

CURRICULUM VITAE: James K. B. Bishop

Professor of the Graduate School (Emeritus),
499 McCone Hall,
Department of Earth and Planetary Science,
University of California, Berkeley
Berkeley, CA 94720-4767 USA
tel: 510 642 6110

EDUCATION

B.Sc.(Hon.): Physical and inorganic chemistry: University of British Columbia, Canada, May 1971
Sc.D: Massachusetts Institute of Technology- Woods Hole Oceanographic Institution Joint Program in
Oceanography, June 1977. "The chemistry and vertical flux of oceanic particulate matter."

EMPLOYMENT

Professor	2006-2024	Earth and Planetary Science, UC Berkeley
Faculty Senior Scientist	2006-2024	Lawrence Berkeley National Laboratory
Senior Scientist	2006-2024	Lawrence Berkeley National Laboratory
Staff Scientist	1998-2006	Lawrence Berkeley National Laboratory
Adjunct Professor	1998-2006	Earth and Planetary Science, UC Berkeley
Professor	1993-1998	School of Earth and Ocean Science, Univ. Victoria
Physical Scientist (GS15)	1993-1997	NASA Goddard Institute for Space Studies,
Adjunct Sr. Research Sci.	1993-1997	Lamont-Doherty Earth Obs. Columbia University
Research Scientist	1992-1993	Lamont-Doherty Earth Obs. Columbia University
Senior Staff Assoc.	1989-1992	Lamont-Doherty Earth Obs. Columbia University
Assoc. Research Sci.	1978-1989	Lamont-Doherty Earth Obs. Columbia University
Post Doctoral Fellow	1977-1978	Lamont-Doherty Earth Obs. Columbia University

RESEARCH INTERESTS

Ocean Carbon Dynamics; Physical, biological, and chemical controls on the cycles of inorganic and organic chemical species in the ocean. Land/ocean interactions. Satellite and in-situ remote sensing. Ocean robotics

OTHER CONTRIBUTIONS:

March 2017 – 2024. Fiat Lux Scholarship interviewer and mentor
July 2006 – Dec 2020. Marine Science Track Undergraduate Advisor, Dept. of Earth and Planetary Science
March 2010 – 2024. UC Regents Scholarship interviewer and mentor.
January 2014 – 2024 Advisory Panel. Haas Scholarship program.
Dec 2011: Proposed / Co-Organized. AGU Fall Meeting Special Session. The Need for Sustained Ocean Observations: Progress, Prospects, and the State of the Art.
IOCCG BIO-ARGO Working Group (2007-2012)
Carbon Cycle Science Ocean Implementation Group (US Carbon Cycle Science Program). 2002-2004
Co-Director, DOE Center for Research on Ocean Carbon Sequestration. Co Proposed/chaired AGU sessions on the science of Ocean Carbon Sequestration. 1999-2002
Dec 2001: Proposed and Co-Chaired. AGU special session: "Pushing the Envelope, A tribute to the career and accomplishments of John M. Edmond".
Member: WCRP, Baseline Surface Radiation Budget Network - Science Panel. 1996-2000
Member: US-Joint Global Ocean Flux Study (JGOFS) Time Series oversight committee. 1992-2000
Member: Canadian-JGOFS Science Steering Committee. 1996-1999.
Director: University of Victoria Regional Inductively Coupled Plasma Mass Spectrometer facility 1993-1998.
Reviewer: Nature, Science, Deep-Sea Research, Marine Chemistry, Journal of Marine Research,

Geophysical Research Letters, Limnology and Oceanography, Global Biogeochemical Cycles, Geochimica et Cosmochimica Acta.

Panel member NSF (OCE), NOAA, NOPP, SOI

Co-Developer: (with Prof. Glenn Flierl, MIT; Dr. David Glover, WHOI) of the net-work distributed object-oriented data system for JGOFS. The system provides access to distributed physical, geochemical, and biological data bases. Access <http://www1.who.edu/jgoofs.html>.

