

Curriculum Vitae

April 2016

Thomas C. Malone
Horn Point Laboratory
University of Maryland Center for Environmental Science



Curriculum Vitae

Thomas C. Malone, Ph.D.
Professor Emeritus, Horn Point Laboratory (HPL)
University of Maryland Center for Environmental Science (UMCES)
E-mail: malone@umces.edu

Education

1965 B.A. The Colorado College, Zoology
1967 M.S. University of Hawaii, Oceanography
1971 Ph.D. Stanford University, Biology

Professional Background

1971-1976 Assistant Professor, Department of Biology, City College of CUNY, New York,
(Promoted with Tenure, 1976)
1976-1980 Senior Research Associate, Lamont-Doherty Geological Observatory, Columbia
University
1976-1980 Adjunct Associate Professor, Department of Biology, City College of CUNY
1980-1982 Oceanographer, Oceanographic Division, Department of Energy and
Environment, Brookhaven National Laboratory

1982-1983 Associate Professor, University of Maryland Center for Environmental
Science, Horn Point Laboratory
1983-2010 Professor, University of Maryland Center for Environmental Science, Horn
Point Laboratory

1988-1990 Interim President, University of Maryland Center for Environmental Science
1990-2001 Director, Horn Point Environmental Laboratory, University of Maryland Center
for Environmental Science
1992-1996 Director, EPA Multiscale Experimental Ecosystem Research Center, University
of Maryland Center for Science
2003-2006 Director, Interagency Ocean.US Office for Sustained and Integrated Ocean
Observations

2010 – Retired, Professor Emeritus, University of Maryland Center for Environmental
Science, Horn Point Laboratory

Research Interests

Biological Oceanography, Marine Ecosystem Dynamics, Phytoplankton Ecology;
Coastal Eutrophication;
Coastal Ocean Observing Systems;
Ocean Policy, Ecosystem Services

National and International Service (1998-Present)

1998-2000 NOAA National Estuarine Eutrophication Assessment Team

1998-2000 President of the American Society of Limnology and Oceanography
2000-2002 Past President of the American Society of Limnology and Oceanography

1998-2002 Chair, IOC-WMO-UNEP-ICSU Coastal Global Ocean Observing System Panel
1999-2004 Chair, Heinz Center Coasts and Oceans Ecosystem Condition Panel
2002-2005 Co-Chair, IOC-WMO-UNEP-FAO-ICSU Coastal Ocean Observations Panel (COOP)

2002-2008 Member, U.N. IOC GOOS Scientific Steering Committee
2003-2008 Member, Coastal Theme Team of the Integrated Global Observation Strategy Partners

2005-2006 Chair, Joint JCOMM-GSSC-GRA Task Team for Implementing the Coastal Module of GOOS

2005-2009 Council Member, Sir Alister Hardy Foundation for Ocean Science
2005-2010 Member, Group on Earth Observations Coastal Zone Community of Practice

2005-Present Member, International Scientific Board of the Rudjer Bošković Institute of Croatia

2006-2007 Guest Editor, MTS Journal, Stemming the Tide of Coastal Disasters, Volume 40 (4) and Volume 41 (1)

2006-2011 Member, U.N. IOC-GSSC Panel for Integrated Coastal Observations (PICO)
2007-2011 Member, Editorial Board, Journal of Operational Oceanography
2008-2010 Member, Advisory Board, National Science Foundation-COSEE Coastal Trends
2009-2010 Co-Chair, Luso-American Foundation/NOAA/IOC Steering Committee, FLAD I Workshop “A Unified Approach for Sustainability in a Changing World: From Ocean Policy to Observations”

2010-2012 Co-Chair, Luso-American Foundation Steering Committee, FLAD II Workshop “Integrated Governance for the Oceans: From Conservation to Human Well Being”

2010 External reviewer of Australia’s Integrated Marine Observing System
2011 External reviewer of EPA-Victoria’s (Australia) monitoring, evaluation and reporting programs for coastal estuarine and marine ecosystems

Awards

- 2002** University of Maryland Reagent's Award for outstanding public service
- 2003** The Colorado College Louis T. Benezet Award for outstanding achievement in one's chosen field, excellence through unusual success or contribution, and research that has advanced a profession and improved people's lives.

