-affected Galápagos Spreading Center: 2.

- Influence of magma supply on volcanic morphology, *Geochem. Geophys. Geosyst.*, 9, Q09004, doi:10.1029/2008GC002036.
47. Haymon, R., S. M. White, E. T. Baker, P. G. Anderson, K. C. Macdonald, and **J. A. Resing** (2008). High-resolution surveys along the hot spot-affected Galápagos Spreading Center: 3. Black smoker discoveries and the implications for geological controls on hydrothermal activity, *Geochem. Geophys. Geosyst.*, doi:10.1029/2008GC002114.
  46. Walker, S.L., E.T. Baker, **J.A. Resing**, W.W. Chadwick, Jr., G.T. Lebon, J.E. Lupton, and S.G. Merle (2008). Eruption-fed particle plumes and volcanoclastic deposits at a submarine volcano: NW Rota-1, Mariana arc. *J. Geophys. Res.*, 113, B08S11, doi: 10.1029/2007JB005441.
  45. Baker, E.T., R.W. Embley, S.L. Walker, **J.A. Resing**, C.E.J. de Ronde, G.J. Massoth, and K.-I. Nakamura (2008): Hydrothermal activity and volcano distributions along the Mariana Arc. *J. Geophys. Res.* 113, B08S09, doi: 10.1029/2007JB005423.
  44. Massoth, G.J., E.T. Baker, T. Worthington, J.E. Lupton, C. de Ronde, R.A. Arculus, S.L. Walker, K. Nakamura, J.-I. Ishibashi, P. Stoffers, **J.A. Resing**, R. Greene, and G. Lebon (2007), Multiple hydrothermal sources along the south Tonga arc and Valu Fa Ridge. *Geochem. Geophys. Geosyst.*, 8(11), Q11008, doi:10.1029/2007GC001675.
  43. Embley, R.W., E.T. Baker, D.A. Butterfield, W.W. Chadwick, Jr., J.E. Lupton, **J.A. Resing**, C.E. de Ronde, C., Nakamura, K., Tunnicliffe, V., Dower, J., Merle, S.G., (2007), Exploring the Submarine Ring of Fire: Mariana Arc - Western Pacific, *Oceanography*, 20, 68-79.
  42. Haymon, R.M., E.T. Baker, **J.A. Resing**, S.M. White, K.C. Macdonald, K.C. and the GalAPAGoS Team, (2007), Hunting for Hydrothermal Vents Along the Galapagos Spreading Center, *Oceanography* 20, 100-107.
  41. **Resing, J.A.**, G. Lebon, E. T. Baker, J. E. Lupton, R. W. Embley, G. J. Massoth, W.W. Chadwick, Jr., C.E.J. de Ronde (2007) Venting of acid-sulfate fluids in a high-sulfidation setting at NW Rota-1 submarine volcano on the Mariana Arc, *Econ. Geology*, 102, no.6, 1047-1061.
  40. de Ronde, C.E.J., E.T. Baker, G.J. Massoth, J.E. Lupton, I.C. Wright, R.J. Sparks, S.C. Bannister, M.E. Reyners, S.L. Walker, R.R. Greene, J. Ishibashi, K. Faure, **J.A. Resing**, and G.T. Lebon (2007): Submarine hydrothermal activity along the mid-Kermadec Arc, New Zealand: Large-scale effects on venting. *Geochem. Geophys. Geosyst.*, 8(Q07007), doi: 10.1029/2006GC001495
  39. German, C.R., E.T. Baker, D.P. Connelly, J.E. Lupton, J. Resing, R.D. Prien, S.L. Walker, H.N. Edmonds, and C.H. Langmuir (2006): Hydrothermal exploration of the Fonualei Rift and Spreading Center and the North East Lau Spreading Center. *Geochem. Geophys. Geosyst.*, 7, Q11022, doi: 10.1029/2006GC001324
  38. Lupton, J., D. Butterfield, M. Lilley, L. Evans, K.-I. Nakamura, W. Chadwick, Jr., J. Resing, R. Embley, E. Olson, G. Proskurowski, E. Baker, C. de Ronde, K. Roe, R. Greene, G. Lebon, and C. Young (2006): Submarine venting of liquid carbon dioxide on a Mariana Arc volcano. *Geochem. Geophys. Geosyst.*, 7, Q08007, doi: 10.1029/2005GC001152.
  37. Baker, E.T., **J.A. Resing**, S.L. Walker, F. Martinez, B. Taylor, and K.-I. Nakamura (2006): Abundant hydrothermal venting along melt-rich and melt-free ridge segments in the Lau back-arc basin. *Geophys. Res. Lett.*, 33, L07308, doi: 10.1029/2005GL025283.