HONORS

UC Berkeley Presidential Chair Fellow (F2007 and S2008)

R&D 100 AWARD Nov 2006. "The Carbon Explorer"

PROFESSIONAL AFFILIATIONS

American Geophysical Union. The Oceanography Society, American Society of Limnology and Oceanography.

FIELD EXPERIENCE 51 Research Expeditions - 101 weeks at sea;

Bishop Group Members : 8 Expeditions: 25 weeks at sea

June 2025 **Chief Scientist**, R/V Bob & Betty Beyster, NSF Ocean C Observer. 4 days
Nov 2023 **Chief Scientist**, R/V Sproul, NSF Ocean C Observer. 8 days
Nov 2023 P.J. Lam, USCG Ice Breaker N.B. Palmer, GEOTRACES GP-17-ANT, 67°S - Antarctic, PIC/POC, 9 weeks, - remote participant.
Nov 2022 B. Twining, R/V Revelle, GEOTRACES GP-17-OCE, Tahiti to 67°S, PIC/POC, 9 weeks - remote participant
Sep 2018 P.J. Lam, R/V Revelle, GEOTRACES GP15, Adak to Tahiti, PIC/POC, 9 weeks - remote participant
June 2017 M. Ohman, R/V Revelle, NSF C-SNOW, CFE-Cal, 32 days
Aug 2016 **Chief Scientist**, R/V Oceanus, NSF C-SNOW, CFE-Cal, 12 days
Mar 2013 **Chief Scientist**, R/V New Horizon, NSF Carbon Flux Explorer/PIC, 6 days
Jan 2013 **Chief Scientist**, R/V New Horizon, NSF PIC/Carbon Flux Explorer, 6 days
Oct 2012 **Chief Scientist**, R/V Point Sur, NSF PIC/POC, Carbon Explorer, 6 days
May 2012 **Chief Scientist**, R/V New Horizon, NSF Carbon Flux Explorer/PIC, 10 days
Feb 2012 **Chief Scientist**, R/V Point Sur, NSF PIC/POC sensor tests/CFE 7 days
Sept 2011 **Chief Scientist**, R/V Point Sur, NSF Carbon Flux Explorer recovery/PIC, 7 days
July 2011 **Chief Scientist**, R/V Point Sur, NSF Carbon Flux Explorer deployment/PIC, 6 days
May 2011 **Chief Scientist**, R/V New Horizon, NSF Carbon Flux Explorer/PIC, 11 days
Oct 2010 **Chief Scientist**, R/V Sproul, NSF Carbon Flux Explorer, 6 days
July 2009 Participant S.S.V. Robert Seamens (Sea Education) 5 days.
May 2009 G. Cutter, R/V/ Knorr, NSF GEOTRACES - MULVFS, 3.5 weeks
June 2008 G. Cutter, R/V/ Knorr, NSF GEOTRACES - MULVFS, 2 weeks
June 2007 **Chief Scientist**, R/V Sproul, Carbon Flux Explorer, ONR/NOPP, 3 days
Sept 2006 T. Frank, R/V Wecoma, Carbon Flux Explorer Testing DOE/NSF 10 days
July 2005 K. Buesseler, R/V Revelle, VERTIGO Carbon flux DOE/NSF 42 days.
June 2004 K. Buesseler, R/V Kilo Moana, VERTIGO Carbon flux DOE/NSF 21 days.
June 2003 J. Bullister, R/V Ron Brown A16N, Carbon Explorers, PIC sensor NOAA/ONR, 21 days
July 2002 **Chief Scientist**, R/V Sproul, NOPP, 2 days
Aug 2001 **Chief Scientist**, R/V New Horizon, NOPP/MULVFS, 14 days
Feb 2001 **Chief Scientist**, R/V Sproul, NOPP, 2 days
Nov 2000 **Chief Scientist**, R/V Sproul, NOPP, 2 days
July 2000 J. Sherman, R/V J H Martin, Spray test, 1 day
Feb 1997 F. Whitney, R/V Tully 9704, MULVFS 18 days
May 1996 P. Boyd, R/V Tully 9603, MULVFS 26 days
Feb 1996 F. Whitney, R/V Tully 9601, MULVFS 21 days
May 1993 **Chief Scientist**, R/V Iselin 9303, MULVFS, - 8 days