Publications

Papers in Refereed Journals

- Malone, T.C. 1969. Primary productivity in a Hawaiian fishpond and its relationship to selected environmental factors. *Pac. Sci.* 23: 26-34.
- _____. 1970. *In vitro* conversion of DDT to DDD by the intestinal microflora of the northern anchovy, *Engraulis mordax*. *Nature* 227: 848-849.
- _____. 1971. The relative importance of nanoplankton and netplankton as primary producers in the California current system. *Fish. Bull.* 69: 799-820.
- _____. 1971. The relative importance of nanoplankton and netplankton as primary producers in oceanic tropical and neritic phytoplankton communities. *Limnol. Oceanogr.* 16: 633-639.
- _____. 1971. Diurnal rhythms in netplankton and nanoplankton assimilation ratios. *Mar. Biol.* 10: 285-289.
- _____, C. Garside, A.Z. Paul and O.A. Roels. 1973. Potential environmental impact of manganese nodule mining in the deep sea. *Offshore Tech. Conf., Publ. No. 1735:* 129-138.
- _____, C. Garside, R. Anderson and O.A. Roels. 1973. The possible occurrence of photosynthetic microorganisms in deep-sea sediments of the North Atlantic. *J. Phycol.* 9: 482-488.
- _____, C. Garside, K.C. Haines and O.A. Roels. 1975. Nitrate uptake and growth of *Chaetoceros* sp. in large outdoor continuous cultures. *Limnol. Oceanogr.* 20: 9-19.
- Garside, C., _____, O.A. Roels and B.A. Sharfstein. 1976. An evaluation of sewage-derived nutrients and their influence on the Hudson estuary and New York Bight. *Estuar. Coast. Mar. Sci.* 4: 281-289.
- _____. 1976. Phytoplankton productivity in the apex of the New York Bight: September 1973 - August 1974. NOAA Techn. Memo. ERL MESA-5, 46 pp. + appendices.
- _____. 1976. Phytoplankton productivity in the apex of the New York Bight: Environmental regulation of productivity/chlorophyll a. In: (M. Grant Gross, ed.), *Limnol. Oceanogr. Special Symposium "The Middle Atlantic Shelf and New York Bight"* 2: 260-272.

- _____. 1976. Plankton systematics and distribution. MESA New York Bight Atlas Monograph 13, N.Y. Sea Grant Institute, Albany, N.Y.
- _____. 1977. Environmental regulation of phytoplankton productivity in the lower Hudson Estuary. *Estuar. Coast. Mar. Sci.* 5: 151-171.
- _____. 1977. Light-saturated photosynthesis by phytoplankton size fractions in the New York Bight, USA. *Marine Biology* 42: 281-292.
- Garside, C., and _____. 1978. Monthly oxygen and carbon budgets of the New York Bight Apex. *Estuar. Coast. Mar. Sci.* 6: 93-104.
- _____. 1978. The 1976 *Ceratium tripos* bloom in the New York Bight: Causes and consequences. Malone (ed.) NOAA Tech. Rpt. NMFS Circular 410, 1-4.
- _____, and M. Chervin. 1979. The production and fate of phytoplankton size fractions in the plume of the Hudson River, New York Bight. *Limnol. Oceanogr.* 14(4): 683-696.
- _____, M. Chervin, and D.C. Boardman. 1979. Effects of 22 μ m screens on size frequency distributions of suspended particles and biomass estimates of phytoplankton size fractions. *Limnol. Oceanogr.* 24: 956-959.
- _____, C. Garside and P.J. Neale. 1980. Effects of silicate depletion on photosynthesis by diatoms in the plume of the Hudson River. *Mar. Biol.* 58: 197-204.
- Chervin, M.B., _____, and P.J. Neale. 1981. Interactions between suspended organic matter and copepod grazing in the plume of the Hudson River. *Estuar. Coast. Mar. Sci.* 13: 169-184.
- _____, and P.J. Neale. 1981. Parameters of light-dependent photosynthesis for phytoplankton size fractions in temperate estuarine and coastal environments. *Mar. Biol.* 61: 289-297.
- Stepien, J., _____, and M.B. Chervin. 1981. Copepod communities in the estuary and coastal plume of the Hudson River. *Estuar. Coast. Mar. Sci.* 13: 185-195.
- _____. 1982. Phytoplankton photosynthesis and carbon-specific growth: Light saturated rates in a nutrient-rich environment. *Limnol. Oceanogr.* 27: 226-235.
- _____, P.G. Falkowski, T.S. Hopkins, G.T. Rowe, and T.E. Whitledge. 1983. Mesoscale response of diatom populations to a wind event in the plume of the Hudson River. *Deep-Sea Res.* 30: 149-170.
- _____, T.S. Hopkins, P.G. Falkowski, and T.E. Whitledge. 1983. Production and transport of phytoplankton biomass over the continental shelf of the New York Bight. *Continental Shelf Res.* 1: 305-337.