36. Martinez, F., B. Taylor, E. Baker, **J. Resing**, S. Walker. 2006. Opposing trends in crustal thickness and spreading rate along the back-arc Eastern Lau Spreading Center: Implications for controls on ridge morphology, faulting, and hydrothermal activity, *Earth Planet. Sci. Lett.* 245, 655–672, doi:10.1016/j.epsl.2006.03.049.
35. Buck, C. S., W. M. Landing, **J.A. Resing**, G. T. Lebon. 2006. Aerosol Iron and Aluminum Solubility in the Northwest Pacific Ocean: Results from the 2002 IOC Cruise. *Geochem. Geophys. Geosyst.* 7, No. 4, doi:10.1029/2005GC000977.
34. Embley, R.W., Chadwick, W.W., Baker, E.T. Butterfield, D.A., **Resing, J.A.** de Ronde, C.E. Tunnicliffe, V., Lupton, J.E., Juniper S.K., Rubin, K.H., Stern, R.J., Lebon, G.T., Nakamura, K., Merle, S.G., Hein, J.R., Wiens, D.A., Tamura, Y. 2006. Long-Term Eruptive Activity at a Submarine Arc Volcano, *Nature*, doi:10.1038/nature04762
33. Aguilar-Islas, A. M., **J.A. Resing**, K. W. Bruland. 2006. Catalytically enhanced spectrophotometric determination of manganese in seawater by flow-injection analysis with a commercially available resin for on-line preconcentration. *Limnol. Oceanogr.: Methods*, 4, 105–113.
32. Dziak, R., J. Cowen, E. Baker, D. Bohnenstiehl, B. Chadwick, **J. Resing**, R. Embley. 2006. The February 2005 Endeavour segment earthquake swarm: Lessons learned from 12 years of volcanic real-time event detection and response on the Juan de Fuca and Gorda Ridges. *EOS, Trans. Am. Geophys. Un.*, **87** (4).
31. de Ronde, Cornel E. J.; Hannington, M. D.; Stoffers, P.; Wright, I. C.; Ditchburn, R. G.; Reyes, A. G.; Baker, E. T.; Massoth, G. J.; Lupton, J. E.; Walker, S. L.; Greene, R. R.; Soong, C. W. R.; Ishibashi, J.; Lebon, G. T.; Bray, C. J.; and **Resing, J. A.**: 2005: Evolution of a Submarine Magmatic-Hydrothermal System: Brothers Volcano, Southern Kermadec Arc, New Zealand, *Econ. Geol.* 100, no. 6, 1097-1133.
30. Gharib, J. J., F. J. Sansone, **J. A. Resing**, E. T. Baker, J. E. Lupton, G. J. Massoth. 2005. Methane dynamics in hydrothermal plumes over a superfast spreading center: East Pacific Rise 28-32S *Journal Geophysical Research*, 110(B10), B10101, doi: 10.1029/2004JB003531.
29. **Resing, J.A.**, J.E. Lupton, R.A. Feely, M.D. Lilley. 2004. CO<sub>2</sub> and <sup>3</sup>He in hydrothermal plumes: Implications for Mid-Ocean Ridge CO<sub>2</sub> flux, *Earth Planet. Sci. Lett.*, 226, 449-464, DOI: 10.1016/j.epsl.2004.07.028.
28. Hey, R.N., E. Baker, D. Bohnenstiehl, G. Massoth, M. Kleinrock, F. Martinez, D. Naar, D. Pardee, J. Lupton, R. Feely, J. Gharib, **J. Resing**, C. Rodrigo, F. Sansone, S. Walker. 2004. Tectonic and Volcanic Segmentation and Controls on Hydrothermal Venting along Earth's Fastest Active Seafloor Spreading System, EPR 27°-32°S, *Geochem. Geophys. Geosyst.*, 5, Q12007, doi:10.1029/2004GC000764.
27. Embley, R.W., E. T. Baker, W. W. Chadwick, Jr., J. E. Lupton, **J. A. Resing**, G. L. Massoth, K. Nakamura. 2004. Explorations of Mariana Arc Volcanoes Reveal New Hydrothermal Systems, *EOS, Trans. AM. Geophys. Un.* 85, no. 4. 37,39.
26. Baker, E.T., R.P. Lowell, **J.A. Resing**, R.A. Feely, R.W. Embley, G.J. Massoth, and S.L. Walker 2004. Decay of hydrothermal output following the 1998 seafloor eruption at Axial Volcano: Observations and models, *J. Geophys. Res.* 109, B01205, doi:10.1029/2003JB002618.

25. **Resing, J.A.** and F.J. Sansone. 2002: The chemistry of lava-seawater interactions II: The elemental signature. *Geochim. Cosmochim. Acta* 66, no.11, 1925-1941
24. Sansone, F.J., C.R. Benitez-Nelson, **J.A. Resing**, E.H. DeCarlo, S.M. Vink, J.A. Heath, and B.J. Huebert 2002: Geochemistry of atmospheric aerosols generated from lava-seawater interactions. *Geophys. Res. Lett.* 29 (9), 10.1029/2001GLO13882.
23. Baker, E.T., R.N. Hey, J.E. Lupton, **J.A. Resing**, R.A. Feely, J.J. Gharib, G.J. Massoth, F.J. Sansone, M. Kleinrock, F. Martinez, D.F. Naar, C. Rodrigo, D. Bohnenstiehl, and D. Pardee (2002): Hydrothermal venting along Earth's fastest spreading center: East Pacific Rise, 27.5°–32.3°S. *J. Geophys. Res.* 107 (B7), 10.1029/2001JB000651.
22. **Resing, J.A.**, R.A. Feely, G.J. Massoth, and E.T. Baker. 1999. The water column chemical signature after the 1998 eruption of Axial Volcano. *Geophys. Res. Lett.* 26, 3645-3648.
21. Feely, R.A., E.T. Baker, G.T. Lebon, J.F. Gendron, **J.A. Resing**, and J.P. Cowen. 1999. Hydrothermal particle composition at Axial Volcano following the January–February 1998 eruption. *Geophys. Res. Lett.* 26, 3649-3652.
20. McLaughlin-West, E.A., E.J. Olson, M.D. Lilley, **J.A. Resing**, J.E. Lupton, E.T. Baker, and J.P. Cowen. 1999. Variations in hydrothermal methane and hydrogen concentrations following the 1998 eruption at Axial Volcano. *Geophys. Res. Lett.* 26, 3453-3456.
19. **Resing, J.A.**, F.J. Sansone. 1999. The chemical signature of lava-seawater interactions: The generation of acidity. *Geochim. Cosmochim. Acta.*, 63, 2183-2198.
18. Baker, E.T. and 12 others. 1998. Axial Volcano Awakes: Preliminary Report of the Detection of and Response to the January, 1998, Eruption at Axial Volcano, Juan de Fuca Ridge. *Ridge Events*, 9, no. 1. 1-5.
17. Massoth, G.J., E.T. Baker, R.A. Feely, J.E. Lupton, R.W. Collier, K.K. Roe, S.M. Maenner, **J.A. Resing**. 1998. Manganese and iron in hydrothermal plumes resulting from the 1996 Gorda Ridge Event. *Deep Sea Res. II.* 45, 2683-2712.
16. Harris, A.J., L.P. Flynn, S.K. Rowland, L. Keszthelyi, P.J. Mougani-Mark, **J.A. Resing**. 1998. Calculation of lava effusion rates from Landsat-TM data. *Bull. Volc.* 60(1), 52-71.
15. Wheat, C.G., M.J. Mottl, E.T. Baker, R.A. Feely, J.E. Lupton, F.J. Sansone, **J.A. Resing**, G.T. Lebon, and N.C. Becker. 1997. Chemical plumes from low-temperature hydrothermal venting on the eastern flank of the Juan de Fuca Ridge. *J. Geophys. Res.*, 102, no. B7, 15433-15446.
14. Duennebier, F.K., N.C. Becker, J. Caplan-Auerbach, D.A. Clague, J. Cowen, M. Cremer, M. Garcia, F. Goff, A. Malahoff, G.M. McMurtry, B.P. Midson, C.L. Moyer, M. Norman, P. Okubo, **J.A. Resing**, J.M. Rhodes, K. Rubin, F. J. Sansone, J.R. Smith, K. Spencer, Xiyuan Wen, C.G. Wheat. 1997. Researchers rapidly respond to submarine activity at Loihi Volcano, Hawaii. *EOS Trans. Am. Geophys. Un.*, 78, no.22, pp. 229, 232-233.
13. **Resing, J.A.**, F.J. Sansone. 1996. Al and pH anomalies in the Manus Basin: Reappraised: Comments on the paper by T. Gamo et al., "Hydrothermal plumes in the eastern Manus Basin, Bismarck Sea: CH<sub>4</sub>, Mn, Al and pH anomalies". *Deep Sea Res. I*, 43, 1867-1872.
12. Mottl, M.J., F.J. Sansone, C.G. Wheat, **J.A. Resing**, E. Baker, and J.E. Lupton. 1995. Hydrothermal plumes along the East Pacific Rise, 8o40' to 11o50'N: Dissolved manganese and methane. *Geochim. Cosmochim. Acta.* 59, 4147-4165.