Aug. 1992 R. Barber, JGOFS eqpac, MULVFS, 7 weeks
 Jan. 1992 J. Murray, JGOFS eqpac, MULVFS, 7 weeks
 Nov. 1991 **Chief Scientist**, R/V Oceanus 246, MULVFS - 5 days.
 May. 1990 H. Etcheber, Le Suroit, ECOFER-2, 2 weeks
 Sep. 1982 P. Wiebe, Knorr, Warm Core Rings, 3.5 weeks.
 Aug. 1982 P. Wiebe, Oceanus 125, Warm Core Rings, 2.5 weeks.
 Jun. 1982 P. Wiebe, Oceanus 121, Warm Core Rings, 2.5 weeks.
 Apr. 1982 P. Wiebe, Oceanus 118, Warm Core Rings. 2.5 weeks
 Sep. 1981 P. Wiebe, Atlantis II-110, Warm Core Gulf Stream Rings. 3 weeks.
 Nov. 1979 S. Honjo, R/V Gilliss, Balboa-Balboa, 2 weeks.
 Jul. 1979 D.W. Spencer, R/V Knorr, Balboa-Balboa, 3 weeks.
 Feb. 1978 S. Honjo, R/V Atlantis II, San Juan-WHOI, 3 weeks.
 Jun. 1976 J. Corliss, R/V Melville, Balboa-Balboa, 4 weeks.
 Oct. 1974 P. Wiebe, R/V Atlantis II, Bermuda-Woods Hole. 11 days.
 Dec. 1973 C. Summerhayes, R/V Chain, Dakar-Capetown, 4 weeks.
 Oct. 1973 G. Thompson, R/V Atlantis II, Barbados-San Juan, 4 weeks.
 Jun. 1972 A.P. Lisitzin, R/V Dmitri Mendeleev, Los Angeles-Callao, 5 weeks.
 Apr. 1972 W. Metcalf, R/V Knorr, Puerto Rico, 2 weeks.

Other Bishop - group Seagoing work

Aug 2013 M. Robert, CCGS Tully, Line P, Part. Inorganic Carbon 16 days - E. Martinez
 Jun 2013 M. Robert, CCGS Tully, Line P, C Flux Explorers 16 days - Todd Wood, Amelia Weiss
 Feb 2013 M. Robert, CCGS Tully, Line P, PIC, C Explorers 16 days - Todd Wood, Jill Sutton
 Aug 2012 M. Robert, CCGS Tully, Line P, Part. Inorganic Carbon 16 days - E. Martinez
 Jan. 2005 R. Wanninkhof, R/V Ron Brown, A16S. Part. Inorganic Carbon 45 days – A. Thompson
 Mar. 2004 P. Verdugo, R/V Kilo Moana, Optical carbon Flux instrument 10 days –Wood/Yegian
 Jan. 2002 K. Johnson, R/V Revelle, SOFeX/Carbon Explorers/MULVFS 45 days -Lam/Wood/Guay
 Apr. 2001 US Coast Guard Icebreaker Polar Star, Carbon Explorer 7 days - Todd Wood
 Aug. 1996 F. Whitney, R/V Tully 9618, MULVFS 26 days (group)

REFEREED PUBLICATIONS

Submitted:

Published Papers: 76

- 76 Li, Y., Bishop, J. K. B., Lam, P. J., & Ohnemus, D. C. (2025). Analysis of satellite and in situ optical proxies for PIC and POC during GEOTRACES GP15 and GP17-OCE transects from the subarctic north Pacific to the Southern Ocean. *Earth and Space Science*, 12, e2024EA004070. <https://doi.org/10.1029/2024EA004070>.
- 75 Bishop, J.K.B. V. J, Amaral, P.J. Lam, T.J. Wood, J.-M. Lee, A. Laubach, A. Barnard, C. Oricco, A. Derr (2022) Transmitted Cross-Polarized Light Detection of Particulate Inorganic Carbon Concentrations in the Ocean Water Column: Ships to ARGO floats. *Frontiers in Remote Sensing: “Polarization of Light as a Tool for Characterizing Different Facets of the Atmosphere-Ocean System”*. <https://www.frontiersin.org/articles/10.3389/frsen.2022.837938>
- 74 Bourne, H. L., Bishop, J. K. B., Connors, E. J., and Wood, T. J. (2021) Carbon export and fate beneath a dynamic upwelled filament off the California coast, *Biogeosciences*, 18, 3053–3086, <https://doi.org/10.5194/bg-18-3053-202172>
- 73 Martínez-Ruiz, F., A. Paytan, M. T. Gonzalez-Muñoz, F. Jroundi, M. M. Abad, P. J. Lam, J. K. B. Bishop, T. J. Horner, P. L. Morton, M. Kastner. (2019) Barite formation in the ocean: origin of amorphous and crystalline precipitates. *Chemical Geology* 511, 441-451.
- 72 Bourne H, Bishop J, Wood T, Loew T, Liu Y. Carbon Flux Explorer optical assessment of C, N and P fluxes. *Biogeosciences*. 2019 March 27; 16(6):1249-1264. Available from: <https://doi.org/10.5194/bg->