- _____, W.M. Kemp, H.W. Ducklow, W.R. Boynton, J.H. Tuttle, and R.B. Jonas. 1986. Lateral variation in the production and fate of phytoplankton in a partially stratified estuary. *Mar. Ecol. Prog. Ser.* 32: 149-160.
- _____. 1987. Primary production of the ocean water column as a function of surface light intensity. *Deep-Sea Res.* 34: 139.
- Boicourt, W.C., S.Y. Chao, H.W. Ducklow, P.M. Glibert, _____, M.R. Roman, L.P. Sanford, J.A. Fuhrman, C. Garside, and R.W. Garvine. 1987. Physics and microbial ecology of a buoyant estuarine plume on the Continental Shelf. *Eos*, 68: 666-669.
- Roman, M.R., H.W. Ducklow, J.A. Fuhrman, C. Garside, P.M. Glibert, _____, and G.B. McManus. 1988. Production, consumption and nutrient cycling in a laboratory mesocosm. *Mar. Ecol. Prog. Ser.* 42: 39-52.
- _____, L.H. Crocker, S.E. Pike and B.W. Wendler. 1988. Influences of river flow on the dynamics of phytoplankton production in a partially stratified estuary. *Mar. Ecol. Prog. Ser.* 48: 235-249.
- _____ and H.W. Ducklow. 1990. Microbial biomass in the coastal plume of the Chesapeake Bay: Phytoplankton-bacterioplankton relationships. *Limnol. Oceanogr.* 35: 296-312.
- Jones, T. W., _____, and S. Pike. 1990. Seasonal contrasts in diurnal carbon incorporation by phytoplankton size classes of the coastal plume of Chesapeake Bay. *Mar. Ecol. Prog. Ser.* 68: 129-136.
- _____. 1991. River flow, phytoplankton production, and oxygen depletion in Chesapeake Bay. *J. Geological Society Special Publication No. 58*, pp 83-93, London.
- _____, and W.H. Bell. 1991. Environmental Research, Policy and Regulation: The Chesapeake Bay Experience. *Mar. Pollution Bulletin*, 23: 497-501.
- _____, H.W. Ducklow, E.R. Peele, and S. Pike. 1991. Picoplankton carbon flux in Chesapeake Bay. *Mar. Ecol. Prog. Ser.*, 78: 11-22.
- Conley, D.J. and _____. 1992. Annual cycle of dissolved silicate in Chesapeake Bay: Implications for the production and fate of phytoplankton biomass. *Mar. Ecol. Prog. Ser.*, 81: 121-128.
- _____, S.E. Pike and D.J. Conley. 1993. Transient variations in phytoplankton productivity at the JGOFS Bermuda time series station. *Deep-Sea Research*, 40: 903-924.
- _____, and L.D. Wright. 1994. Planning today for the coastal research of tomorrow. *EOS, Transactions, American Geophysical Union*, 75(21): 243-244.
- Roman, M.R., D.A. Caron, P. Kremer, E.J. Lessard, L.P. Madin, _____, J.M. Napp, E.R. Peele and M.J. Youngbluth. 1995. Spatial and temporal changes in the partitioning of organic