11. Sansone, F.J., **J.A. Resing**. 1995. Hydrography and geochemistry of sea-surface hydrothermal plumes resulting from Hawaiian coastal volcanism. *J. Geophys. Res.*, 100, no. C7, 13555-13569.
10. Measures, C.I., J.C. Yuan, **J. Resing**. 1995. Determination of iron in seawater by flow injection analysis using in-line preconcentration and spectrophotometric detection. *Mar. Chem.*, 50, 3-12.
9. Landing, W.M., G.A. Cutter, J.A. Dalziel, A.R. Flegal, R.T. Powell, D. Schmidt, A. Shiller, P. Statham, S. Westurlund, **J. Resing**. 1995. Analytical intercomparison results from the 1990 Intergovernmental Oceanographic Commission Open-Ocean Baseline Survey for trace metals: Atlantic Ocean. *Mar. Chem.*, 49, 253-265.
8. **Resing, J.A.**, C.I. Measures. 1994. Fluorometric determination of Al in seawater by flow injection analysis with in-line preconcentration. *Anal. Chem.*, 66, no. 22, 4105-4111.
7. Baker, E.T., R.A. Feely, M.J. Mottl, F.J. Sansone, C.G. Wheat, **J.A. Resing**, J.E. Lupton. 1994. Hydrothermal plumes along the East Pacific Rise, 8o40' to 11o50' N: Plume distribution and relationship to the apparent magmatic budget. *Ear. Planet. Sci. Lett.*, 128, 1-17.
6. Karl, D.M., **J. Resing**. 1993. Hydrogen peroxide in the Palmer-LTER region: III. Photochemical interactions with dissolved organic matter. *Antarc. J. U.S.*, 28, no. 5, 231-234.
5. **Resing, J.**, G. Tien, R. Letelier, D. Karl, D. Jones. 1993. Hydrogen peroxide in the Palmer-LTER region: II. Water column distributions. *Antarc. J. U.S.*, 28, no. 5, 227-229.
4. Karl, D.M., **J. Resing**, G. Tien, R. Letelier, D. Jones. 1993. Hydrogen peroxide in the Palmer-LTER region: I. An introduction. *Antarc. J. U.S.*, 28, no. 5, 225-226.
3. Lupton, J.E., E.T. Baker, M.J. Mottl, F.J. Sansone, C.G. Wheat, **J.A. Resing**, G.J. Massoth, C.I. Measures, R.A. Feely. 1993. Chemical and physical diversity of hydrothermal plumes along the East Pacific Rise, 8o 45'N to 11o50'N. *Geophys. Res. Lett.*, 20, no. 24: 2913-2916.
2. **Resing, J.A.**, M.J. Mottl. 1992. Determination of manganese in seawater by flow injection analysis using online preconcentration and spectrophotometric detection. *Anal. Chem.*, 64, 2682-2687.
1. Sansone, F.J., **J.A. Resing**, G.W. Tribble, P.N. Sedwick, K.M. Kelly, K. Hon. 1991. Lava-seawater interactions at shallow-water submarine lava flows. *Geophys. Res. Lett.* 18, no. 9: 1731-1734.

#### **1ST AUTHORED ABSTRACTS FROM LAST FIVE YEARS**

- Resing, J A** and Embley, R W. 2009. Active Eruptions in the NE Lau Basin, *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract V43I-01.
- Resing, J A**, Baker, E, Martinez, F, Buck, N, Walker, S, Seewald, J, Proskurowski, G, Lupton, J, Wheat, G. 2008. Hydrothermal Plume Geochemistry along the East Lau Spreading Center, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract V53D-07.
- Resing, J**, Baker, E, Lebon, G, Walker, S, Haymon, R, Nakamura, K Lupton, J. 2006. The Chemistry of Hydrothermal Plumes Along the Galapagos Spreading Center, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract V14A-08. **INVITED.**

**Resing, J.**, E. Baker, F. Martinez, G. Lebon, S. Walker, G. Massoth, B. Taylor, J. Lupton, R. Greene, K. Nakamura. 2004. Characteristics of Hydrothermal Activity in the Lau Back Arc Basin, *Eos Trans. AGU*, Fall 2004 Meeting.