- 71 Bourne, H. L., Bishop, J. K. B., Lam, P. J., & Ohnemus, D. C. (2018). Global Spatial and Temporal Variation of Cd:P in Euphotic Zone Particulates. *Global Biogeochemical Cycles*, 32(7), 1123–1141. DOI: <http://doi.org/10.1029/2017GB005842>
- 70 Kim, H., W.E. Dietrich, J.K.B. Bishop, B.M. Thurnhoffer, I.Y. Fung (2017). Controls on solute concentration-discharge relationships revealed by simultaneous hydrochemistry observations of hillslope runoff and stream flow: The importance of critical zone structure, *Water Resour. Res.*, 53, 1424–1443, doi:10.1002/2016WR019722.
- 69 Bishop, J.K.B., M. B. Fong, T.J. Wood (2016). Robotic observations of high wintertime carbon export in California coastal waters. *Biogeosciences*, 13, 3019-3129, doi:10.5194/bg-13-3109-2016.
- 68 McDonnell, A.M.P., Lam, P.J., Lamborg, C.H., Buesseler, K.O., Sanders, R., Riley, J.S., Marsay, C., Smith, H.E.K., Sargent, E.C., Lampitt, R.S., Bishop, J.K.B. (2015). The oceanographic toolbox for the collection of sinking and suspended marine particles. *Progress in Oceanography*. doi:10.1016/j.pocean.2015.01.007.
- 67 Boss, E., L. Guidi, M.J. Richardson, L. Stemman, W.D. Gardner, J. K. B. Bishop, R.F. Anderson, R. Sherrell. (2015) Optical techniques for in-situ characterization of particles pertinent to GEOTRACES. *Progress in Oceanography*. 133 (2015) 43–54. Doi:10.1016/j.pocean.2014.09.007
- 66 Tostevin, R., A. V. Turchyn, J. Farquhar, D. T. Johnston, D. L. Eldridge, J. K. B. Bishop, M. McIlvin. (2014) Multiple Sulfur Isotope Constraints on the Modern Sulfur Cycle. *Earth and Planetary Science Letters* 396, 14-21.
- 65 Kim, H., J.K.B. Bishop, W. Dietrich, I.Y. Fung. Process dominance shift in solute chemistry as revealed by long-term high-frequency water chemistry observations of groundwater flowing through weathered argillite underlying a steep forested hillslope. *Geochimica et Cosmochimica Acta* 140 (2014) 1-19. (<http://dx.doi.org/10.1016/j.gca.2014.05.011>).
- 64 Kim, H., J.K.B. Bishop, T.J. Wood, and I.Y. Fung (2012), Autonomous water sampling for a long-term monitoring of trace metals in remote environments. *Environ. Sci. Technol.*, 46, 11220–11226; dx.doi.org/10.1021/es3006404.
- 63 Bishop, J. K. B., P. J. Lam and T. J. Wood (2012), Getting good particles: Accurate sampling of particles by large volume in-situ filtration. *Limnol. Oceanogr. Methods* 10, 681-710; DOI: 10.4319/lom.2012.10.681
- 62 Lam, P.J., S.C. Doney, and J.K.B. Bishop (2011) The dynamic ocean biological pump: Insights from a global compilation of particulate organic carbon, CaCO₃, and opal concentration profiles from the mesopelagic. *Global Biogeochemical Cycles*, 25, GB3009, doi:10.1029/2010GB003868.
- 61 S.E. Wilson, D.K. Steinberg, F.-L. E. Chu, J.K.B. Bishop (2010) Feeding ecology of mesopelagic zooplankton of the subtropical and subarctic North Pacific Ocean determined using fatty acid biomarkers. *Deep-Sea Research I*. 57 1278–1294. doi:10.1016/j.dsr.2010.07.005
- 60 Claustre H., J. Bishop, E. Boss, S. Bernard, J.-F. Berthon, C. Coatanoan, K. Johnson, A. Lotiker, O. Ulloa, M. J. Perry, F. D’Ortenzio, O. H. F. D’andon, J. Uitz. (2009) Bio-optical profiling floats as new observational tools for biogeochemical and ecosystem studies: potential synergies with ocean color remote sensing. 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., 7 pp.
- 59 Bishop, J.K.B (2009) Autonomous Observations of the Ocean Biological Carbon Pump. *Oceanography*, 22 (2), 182-193.
- 58 Bishop, J.K.B. and T.J. Wood (2009) Year Round Observations of Carbon Biomass and Flux Variability in the Southern Ocean. *Global Biogeochemical Cycles*. 23. GB2019, doi:10.1029/2008GB003206.
- 57 Bishop, J.K.B. and Wood, T.J. (2008) Particulate Matter Chemistry and Dynamics in the Twilight Zone at VERTIGO ALOHA and K2 Sites. *Deep-Sea Research I* 55, 1684-1706. 10.1016/j.dsr.2008.07.012
- 56 Aono, T., M. Kusakabe, T. Nakanishi, M. Yamada, S. Kaneko, T. Nakamura, K. Hori, J.K.B. Bishop (2009) Large volume in situ filtration and concentration system for measurements of low-level radioactivity in seawater. *J. Adv. Mar. Sci. Technol. Soc.*, 14, pp. 39-50. <https://doi.org/10.1016/j.jenvrad.2011.04.008>
- 55 Lam, P. J., and J. K. B. Bishop (2008), The continental margin is a key source of iron to the HNLC North