- carbon in the plankton community of the Sargasso Sea off Bermuda. *Deep Sea Research I*, 42(6):973-992.
- Caron, D.A., H.G. Dam, P. Kremer, E.J. Lessard, L.P. Madin, _____, J.M Napp, E.R. Peele, M.R. Roman and M.J. Youngbluth. 1995. The contribution of microorganisms to particulate carbon and nitrogen in surface waters of the Sargasso Sea near Bermuda. *Deep Sea Research I*, 42(6):973-992.
- Glibert, P.M., D.J. Conley, T.R. Fisher, L.W. Harding, and _____. 1995. Dynamics of the 1990 winter/spring bloom in Chesapeake Bay. *MEPS*, 122:27-43.
- _____, D.J. Conley, T.R. Fisher, P.M. Glibert, L.W. Harding, K. Sellner. 1996. Scales of nutrient limited phytoplankton productivity in Chesapeake Bay. *Estuaries*, 19(2B): 371-385.
- _____, and D.A. Nemazie. 1996. Toward a national agenda for research in the coastal zone: Where are we? *Biol. Bull.* 190: 245-251.
- _____, A. Malej, N. Smodlaka. 1996. Trends in Land-Use, Water Quality and Fisheries: A Comparison of the Northern Adriatic Sea and the Chesapeake Bay. *Periodicum Biologorum*. 98(2): 137-150.
- Howarth, R. D. Anderson, J. Cloern, C. Elfring, C. Hopkinson, B. Lapointe, _____, N. Marcus, K. McGlathery, A. Sharpley and D. Walker. 2000. Nutrient pollution of coastal rivers, bays and seas. *Issues in Ecology*, No. 7, *Ecol. Soc. Am.*, 15 p.
- _____ and M. Cole. 2000. Toward a global scale coastal ocean observing system. *Oceanography*, 13: 7-11.
- _____ 2003. The coastal component of the U.S. integrated ocean observing system. *Environmental Monitoring and Assessment*, 81: 51-62.
- Fisher, W.S., _____, and J.D. Giattina. 2003. A pilot project to detect and forecast harmful algal blooms in the northern Gulf of Mexico. *Environmental Monitoring and Assessment*, 81: 373-381.
- _____ 2003. The coastal module of the Global Ocean Observing System (GOOS): an assessment of current capabilities to detect change. *Marine Policy*, 27: 295 – 302.
- Nowlin, Jr., W.D. and _____. 2003. Research and GOOS. *Mar. Tech. Soc. J.*, 37: 42-46.
- _____ and J.M. Hemsley. 2006. Developing the Integrated Ocean Observing System for Improved Management and Mitigation of Coastal Inundation. *MTS Journal*, 40 (4): 45-55.
- _____, M. Davidson, P. DiGiacomo, E. Gonçalves, T. Knap, J. Muelbert, J. Parslow, N. Sweijd, T. Yanagai and H. Yap. 2010. Climate change, sustainable development and coastal ocean information needs. *Procedia Environmental Sciences*, 1: 324-341.
- _____, P.M. DiGiacomo, E. Gonçalves, A.H. Knap, L. Talaue-McManus, and S. de Mora. 2014. A global ocean observing system framework for sustainable development. *Marine Policy*, 43: 262-272.

_____, P.M. DiGiacomo, E.J. Gonçalves, A.H. Knap, L. Talaue-McManus, S. de Mora, and J. Muelbert. 2014. Enhancing the global ocean observing system to meet evidence based needs for ecosystem-based management of coastal ecosystem services. *Natural Resources Forum*, 38: 168–181 (doi: 10.1111/1477-8947.12045).

Books and Chapters in Books

- Malone, T.C., W. Esaias, and P. Falkowski. 1979. Plankton dynamics and nutrient cycling. pp. 193-218 In: (R.L. Swanson and C. Sinderman, eds.) *Oxygen Depletion and Associated Benthic Mortalities in New York Bight, 1976*, NOAA Professional Paper 11.
- _____. 1980. Algal size and phytoplankton ecology. pp. 433-464 In: (I. Morris, ed.) *The Physiological Ecology of Phytoplankton*, Blackwell Scientific Publications, London.
- _____. 1980. Size-fractionated primary productivity of marine phytoplankton. pp. 301-320 In: (P. Falkowski, ed.) *Primary Productivity in the Sea*, Plenum Press, New York.
- _____, P.J. Neale, and D.C. Boardman. 1980. Influences of estuarine circulation on the distribution and biomass of phytoplankton size fractions. pp. 249-262 In: (V.S. Kennedy, ed.) *Estuarine Perspectives*, Academic Press, New York.
- _____. 1982. Factors influencing the fate of sewage-derived nutrients in the lower Hudson estuary and New York Bight. pp. 389-400 In: (G.F. Mayer, ed.) *Ecological Stress and the New York Bight: Science and Management*, Estuarine Research Federation, Columbia, South Carolina.
- _____. 1984. Anthropogenic nitrogen loading and assimilation capacity of the Hudson River estuarine systems, USA. pp. 291-311 In: (V.S. Kennedy, ed.) *The Estuary as a Filter*, Academic Press, New York.
- _____. 1987. Nutrient loading and seasonal anoxia in Chesapeake Bay. A symposium. pp. 65-67. Maryland Sea Grant Publication UM-SG-TS-87-01.
- _____. 1987. Seasonal oxygen depletion and phytoplankton production in Chesapeake Bay: Preliminary result of 1985-86 field studies. pp. 54-60 In: (G.B. Mackiernan, ed.) *Dissolved Oxygen in Chesapeake Bay: Processes and Effects*, Maryland Sea Grant Publication UM-SG-TS-87-03.
- _____. 1987. Autochthonous sources of particulate organic matter in the Chesapeake Bay and its coastal plume. pp. B12-B14 In: (E.D. Houde, ed.) *Long-Range Research Needs for Chesapeake Bay Living Resource*, UMCEES Tech. Ser. No. TS 61-87.
- Tuttle, J.H., R.B. Jonas, and _____. 1987. Origin, development and significance of Chesapeake Bay anoxia. pp. 442-472 In: (S.K. Majumdar, L.W. Hall, and H.M. Austin, eds.) *Contaminant Problems and Management of Chesapeake Bay Resources*, Penn. Acad. Sci.