### **Abstracts from the Last Two Years**

Slemons, L. J. Resing, J. W. Murray (2012) Particulate Iron, Aluminum, And Manganese In The Pacific Equatorial Undercurrent And Low Latitude Western Boundary Current Sources. The 2012 Ocean Sciences Meeting presentation A0254Abstract 10169, February 2012.

Buck, C. S. W.M. Landing, J.A. Resing, N. Buck (2012) On The Size Distribution, Composition, And Solubility Of Pacific Ocean Aerosols. The 2012 Ocean Sciences Meeting presentation AO263 Abstract 11291, February 2012

Lupton, J E, Resing, J A, Baker, E T, Embley, R W, Massoth, G J, Arculus, R J, Greene, R R, Haxel, J H Buck, N J (2011) The Regional Hydrothermal Helium-3 Plume in the Tonga-Fiji-Samoa Region of the South Pacific: **Abstract V51B-2518 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 December.**

Resing, J A, Baker, E T Lupton, J E Lilley, M D Rubin, K H Buck, N J (2011) The Chemistry of Hydrothermal venting at a Volcano “O”, a large Submarine Volcano in the NE Lau Basin: **Abstract V53D-2652 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 December.**

Baker, E T Walker, S L White, S M Embley, R W Resing, J A Lobecker, M (2011) GALREX 2011: Extensive hydrothermal venting discovered along the eastern Galápagos Rift **Abstract OS22A-08 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 December.**

Matsumoto, H., S.E. Stalin, R.W. Embley, J.H. Haxel, D.R. Bohnenstiehl, R.P. Dziak, C.

Meinig, **J.A. Resing**, and N.M. Delich (2010): Hydroacoustics of a submarine eruption in the northeast Lau Basin using an acoustic glider.

Walker, S L, Baker, E T., Malik, M A., Greene, R, Buck, N, Embley, R W, Merle, S G, Lupton, J E, Resing, J, (2010), Gorda Ridge Revisited: the R/V Okeanos Explorer Conducts its First Hydrothermal Plume Survey, *Eos Trans. AGU*, 91(26), Ocean Sci. Meet. Suppl., Abstract IT21B-04.

### **PENDING FUNDING**

**Title:** Collaborative Research: Collaborative Research: U.S. GEOTRACES Pacific Section – Shipboard Al, Mn and Fe, Submitted to NSF-OCE Chemical Oceanography Feb 15<sup>th</sup> 2012. Collaborative with: P. Sedwick (ODU).

**Title:** Collaborative Research: Dynamics of eruptive plumes above a submarine arc volcano, Submitted to NSF-OCE Marine Geology and Geophysics, Feb 15<sup>th</sup> 2012. Collaborative with: W. Chadwick (OSU).



## CURRENT FUNDING

- Title:** Exploration of Active Volcanism and Hydrothermal Systems in the NE Lau Basin, NOAA OER, 2/01/10- 1/31/12, Collaborative with: R. Embley and E. Baker.
- Title:** Collaborative Research: A Submarine Eruption on the North East Lau Spreading Center, a RAPID Response Effort, NSF-MGG, Ridge 2000, 4/09-4/12. Collaborative with: William Lange, C. Moyer, D. Clague, D. Caress, T. Shank.
- Title:** Collaborative Research: Strombolian eruptions, magma degassing, and hydrothermal discharge at an active submarine arc volcano NSF: OCE-MGG 02/09-01/13, Collaborative with: W. Chadwick, D. Butterfield, M.Lilley.
- Title:** Collaborative Research: Global Ocean Survey of Dissolved Iron and Aluminum and Aerosol Iron and Aluminum Solubility Supporting the CLIVAR Repeat Hydrography Project (2007-2009). NSF: OCE-Chem. Ocn., 03/07 - 02/13 Collaborative with: W. Landing, C. Measures.

## PAST FUNDING

- Title:** Collaborative Research: Investigating the Distribution of Hydrothermal Activity and its Geologic and Geophysical Controls at the Lau Integrated Studies Site NSF: OCE-MGG, Ridge 2000, 09/07-8/11, Collaborative with: F. Martinez, E. Baker.
- Title:** Enhancing Exploration Efficiency with Specific Application to Exploration of the Galapagos Spreading Center NOAA-Ocean Exploration, 04/05-12/11.
- Title:** Collaborative Research: Rapid Response to a Submarine Eruption at W. Mata Volcano: NSF-MGG, Ridge 2000, Margins 4/09-4/10. Collaborative with: K.Rubin, J. Cowen, J. Huber.
- Title:** Collaborative Research: Hydrothermal System Response to Magma Supply and Crustal Thickness Gradients Along the Galapagos Spreading Center, 89.5-94W. NSF: MGG and NOAA Ocean Exploration, 05/04-05/08, Collaborative with: R. Haymon, K MacDonald, T. Shank, S. White, E. Baker.
- Title:** Submarine Ring of Fire 2005-2007: Exploring Western Pacific Arc Volcanoes NOAA Ocean Exploration, 03/05-02/08, Collaborative with: R. Embley, E. Baker, J. Lupton, D. Butterfield, J. Resing, J. Baross, M. Lilley, W. Chadwick.
- Title:** Iron in the Equatorial Undercurrent: Data and Models NSF Chemical Oceanography, 09/04-08/08 Collaborative with: James Murray.
- Title:** Exploring the Submarine Ring of Fire NOAA Ocean Exploration, 04/02 - 03/05, Collaborative with: R. Embley, E. Baker, W. Lavelle, J. Lupton, D. Butterfield, J. Resing, J. Baross, M. Lilley, W. Chadwick, R. Dziak C. Moyer, M. Tivey.
- Title:** Endeavour Rapid Response. NOAA-Ocean Exploration, 03/05-09/05, Co-PIs: J Resing, E.Baker, W. Chadwick, R. Embley.
- Title:** Collaborative Research: Global ocean survey of dissolved iron and aluminum and aerosol iron and aluminum solubility supporting the Repeat Hydrography (CO<sub>2</sub>) project. NSF Chem.Ocn. 02/03-02-06 Collaborative with: Christopher Measures, William Landing

**Title:** Using Suspended Particulate Matter in Hydrothermal Plumes in the Lau Basin to Better Identify Hydrothermal Source Variability. NSF Ridge 2000, 08/04-07/07.