- Pacific Ocean, *Geophys. Res. Lett.*, 35, L07608, doi:10.1029/2008GL033294.
- 54 Buesseler, K.O., Trull, T.W., Steinberg, D.K., Silver, M.W., Siegel, D.A., Saitoh, S.-I., Lamborg, C.H., Lam, P.J., Karl, D.M., Jiao, N.Z., Honda, M.C., Elskens, M., Dehairs, F., Brown, S.L., Boyd, P.W., Bishop, J.K.B., Bidigare, R.R. VERTIGO (VERTical Transport In the Global Ocean): a study of particle sources and flux attenuation in the North Pacific (2008). *Deep-Sea Research II* 55, 1522-1538. doi:10.1016/j.dsr2.2008.04.024
 - 53 Dehairs, F., Jacquet, S., Savoye, N., Van Mooy, B.A.S., Buesseler, K., Bishop, J.K.B., Lamborg, C., Elskens, M., Baeyens, W., Boyd, P., Casciotti, K.L., Monnin, C., (2008). Barium in Twilight Zone suspended matter as a proxy for particulate organic carbon remineralization: Results for the North Pacific. *Deep Sea Research II* 55, 1673-1683. doi:10.1016/j.dsr2.2008.04.020 .
 - 52 Boyd, P.W., M. P. Gall, M. W. Silver, J.K.B. Bishop. Quantifying the surface-subsurface biogeochemical coupling during the VERTIGO ALOHA and K2 studies (2008). *Deep-Sea Research II* 55. 1578-1593. doi:10.1016/j.dsr2.2008.04.010
 - 51 Lam, P.J., J.K.B. Bishop, High Biomass Low Export Regimes in the Southern Ocean. (2007) *Deep-Sea Research II* 10.1016/j.dsr2.2007.01.013. 35 pp. [LBNL# 59452]
 - 50 Buesseler, K.O., C. H. Lamborg, P.W. Boyd, P. J. Lam, T. W. Trull, R. R. Bidigare, J.K.B. Bishop, K. L. Casciotti, F. Dehairs, M. Elskens, M. Honda, D. M. Karl, D. Siegel, M. W. Silver, D. K. Steinberg, J. Valdes, B. Van Mooy and S. Wilson (2007). Revisiting Carbon Flux through the Ocean's Twilight Zone, *Science*. 316. 567-570.
 - 49 Lam, P.J., J.K.B. Bishop; C. C. Henning, M.A. Marcus, G. A. Waychunas, and I.Y. Fung. (2006) Wintertime phytoplankton bloom in the Subarctic Pacific supported by Continental Shelf Iron., *Global Biogeochemical Cycles*. 20, GB1006, doi:10.1029/2005GB002557. [LBNL# 55467]
 - 48 Glover, D.M., C.L. Chandler, S.C. Doney, K.O. Buesseler, G. Heimerdinger, J.K.B. Bishop, and G.R. Flierl. (2006) The U.S. JGOFS Data Management Experience. *Deep Sea Research II*. 53, 793-802. [LBNL #59804]
 - 47 Bishop, J.K.B., T.J. Wood, R.E Davis, J.T. Sherman. (2004) Robotic Observations of Enhanced Carbon Biomass and Carbon Export at 55S During SOFeX - *Science*, 304, 417-420. [LBNL# 53136]