- _____ and W.H. Bell. 1990. Environmental research, policy and regulation: the Chesapeake Bay experience. In: T. Goda, W.H. Bell, and others (eds.) *Environmental Management and Appropriate Use of Enclosed Coastal Seas*, EMECS '90, Pergamon Press, pp. 497-502.
- _____ 1991. River flow, phytoplankton production and oxygen depletion in Chesapeake Bay, In *Modern and Ancient Continental Shelf Anoxia*, Tyson, R.V. and T.H. Pearson (eds), Geological Society Publication No. 58, p. 83-94.
- _____. 1992. Effects of water column processes on dissolved oxygen, nutrients, phytoplankton and zooplankton. pp. 61-112 In: (D.E. Smith, M. Leffler, and G. Mackiernan, eds.) *Oxygen Dynamics in the Chesapeake Bay, A Synthesis of Recent Research*, Maryland Sea Grant Publication UM-SG-TS-92-01.
- _____, W. Boynton, T. Horton and C. Stevenson. 1993. Nutrient Loadings to Surface Waters: Chesapeake Bay Case Study. In: *Keeping Pace with Science and Engineering: Case Studies in Environmental Regulation*. M.F. Uman and C. O'Melia (eds.) National Academy Press, pp. 8-38
- _____, A. Malej, L.W. Harding, N. Smodlaka (eds). 1999. *Ecosystems at the Land-Sea Margin: Drainage Basin to the Coastal Sea*. AGU, Estuarine and Coastal Sciences Series, No. 55, 377 p.
- _____ and others. 2000. Bridging Boundaries Through Regional Marine Research, NRC Report, NAS Press, 115 pp.
- _____ and others. 2002. Coasts and Oceans. In *The State of the Nation's Ecosystems*, Clark, W.C., T. Jorling and T.E. Lovejoy (eds.), Cambridge University Press, pp. 63-84.
- _____, T. Knap and M. Fogarty. 2005. Overview of science requirements. In *The Sea: The Global Coastal Ocean, Multiscale Interdisciplinary Processes* (Robinson, A.R. and K.H. Brink, eds), Harvard University Press, Cambridge, Massachusetts, pp. 757-784.
- _____ 2008. Ecosystem Dynamics, Harmful Algal Blooms and Operational Oceanography. In (M. Babin, C. Roesler, and J. Cullen, eds.), *Real-time Coastal Observing Systems for Marine Ecosystem Dynamics and Harmful Algal Blooms*. UNESCO Series "Monographs on Oceanographic Methodology", pp. 527-559.
- _____ and M. Culver. 2008. Managing Public Health Risks: Role of Integrated Ocean Observing Systems. In *Oceans and Human Health: Risks and Remedies from the Seas* (P.J. Walsh, S.L. Smith, L.E. Fleming, H.M. Solo-Gabriele, and W.H. Gerwick, eds.), Academic Press, New York, pp. 21-33.
- _____ and D. Rockwell. 2008. Managing Human Impacts on Water Quality: Role of Integrated Ocean Observing Systems. In *Effective Cross-Border Monitoring Systems for Waterborne Microbial Pathogens: A Plan of Action* (E. Dreelin and J. Rose, eds.), IWA Publishing, London, U.K., pp. 97-127.