**Title:** Collaborative Research: Investigating the interrelationships between crustal structure, volcanism, and hydrothermal activity along the backarc East Lau Spreading Center. NSF: RIDGE2000/MGG, 09/03- 08/06 Collaborative with: F. Martinez, B. Taylor, E. Baker.

## FIELD EXPERIENCE

- 2010 Exploration of NE Lau Basin, 12 Days, Kila Moana, Chief Scientist
- 2010 Strombolian eruptions-NW Rota, 17days, Kila Moana
- 2009 NE Lau Response Cruise, 8 days, T.G. Thompson, Chief Scientist.
- 2008 Exploration of the NE Lau Basin, 16 days, T.G. Thompson.
- 2008 Controls on Hydrothermal Activity at the Lau ISS, 35 days, RV Kila Moana
- 2007 Detailed Exploration of Brothers Seamount, 17 days, MV Sone
- 2006 Fe in the Equatorial Under Current, 28 days, RV Kila MOana
- 2006 Submarine Ring of Fire, 26 days, RV Melville
- 2005 Galapagos Spreading Center, 39 Days, T.G. Thompson.
- 2005 Endeavour Response, 6 Days RV T.G. Thompson.
- 2004 Lau Basin Hydrothermal survey. 35 Days RV Kila Moana
- 2003 The Submarine Ring of Fire: Mariana Arc. 25 days RV T.G. Thompson.
- 2002 Exploration of Explorer Ridge. Two legs Totaling 25 days. RV T.G. Thompson.
- 2001 Juan de Fuca and Axial volcano hydrothermal emissions. 17 days RV Wecoma.
- 2001 Astoria Canyon, Ocean Exploration-Lewis and Clarke Legacy, 10 days R.H. Brown.
- 2001 Gorda Ridge Event detection response cruise, RV New Horizon, 7 days.
- 2000 Juan de Fuca and Axial volcano hydrothermal emissions. 17 days R.H. Brown.
- 1999 Juan de Fuca and Axial volcano hydrothermal emissions. 17 days RV Wecoma.
- 1998 Loihi, seismic event follow up cruise. 7 days: RV Kaimikai O'Kanaloa.
- 1998 Axial Volcano eruption, response follow up. 18 days NOAA Ship R.H. Brown.
- 1998 28-32S EPR hydrothermal survey of earth's fastest spreading center. 41 days RV Melville.
- 1998 Axial Volcano eruption, Rapid Response Cruise. 7 days RV Wecoma.
- 1997 Loihi seismic event follow up cruise. 7 days: RV Kaimikai O'Kanaloa.
- 1996 Loihi seismic event rapid response cruise. 7 days: RV Kaimikai O'Kanaloa.
- 1990-95 The interaction of molten lava with seawater, 20 1-3 day field trips on the Island of Hawaii.
- 1993 Vents cruise, leg III. 12 days: NOAA ship Discoverer.
- 1992 Loihi, hydrothermal plume survey, 7 days: RV Thomas G. Thompson.
- 1992 Microbial dynamics of the Antarctic spring bloom. 25 days: RV Polar Duke.
- 1991 Hydrothermal plume survey, East Pacific Rise from 9<sup>0</sup>-11<sup>0</sup> N. 30 days: RV New Horizon.
- 1989 Hawaii ocean time series. 5 days: RV Kaimalino.

- 1989 Carbonate chemistry of Penguin Bank Hawaii. 5 days: *RV Thomas Cromwell*.  
 1988 Chemistry of hydrothermal venting, Juan de Fuca ridge. 30 days: *RV Atlantis II/Alvin*.  
 1986 Coral collection and recruitment studies, Great Barrier Reef, Australia: 20 field days.

## STUDENTS

- 2010** **Mentor:** JISAO Summer Intern, Cole Perkinson  
**2009-** **Thesis advisor** Pamela Barrett  
**2006-09** **Dissertation committee member**, Lia Osiander, University of Washington  
**2007** **Mentor:** Hollings Fellow, Dondra Biller (UCSD)  
**2004** **Mentor:** Undergraduate field intern (Jamie Smith, Depaul University)  
**2003** **Mentor:** Undergraduate field intern (Kelly Kaiser, Depaul University)  
**2002** **Mentor (with Ed Baker):** Undergraduate field intern Marine Advanced Technology Education (MATE) Program  
**Mentor:** Undergraduate field interns (Angela Opiola, Depaul University and Andrea Toth, DePaul University).  
**2001** **Mentor:** Undergraduate field intern (Angela Opiola, Depaul University)  
**2000** **Master Thesis Committee Member**, James Jamshid Gharib, University off Hawaii  
**Sponsor:** Teacher for Teacher at Sea Program (together with E. Baker)  
**Sponsor:** Midshipman summer intern (together with E. Baker)  
**1999** **Sponsor:** Teacher at Sea Program (together with E. Baker)  
**Sponsor:** Midshipman summer internship (2 students) (together with E. Baker)  
**1998** **Sponsor:** Teacher at Sea Program (together with E. Baker)  
**Sponsor:** Midshipman summer internship (2 students) (together with E. Baker)