 - 46 Bishop, J.K.B. R.E. Davis and J.T. Sherman (2002) Robotic Observations of Dust Storm Enhancement of Carbon Biomass in the North Pacific. *Science* 298, 817-821. [LBNL #50120].
 - 45 Sheridan, C.C., C. Lee, S.G. Wakeham and J.K.B. Bishop (2002) Suspended particle organic composition and cycling in surface and midwaters of the equatorial Pacific Ocean. *Deep-Sea Research. I* 49 1983-2008.
 - 44 Campbell, J.W., D. Antoine, R. Armstrong, K. Arrigo, W. Balch, R. Barber, M. Behrenfeld, R. Bidigare, J. Bishop, M.-E. Carr, W. Esaias, P. Falkowski, N. Hoepffner, R. Iverson, D. Kiefer, S. Lohrenz, J. Marra, A. Morel, J. Ryan, V. Vederikov, K. Waters, C. Yentsch, and J. Yoder. (2002) Comparison of algorithms for estimating ocean primary productivity from surface chlorophyll, temperature, and irradiance. *Global Biogeochemical Cycles*, 16(3), 10.1029 / 2001GB001444 [LBNL# 48412]
 - 43 Guay, C.K. and J.K.B. Bishop (2002) A rapid birefringence method for measuring suspended CaCO₃ concentrations in water, *Deep-Sea Research I*, 49, 197-210 [LBNL #46895].
 - 42 Fung, I. Y., S.K. Meyn, I. Tegen, S.C. Doney, J.G. John, and J.K.B. Bishop (2000) Iron supply and demand in the upper ocean. *Global Biogeochemical Cycles*. V14(N1):281-295. [LBNL #44330]
 - 41 Bishop, J.K.B., S.E. Calvert, and M. Y.-S. Soon (1999). Spatial and Temporal Variability of POC in the Northeast Subarctic Pacific. *Deep-Sea Research II*. 46(11-12) 2699-2733. [LBNL #44130]
 - 40 Boyd, P.W., N.D. Sherry, J.A. Barges, J.K.B. Bishop, S.E. Calvert, M.A. Charette, S.J. Giovannoni, R. Goldblatt, P.J. Harrison, S.B. Moran, S. Roy, M. Soon, S. Strom, D. Thibault, K.L. Vergin, F.A. Whitney and C.S. Wong (1999). Transformations of biogenic particles from the pelagic to the deep ocean realm. *Deep-Sea Research II*. 46(11-12) 2761-2792. [LBNL # 45063]
 - 39 Charette, M.A., S.B. Moran and J.K.B. Bishop (1999) ²³⁴Th as a tracer of particulate organic carbon export in the subarctic Northeast Pacific Ocean. *Deep-Sea Research II* 46(11-12) 2833-2862. [LBNL #44174]
 - 38 Eek, M., M.J. Whiticar, J.K.B. Bishop and C.S. Wong. (1999) Carbon Isotope Composition of Alkenones along Line P - NE Pacific: Effects of pCO₂, Nutrients and Temperature. *Deep-Sea Research II* 46(11-12) 2863-2876. [LBNL #45076]