_____, Davidson, M., DiGiacomo, P., Gonçalves, E., Knap, T., Muelbert, J., Parslow, J., Sweijd, N., Yanagai, T., Yap, H., (2010). Climate change, sustainable development and coastal ocean information needs. *Procedia Environmental Sciences*, 1: 324-341.

_____, P. DiGiacomo, J. Muelbert, J. Parslow, N. Sweijd, T. Yanagi, H. Yap, and B. Blanke. 2010. Building a Global System of Systems for the Coastal Ocean: A Strategic Action Plan for Implementing the Coastal Module of GOOS 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.59

Denman, K., _____ and others. 2010. Observing Planktonic Ecosystems: Needs, Capabilities, and a Strategy for the Next Decade, Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society (Vol. 1), Venice, Italy, 21-25 September 2009, Hall, J., Harrison, D.E. & Stammer, D., Eds., ESA Publication WPP-306, doi:10.5270/OceanObs09.pp.15

Harding Jr., L.W., R. A. Batiuk, T. R. Fisher, C. L. Gallegos, _____, W. D. Miller, M. R. Mulholland, H. W. Paerl, E. S. Perry, and P. Tango. 2013. Scientific bases for numerical chlorophyll criteria in Chesapeake Bay. *Estuaries and Coasts* (DOI 10.1007/s12237-013-9656-6).

_____. 2014. Management-Driven Assessments of the Coastal Ocean, In *Oceans and Human Health: Implications for Society and Well Being*, Bowan, R.E., M.H. Depledge, C.P. Carlarne, and L.E. Fleming (eds.), Wiley-Blackwell, Chapter 8.

_____, DiGiacomo, P.M., Gonçalves, E., Knap, A.H., Talaue-McManus, L., de Mora, S. 2014. A global ocean observing system framework for sustainable development. *Marine Policy*, 43: 262-272.

_____, P.M. DiGiacomo, E. Gonçalves, A.H. Knap, L. Talaue-McManus, S. de Mora and J. Muelbert. 2014. Enhancing the Global Ocean Observing System to meet evidence based needs for the ecosystem-based management of coastal ecosystem services. *Natural Resources Forum*, 38: 168–181.

_____ and Knap, A.H. 2017. Integrated Coastal Zone Monitoring in Support of Ecosystem Services. In *Handbook for Environmental Management of Marine Ecosystems*. Islam, M.N. and S. E. Jorgensen (eds). CRC Press (in press).

Technical Reports (1998 – 2011)

Malone and L.W. Botsford. 1998. Interactions and exchanges among coastal ecosystems on multiple spatial and temporal scales. Background paper for OEUVRE, NSF-OCE Biological Oceanography Strategic Planning Workshop.

Nowlin, W. and _____. 1999. Toward a U.S. Plan for an Integrated, Sustained Ocean Observing System. National Ocean Partnership Program Report for the Honorable Jim Saxton and the Honorable Curt Weldon.

_____. 1999. An Ocean Observing System for U.S. Coastal Waters: First Steps. Workshop Proceedings, U.S. Coastal GOOS Office, Horn Point Laboratory.

_____ and others. 2000. Strategic Design Plan for the Coastal Component of the Global Ocean Observing System. GOOS Report No. 90.

_____ and others. 2002. Integrated Strategic Design Plan for the Coastal Ocean Observations Module of GOOS. GOOS Report No. 125, IOC Information Document Series No. 1183.

_____ and others. 2005. Implementation Strategy for the Coastal Module of GOOS. GOOS Report No. 148. IOC Information Documents Series No. 1217.

Co-writer and editor of the following Ocean.US publications 2002-2008:

Building Consensus: Toward an Integrated and Sustained Ocean Observing System, Ocean.US Report No. 1

An Integrated and Sustained Ocean Observing System for the United States: Design and Implementation, Ocean.US Report No. 2

Proceedings of the Regional Organization Workshop, Ocean.US Report No. 5

Proceedings of the First Annual IOOS Development Workshop, Ocean.US Report No. 8

First Annual Integrated Ocean Observing System (IOOS) Development Plan, Ocean.US Report No. 9

Proceedings of the Second Annual IOOS Development Workshop, Ocean.US Report No. 12

Public Health Risks: Coastal Observations for Decision-Making, Ocean.US Report No. 15

Workshop on Regional Needs for Coastal Remote Sensing, Ocean.US Report No. 16

Drafted “Summit Proceedings: Embracing the Full Spectrum of IOOS Environmental Information for Marine Domain Awareness, Ocean.US Publ. No. 17.