## OUT REACH

- 2012 Presentation to Eastern Washington College Class  
 2011 Presentation to Eastern Washington College Class  
 2010 Career Day talk, Kellog Middle School, Lake Forest Park, WA  
 2010 Lecture Western Washington University, Bellingham, WA  
 2010 “Scoop on Cool Careers” event (W. Mata Video), Redmond, WA  
 2010 Cruise Blog <http://laueruptions.blogspot.com/>  
 2010 W. Mata Lecture to Students from Central Washington University.  
 2010 Pacific Science, Husky Weekend (W. Mata)  
 2009 Fox and Friends Interview, Seattle, WA  
 2009 Press Conference at AGU Fall Meeting, San Francisco, CA  
 2009 Interviews with CNN International, AP International, Discovery Channel Online, BBC Radio, and others.  
 2009 Lecture, Old Dominion University, Norfolk, VA  
 2009 Lecture St. Anselm’s Abbey High School, Washington D.C.  
 2009 Cruise Blog <http://laueruptions.blogspot.com/>

## WORKSHOPS

- 2011 GEOTRACES Ocean Particles-Modeling and Data, Barcelona Spain Nov. 14-17.
- 2011 MTMNM Science Exploration and Research, Kona HI, September 18-19.
- 2011 GEOTRACES Pacific Section, San Diego, CA, September 12-14
- 2011 WUN Workshop on Ocean Acidification, Friday Harbor, WA August 28-30
- 2011 GEOPRISMS Implementation, Austin TX, January 5-7
- 2010 2010 R2K Community Meeting, Portland OR, October 29-31

## 1<sup>ST</sup> AUTHORED ABSTRACTS FROM PRIOR YEARS

- Resing, J.,** G. Lebon, E. Baker, J. Lupton, K. Nakamura, G. Massoth, R. Embley. 2003. Geochemical Characterization of Hydrothermal Plumes Above Hydrothermally Active Volcanos on the Mariana Arc, *Eos Trans. AGU*, Fall 2003 Meeting
- Resing, J.,** G. Wheat, E. Baker, 2003, An integrated study approach to Time Critical Studies, White paper for Ridge 2000 Community Meeting, Boulder, CO, November 6-8, 2003.
- Resing, J.,** G. Wheat, H. Jannasch, J. Plant, E. Baker, W. Lavelle, (2002) Long-term trace element monitoring at Axial Volcano using Osmotic samplers in hydrothermal Plumes. *EOS-Trans AGU*, 83, Ocean Science meeting Abstract OS31F-88.
- Resing, J.,** G. Lebon, E. Baker, S. Walker, K. Nakamura, B. Silvers. 2002. Using Hydrothermal Plumes and Their Chemical Composition to Identify and Understand Hydrothermal Activity at Explorer Ridge. *Eos Trans. AGU*, 83, (47), Fall Meeting Suppl., Abstract T11C-1265.
- Resing, J.,** R. Feely, E. Baker, J. Lupton. 2000. The Evolution of the Water-Column-Chemical Signature of the 1998 Axial Eruption at Axial Volcano, Juan de Fuca Ridge. *EOS Trans. AGU*, 80, no. 49, p.OS5: **INVITED**.
- Resing, J.,** R. Feely, E. Baker, G. Lebon, G. Massoth, R. Collier. 1998. The Water-Column-Chemical Signature of the 1998 Axial Eruption: Axial Volcano, Juan de Fuca Ridge. *EOS Trans. AGU*, 79, no. 45, p. F831-832.
- Resing, J.,** R. Feely, G. Massoth, E. Baker, J. Lupton. 1998. The chemical signature of hydrothermal plume waters along 28°-32° S. East Pacific Rise. *EOS Trans. AGU*, 79, no. 45, p. F922.
- Resing, J.A.,** C.G. Wheat, R.A. Feely, F.J. Sansone, E.T. Baker, M.J. Mottl. 1998. The chemistry of hydrothermal plume along 9-12N EPR. RIDGE Workshop on the Results of Field Studies along the East Pacific Rise, 9 - 10N, Santa Barbara, CA, September 1998.
- Resing, J.A.,** and F.J. Sansone, 1997. The generation of acidity from lava seawater interactions. *EOS Trans. AGU*, 78, no. 46, p F804-F805.
- Resing, J.A.,** F.J. Sansone, X.Y. Wen, B. Midson. 1996. The geochemical signature of fluids issuing from Loihi Seamount after an intense seismic event. *EOS Trans. AGU*, 77, no. 46, p. F398.
- Resing, J.A.,** F. Sansone. 1995. Lava-seawater experiments and the unique chemical signature of lava-seawater interactions. *EOS Trans. AGU*, 76, no. 46, p. F709.

- Resing, J.A.**, F. Sansone. Chemical signatures of submarine eruptions. Gordon Research Conference, June, 1995.
- Resing J.A.** and F.J. Sansone. 1994. The chemical signature of basalt-seawater interactions. *EOS Trans. AGU*, 75, no.44, p. 706.
- Resing J.A.**, C.I. Measures. 1994. Application of micro-column techniques to trace element determination in flow injection analysis. Winter Conference on Flow Injection Analysis (WC-FIA 94), San Diego, Ca., Jan. 1994.
- Resing, J.A.**, F.J. Sansone, C.G. Wheat, G.J. Massoth, E. Baker. 1993. The water column signature of the 1993 Coaxial eruption site on the Juan de Fuca Ridge. *EOS Trans. AGU*, 74, no. 43, p. 620.
- Resing, J.A.**, F.J. Sansone, C.G. Wheat, C.I. Measures, G.M. McMurtry, P.N. Sedwick, G.J. Massoth. 1992. The extraction of aluminum from hot rock: The elemental signature of an eruptive vs. classical hydrothermal system. *EOS Trans. AGU*, 73, no. 43, p. 254.
- Resing, J.A.**, F.J. Sansone. 1991. Laze and the nearshore environment at Wahaula Hawaii. Seminar on Vog and Laze, University of Hawaii at Hilo July 1991.
- Resing, J.A.**, M.J. Mottl. 1991. Determination of manganese in seawater using FIA with online preconcentration and spectrophotometric detection. *EOS Trans. AGU*, 72, p. 264.
- Resing, J.A.**, F.J. Sansone, G.W. Tribble, K. Hon. 1990. Process-related variability of lava seawater interactions, Kalapana, Hawaii. *EOS Trans. AGU*, 71, p. 1722.