- 37 Thibault, D., S. Roy, C.S. Wong, and J.K.B. Bishop (1999). The Downward Flux of biogenic material in the NE subarctic Pacific: importance of algal sinking and mesozooplankton herbivory. *Deep-Sea Research II*. 46(11-12) 2669-2698. [LBNL #46479]
- 36 Bishop, J.K.B. (1999) Transmissometer Measurement of POC. *Deep-Sea Research I*. 46(2) 353-369. [LBNL# 43996]
- 35 Bishop, J.K.B., W.B. Rossow and E.G. Dutton (1997) Surface Solar Irradiance from ISCCP 1983-1991. *J. Geophys. Res. (Atmospheres)*, 102, 6883-6910.
- 34 Dunne, J.P., J.W. Murray, J. Young, L.S. Balistrieri, and J.K.B. Bishop, (1997) ^{234}Th and particle cycling in the central equatorial Pacific. *Deep-Sea Research II*. 44 2049-2084.
- 33 McLaughlin, F.A., Carmack, E.C., Macdonald, R.W. and Bishop, J.K.B. (1996), Physical and Geochemical Properties across the Atlantic/Pacific water mass front in the southern Canadian Basin. *J. Geophys. Res.* 101 (C1) 1183-1197.
- 32 Jeandel, C., Bishop, J.K.B. and Zindler, A.N. (1995). Exchange of Neodymium and its isotopes between seawater, small and large particles in the Sargasso Sea. *Geochimica. et Cosmochimica Acta*. 59, 535-547.
- 31 Luo, S., T.L. Ku, M. Kusakabe, J.K.B. Bishop and Y.L. Yang (1995) Tracing particle cycling in the upper ocean with ^{230}Th and ^{228}Th - an investigation in the eqatorial Pacific along 140 W. *Deep Sea Research II*, 42 805-829.
- 30 Ku, T.L., S. Luo, M. Kusakabe, and J.K.B. Bishop (1995). ^{228}Ra -derived nutrient budgets in the upper equatorial Pacific and the role of "new" silicate in limiting productivity. *Deep Sea Research II*. 42, 479-497.
- 29 Liu W.T., Zhang, A, and J.K.B. Bishop (1994). Evaporation and solar irradiance as regulator of sea surface temperature in annual and interannual changes. *J. Geophys. Res.*, 99 (C6), 12,623-12,637.
- 28 Bishop, J.K.B., Smith, R.C. and Baker, K., (1992) Springtime distributions and variability of biogenic particulate matter in Gulf Stream warm-core ring 82B and surrounding N.W. Atlantic waters. *Deep-Sea Research*. 39 (1A) s295-s326.
- 27 Joyce, T.M., Bishop, J.K.B., and Brown, O.B., (1992) Observations of offshore shelf-water transport induced by a warm-core ring. *Deep-Sea Research*. 39 (1A), s97-s114.
- 26 Altabet, M.A., Bishop, J.K.B., and McCarthy, J.J. (1992) Differences in particulate nitrogen concentration and isotope composition for samples collected by bottles and large-volume pumps in Gulf Stream warm-core rings and the Sargasso Sea. *Deep-Sea Research*. 39 (1A), s405-s417.
- 25 Mitchell, B.G., E. Brody, O. Holm-Hansen, C. McClain, J.K.B. Bishop, (1991) Light limitation of phytoplankton biomass and macronutrient utilization in the Southern Ocean. *Limnol. & Oceanogr.* 36(8) 1662-1677.
- 24 Bishop, J.K.B. and W.B. Rossow. (1991) Spatial and temporal variability of global surface solar irradiance. *J. Geophys. Res.*, 96 (C9), 16,839-16,858.
- 23 Bishop, J.K.B. (1991) Getting good weight. in: *Marine Particles: Analysis and Charaterization*. D.C. Hurd and D.W. Spencer, eds., Geophysical Monograph 63, 229-234. American. Geophysical Union.
- 22 Bishop, J.K.B., (1990) Determination of Ba in seawater using Vanadium/Silicon modifier and direct injection graphite furnace atomic absorption spectrometry. *Analytical Chemistry*. 62, 553-557.
- 21 Bishop, J.K.B. (1989) Regional extremes in particulate matter composition and flux: effects on the chemistry of the ocean interior. In Berger, W.H., Smetacek, V.S., and Wefer, G. eds. Productivity of the ocean present and past. Dahlem Konferenzen. Chichester: John Wiley and Sons Ltd.. pp 117-137.
- 20 Bishop, J.K.B. (1988) The barite-opal-organic carbon association in oceanic particulate matter. *Nature* 332, 341-343.
- 19 Conte, M.H. and J.K.B. Bishop (1988) Nanogram quantification of lipid classes in oceanic particles by high-performance thin layer chromatography. *Lipids* 23, 493-500.
- 18 Bishop, J.K.B. and M.Q. Fleisher (1987) Particulate manganese dynamics in Gulf Stream warm-core rings and surrounding waters of the N.W. Atlantic. *Geochimica et Cosmochimica Acta* 51(10), 2807-2826.
- 17 Bishop, J.K.B., J.C. Stepien, and P.H. Wiebe (1987) Particulate matter distributions, chemistry and flux in the Panama Basin: response to environmental forcing. *Progress in Oceanography* 17, 1-59.

- 16 Marra, J., P.H. Wiebe, J.K.B. Bishop, and J.C. Stepien (1987) Primary production and grazing in the plankton of the Panama Bight. *Bulletin of Marine Science* 40, 255-270.
- 15 Bishop, J.K.B., M.H. Conte, P. Wiebe, M. Roman and C. Langdon (1986) Particulate matter production and consumption in deep mixed layers: Observations in a warm core ring. *Deep-Sea Research* 33, 1813-1841.
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