Invited Talks (2006 – Present)

2006

AGU-ASLO-TOS Ocean Sciences Meeting – “Implementing the Coastal Component of the U.S. Integrated Ocean Observing System (IOOS)”

US-EU International Baltic Symposium, Plenary Presentation – “Global Ocean Observing System (GOOS): Regional Alliances & the Development of the Coastal Module”

Association of Flood Plain Managers Annual Conference 2006 – “An Integrated Ocean Observing System in Support of Flood Plain Management”

MTS/IEEE Oceans 2006 Conference – “Research to Operations and Back Again”

National Federation of Regional Associations’ IOOS Regional Conference – Design of a Harmful Algal Bloom Observing and Predicting Systems”

3rd GOOS Regional Forum, Plenary Presentation – “An Implementation Strategy for the Coastal Module of GOOS”

SCOR Meeting – “Developing Synergy Between Global Research Programs and the Implementation of Operational Oceanography”

2007

Gulf of Mexico Coastal Ocean Observing System Conference on Coastal Inundation – “An Integrated Ocean Observing System for the U.S.”

Meeting of the Intergovernmental Panel on Harmful Algal Blooms – “Design and Implementation of GOOS-HAB Pilot Projects”

IEEE Oceans 2007 Marine Challenges Coastline to Deep Sea – “Quantitative Assessments of the Condition of Marine Ecosystems & The Need for the Global Ocean Observing System”

AMS Conference on Coastal Urban Interactions & Vulnerabilities/Coastal Atmospheric & Oceanic Prediction & Processes: Opening Plenary – “An Integrated Ocean Observing System for Improved Mitigation of the Impacts of Coastal Inundation on Coastal Communities”

2008

Census of Marine Life Biological Observing Workshop: Exploring components of IOOS from the perspective of Census of Marine Life – “Biological Variables Critical to the Success of IOOS”

2009

_____ and others. 2009. Climate Change, Sustainable Development and Coastal Ocean Information Needs. Proceedings of the 3rd World Climate Conference, Geneva, Switzerland.

5th Global Oceans Conference 2009, Ensuring Survival, Preserving Life and Improving Governance, *Indicators of Marine Ecosystem Health, the Regular Process and the Global Ocean Observing System*, 9 October, Paris, France.

2010

Implementing and Assessing Ocean Policy: Role of the Global Ocean Observing System, Conference on *A Unified Approach for Sustainability in a Changing World: From Ocean Policy to Observations*, Lisbon, Portugal 7-8 October, 2010, Sponsors: Luso-American Foundation, National Oceanographic and Atmospheric Administration, Intergovernmental Oceanographic Commission and ISPA University Institute.

2011

Commencement address, Graduation Ceremony, Nippon Foundation-Partnership for Observing the Global Ocean, Bermuda Institute for Ocean Science, 20 May

Opening Keynote Address, *Climate Change, Habitat Loss and Coastal Development: The Perfect Storm for Coastal Populations*, II Brazilian Workshop on Climate Changes in Coastal Zones, 6-9 November 2011, Salvador, Brazil.

2012

III Franklin D. Roosevelt Azorean Forum, *Effective Implementation of Ocean Policies in the Coastal Zone*, Azores Portugal, 28-29 April

University of Sao Paulo Conference About the Sea, *Marine Species Diversity, Sustainable Development and Operational Oceanography*, Sao Paulo, Brazil, May 16

Commencement address, Graduation Ceremony, Nippon Foundation-Partnership for Observing the Global Ocean, Bermuda Institute for Ocean Science, 21 May

2013

Opening Keynote Address, *Climate Change, Sustainable Development and Coastal Information Needs*, III Brazilian Workshop on Climate Changes in Coastal Zones, 10-12 December, Florianópolis, Brazil.

2017

Invited Lecture: *The Global Ocean in the Anthropocene*, Quest University, Squamish, B.C. Canada, 14 March