#### **Co-authored Presentations and Abstracts from Prior Years**

- Lin, H, Cowen, J P, Butterfield, D A, Embley, R W, Resing, J. 2009. Dissolved Organic Carbon Distribution in Two Hydrothermal Systems - West Mata, NE Lau Basin during an eruption event and basement fluids from sediment-buried Juan de Fuca Ridge flanks. *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract B21D-06.
- Baumberger, T, Lilley, M D, Lupton, J E, Resing, J A, Baker, E T, Walker, S L, Rubin, K H, Frueh-Green, G L. 2009. Hydrogen and Methane Dissolved in Plumes of the Northeast Lau Basin Eruption Sites, *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract V43I-04.
- Lupton, J E, Butterfield, D A, Lilley, M D, Resing, J, Embley, R W, Arculus, R J, Rubin, K H, Evans, L, Greene, R. 2009. Helium, Carbon, and Helium Isotopes in the Northern Lau Basin, *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract V51D-1718.
- Butterfield, D A, Resing, J A, Roe, K K, Christensen, M, Embley, R W, Lupton, J E, Chadwick, W. 2009. Chemical properties and hydrothermal processes on the first two directly sampled deep-sea eruptions *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract V43I-06.
- Huber, J A, Cantin, H, Resing, J, Butterfield, D A. 2009. Microbial Communities in Erupting Fluids from West Mata Volcano, Tonga Arc *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract V43I-07.
- Embley, R W, Merle, S G, Lupton, J E, Resing, J, Baker, E T, Lilley, M D, Arculus, R J, Crowhurst, P V. 2009. Extensive and Diverse Submarine Volcanism and Hydrothermal Activity in the NE Lau Basin, *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract V51D-1719.

- Walker, S L, Baker, E T, Lupton, J E, Resing, J, Crowhurst, P V, Greene, R, Buck, N. 2009 Near and Far Field Particle Plumes Around an Erupting Volcano - W Mata, NE Lau Basin, *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract V51D-1717.
- Nakamura, K, Takano, B, Butterfield, D A, Resing, J, Chadwick, W W, Embley, R W. 2009. Intermediate products of sulfur disproportional reaction and their physical role in effusive to explosive submarine volcanic activity, *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract V51D-1715.
- Rubin, K H, Embley, R W, Clague, D A, Resing, J A, Michael, P J, Keller, N S, Baker, E T. 2009. Lavas from Active Boninite and Very Recent Basalt Eruptions at Two Submarine NE Lau Basin Sites *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract V43I-05.
- Dziak, R P, Embley, R W, Baker, E T, Chadwick, W W, Resing, J, Matsumoto, H, Walker, S L, Bohnenstiehl, D R, Klink, H. 2009. Long-term explosion records from two erupting submarine volcanoes in the Mariana and Tonga island-arcs, *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., V44B-02.
- Keller, N S, Rubin, K H, Clague, D A, Michael, P J, Resing, J A, Cooper, L B, Shaw, A M, Ono, S, Tamura, Y. 2009. Sulfur in submarine eruptions: Observations and preliminary data from West Mata, NE Lau Basin, *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., V43I-08.
- Baker, E T, Walker, S L, Resing, J, Baumberger, T, Lilley, M D, Lupton, J E, Lavelle, J W, Rubin, K H, Embley, R W, Greene, R. 2009. Water-column Observations During a Seafloor Eruption on the Northeast Lau Spreading Center, *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., V43I-03.
- De Ronde, C., E. Baker, R. Embley, J. Lupton, D. Butterfield, K. Faure, M. Leybourne, W. Chadwick, J. Ishibashi, J. Resing, S. Walker, S. Merle and R. Greene. 2009 Hydrothermal systems of intraoceanic arcs *Geochim. Cosmochim. Acta*, 73, 13, Suppl.1, A282.
- Baker, E T, Resing, J A, Martinez, F, Walker, S L, Buck, N, Edwards, M H, Nakamura, K. 2008. Hydrothermal Cooling Within the Lau Integrated Study Site: No Evidence for Off-axis Discharge, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract V53D-06.
- Walker, S L, Baker, E T, de Ronde, C E, Yoerger, D, Embley, R W, Davy, B, Resing, J A, Nakamura, K. 2008. High-Resolution Distribution of Temperature, Particle and Oxidation/Reduction Potential Anomalies From a Submarine Hydrothermal System: Brothers Volcano, Kermadec Arc, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract V41B-2077.
- Martinez, F, Baker, E T, Resing, J A, Edwards, M H, Walker, S L, Buck, N. 2008. Distribution of Hydrothermal Activity at the Lau ISS: Possible Controlling Parameters, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract V53D-05.
- Merle, S G, Dziak, R P, Embley, R W, Lupton, J E, Greene, R R, Chadwick, W W, Lilley, M, Bohnenstiehl, D R, Braunmiller, J, Fowler, M, Resing, J. 2008. Preliminary Analysis of Multibeam, Subbottom, and Water Column Data Collected from the Juan de Fuca Plate and Gorda Ridge Earthquake Swarm Sites, March-April 2008, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract T23B-2025.

- Murray, J W, Slemons, L O, Resing, J, Paul, B. 2008. Distributions of iron, aluminum and manganese in the western equatorial Pacific, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract OS21G-04.
- Buck, C S, Landing, W M, Resing, J A, Buck, N, Lam, P, Ohnemus, D, 2008. Aerosol Chemistry from the Pacific and North Atlantic Oceans: Results from the CLIVAR/Repeat Hydrography Program, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract OS13F-05, INVITED.
- Buck, C S, Landing, W M, Resing, J. 2008. Aerosol iron solubility in size-fractionated samples collected over the North Atlantic and North Pacific during three CO<sub>2</sub>/CLIVAR repeat hydrography sections, 2008 Ocean Sciences Meeting, Orlando, FL.
- Upchurch, L, Edmonds, H N, Resing, J., Nakamura, K., Buck, N., Liljebladh, B., Stranne, C., Tupper, G., Winsor, P.. 2007. Geochemical Characterization of Hydrothermal Plume Fluids From Peridotite- and Basalt- Dominated Regions of the Ultra-Slow Spreading Gakkel Ridge, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract OS43A-0993.
- Walker, S L., Baker, E T., Resing, J A., Nakamura, K., McLain, P D. 2007. A New Tool for Detecting Hydrothermal Plumes: an ORP Sensor for the PMEL MAPR, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract V21D-0753.
- Butterfield, D., Resing, J A., Chadwick, W W., Embley, R W., Lupton, J E., Nakamura, K., Lilley, M D., Huber, J A. 2007. Sulfur Lakes and Sulfur-rich Volcanic Hydrothermal Systems on the Mariana Arc, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract V34B-03.
- Embley, R W., de Ronde, C., Davy, B., Baker, E T., Resing, J A., Yoerger, D R., Merle, S G., Walker, S L. 2007. Preliminary Results of a Near-Bottom Integrated Seafloor and Water Column survey of Brothers volcano, Kermadec arc, Using the Autonomous Vehicle ABE, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract V34B-07.
- C.E.J. de Ronde, E.T. Baker, G.J. Massoth, J.E. Lupton, I.C. Wright, R.J. Sparks, S.L. Walker, R.R. Greene, S.C. Bannister, M.E. Reyners, J. Ishibashi, K. Faure, J.A. Resing, G.T. Lebon. 2006. Submarine hydrothermal activity along the mid-Kermadec arc, New Zealand: Large-scale effects on venting, *Geochim. Cosmochim. Acta*, 70, no. 18, Suppl. 1, A136
- Buck, C S, Landing, W M, Resing, J, Lebon, G T. 2006. The Solubility of Aerosol Iron and Aluminum in the Pacific Ocean: Results From the CLIVAR/CO<sub>2</sub> Repeat Hydrography Cruises, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract A53A-0151.
- Heintz, M B, Haymon, R, Valentine, D L, Carlson, C, Resing, J, Baker, E, Lebon, G, Walker, S, Ehrhardt, C, Swan, B. 2006. Microbial Community Structure in Hydrothermal Plumes of the Galapagos Spreading Center, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract V23A-0591.
- Butterfield, D A, Embley, R W, Chadwick, W W, Lupton, J E, Nakamura, K, Takano, B., de Ronde, C, Resing, J, Bolton, S, Baross, J. 2006. Up-Close Fluid Sampling at a Deep Submarine Lava Eruption, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract V13C-07.

- Walker, S L, Baker, E T, Resing, J A, Lebon, G T, Lupton, J E, Greene, R R. 2006. Lateral Dispersion of Volcanic Ash From the Flanks of an Actively Erupting Submarine Volcano, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract V23B-0610.
- Lupton, J, Lilley, M, Butterfield, D, Cowen, J, Von Damm, K, Baker, E, Resing, J, Embley, R, Chadwick, W, Love, B, Greene, R, Evans, L. 2006. Changes in Hydrothermal Gas Chemistry Associated with Deep-Sea Eruptive Events, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract V13C-08.
- Nakamura, K, Embley, R W, Chadwick, W W, Butterfield, D A, Takano, B, Resing, J A, de Ronde, C E, Lilley, M D, Lupton, J E, Merle, S G, Inagaki, F. 2006. Liquid and Emulsified Sulfur in Submarine Solfataria Fields of two Northern Mariana Arc Volcanoes, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract V23B-0608.
- Baker, E T, Resing, J A, Walker, S L, Lebon, G T, Nakamura, K, Haymon, R M, White, S M, Macdonald, K C. 2006. Hydrothermal Plume Mapping Along the Hotspot-affected Galapagos Spreading Center Finds High-Temperature Vent Sites are Anomalously Scarce, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract V13C-08. V14A-06.
- Haymon, R M, Anderson, P G, Baker, E T, Resing, J A, White, S M, Macdonald, K C. (2006). Discovery and Distribution of Black Smokers on the Western Galapagos Spreading Center: Implications for Spatial and Temporal Controls on High Temperature Venting at Ridge/Hotspot Intersections, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract V13C-08. V14A-07
- Buck, C S, Landing, W M., Resing, J A, Lebon, G T., 2006. The Solubility and Deposition of Aerosol Fe and Other Trace Elements to the Pacific Ocean, *Eos Trans. AGU*, 87(36), Ocean Sci. Meet. Suppl., Abstract OS16M-21.
- Landing, W M, Measures, C, Resing, J. 2006. Ocean Sections of Dissolved Fe, Ni, Cu, Zn, Cd, and Pb: Results from the CLIVAR Repeat Hydrography Program, *Eos Trans. AGU*, 87(36), Ocean Sci. Meet. Suppl., Abstract OS16M-22.
- Ranville, M A, Cutter, G A, Buck, C S, Landing, W M, Cutter, L S, Resing, J, Flegal, A R. 2006. Evidence of Asian Coal Combustion in North Pacific Surface Waters and Atmosphere, *Eos Trans. AGU*, 87(36), Ocean Sci. Meet. Suppl., Abstract OS16M-23.
- Martinez, F, Taylor, B, Baker, E T, Resing, J A, Walker, S L. 2005. Opposing Trends in Crustal Thickness and Spreading Rate Along the Back-arc Eastern Lau Spreading Center: Controls on Ridge Morphology, Faulting, and Hydrothermal Activity *Eos Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract T31A-0473.
- Massoth, G J., et al., 2005. Plume-Vent Fluid Connections along the Tonga-Kermadec arc, *Eos Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract V51C-1495.
- Lupton, J., et al., Carbon Fluxes from Submarine Arc Volcanoes - examples from the Mariana and Kermadec Arcs, *Eos Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract V51C-1498.
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