

CURRICULUM VITAE

CHRISTOPHER MICHAEL REDDY

Senior Scientist
(preferred)

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EDUCATION:

B.Sc. Chemistry (minor in mathematics), Rhode Island College, Providence, RI, 1992

Ph.D. Chemical Oceanography, Graduate School of Oceanography, University of Rhode Island, Kingston, RI, 1997

Executive Certificate. Management and Leadership, Sloan School of Management, Massachusetts Institute of Technology, 2010

Certificate. *Leadership in the 21st Century: Chaos, Conflict, and Courage*, Kennedy School of Government, Harvard University, 2008

PROFESSIONAL EXPERIENCE:

- Chemist, ULTRA Scientific, North Kingstown, RI, 1992
- Environmental Chemist, CEIMIC Corporation, Narragansett, RI, Mar. 1993 to June 1994
- Research graduate assistant, Chemical Oceanography, University of Rhode Island, June 1994 to Dec. 1997
- Post-Doctoral Scholar and Investigator, Department of Marine Chemistry and Geochemistry, WHOI, Woods Hole, MA, Dec. 1997 to Feb. 2000
- Assistant Scientist, Dept. of Marine Chemistry and Geochemistry, WHOI, Mar. 2000 to Jan. 2004
- Visiting Scholar, Scripps Institution of Oceanography, UC San Diego, La Jolla, CA, Jan. 2003 to May 2003
- Visiting Associate, Div. of Geologic and Planetary Sciences, California Institute of Technology, Pasadena, CA, Jan. to Mar. 2005
- Adjunct Associate Professor of Biology, Boston University, Boston, MA, July 2006 to June 2008
- Associate Scientist, Dept. of Marine Chemistry and Geochemistry, WHOI, Jan. 2004 to Oct. 2006
- Associate Scientist with tenure, Dept. of Marine Chemistry and Geochemistry, WHOI, Oct. 2006 to Oct 2010
- Manager, WHOI Small Boats Fleet, 2008 to 2014
- Director, Coastal Ocean Institute, WHOI, Aug. 2008 to March 2015
- Senior Scientist, Dept. of Marine Chemistry and Geochemistry, WHOI, Oct. 2010 to present

GRADUATE ADVISOR: Professor James G. Quinn, University of Rhode Island

POST-DOCTORATE ADVISOR: Dr. Timothy I. Eglinton, Woods Hole Oceanographic Institution, (now at ETH-Switzerland)

INTERESTS:

- Chemical oceanography
- Marine pollution
- Marine natural products
- Communicating science and how science works

AWARDS AND HONORS:

- 2018 American Geophysical Union's Ambassador Award
- 2018 Fellow, American Geophysical Union
- 2016 First runner-up for top manuscript (Environment technology) published in *Environmental Science and Technology* (Gros *et al.* 2016)
- 2016 Stanley Watson Chair in Oceanography at WHOI
- 2014 Fellow, The Geochemical Society
- 2014 C.C. Patterson Award; awarded internationally for leading an innovative breakthrough of fundamental significance in environmental geochemistry, particularly in service to society
- 2013 R.A. Glenn Award; awarded to the most innovative and interesting paper in fuel science
- 2011 Best Paper for *Marine Pollution*. Moret Ferguson *et al.* 2010
<https://www.sciencedirect.com/science/article/pii/S0025326X12000987?via%3Dihub>
- 2011 University of Rhode Island Distinguished Achievement Award
- 2011 Kavli Fellow
- 2010 Kavli Fellow
- 2009 Kavli Fellow; awarded by the US National Academy of Sciences; it is the Academy's premiere recognition for distinguished young scientists under 45 years of age.
- 2008 Fulbright Specialists Roster Candidate
- 2008 The Henry L. and Grace Doherty Professor of Oceanography in the MIT/WHOI Joint Program
- 2007 First runner-up for top manuscript (Environment science) published in *Environmental Science and Technology* (Hofstetter *et al.* 2007)
- 2007 *Environmental Science and Technology* Excellence in Review Award
- 2007 John B. Phillips Award; in honor of the inventor of comprehensive two-dimensional gas chromatography (GC×GC) for a paper viewed to have the most potential impact on the future of GC×GC (Arey *et al.* 2005)
- 2006 Rhode Island College Athletic Alumnus award
- 2006 Fellow, Aldo Leopold Leadership Program (trains academic environmental scientists to communicate effectively to non-scientists)
- 2003 Office of Naval Research Young Investigator Program awardee
- 1998 Rhode Island College Alumni Honor Roll award
- 1998 "Save the Bay" Environmental Award; for identifying a second more toxic oil after the *North Cape* oil spill, which led to an additional 1.5 million dollars added to the damage settlement.
- 1996 Honorable Lincoln Almond (Governor of Rhode Island) Award; for scientific contribution during the *North Cape* oil spill
- 1995 American Chemical Society's Outstanding Graduate Student Award in Environmental Chemistry
- 1991 American Chemical Society's Outstanding Undergraduate Student Award in Analytical Chemistry

PARTICIPATION IN WHOI ACADEMIC PROGRAM:

- Guest lecturer for *Marine Org. Geochemistry*, MIT/WHOI Joint Program (Spring 1999, 2001, 2003, 2005, 2007, 2009)
- Guest lecturer for *Marine Mammal Toxicology*, MIT/WHOI Joint Program (Winter 2004)
- Guest lecturer for *Elements of Modern Oceanography*, MIT/WHOI Joint Program (Fall 2016)
- Instructor (with Roger Francois), *Marine Geochemistry*, MIT/WHOI Joint Program (Fall 2002, 2003)
- Admissions committee for Department of Marine Chemistry and Geochemistry (2006, 2007, 2008)

- Pre-generals advisor for JP Students in Marine Chemistry and Geochemistry (Incoming classes of 2002, 2006)
- General exam coordinator (Spring 2007)
- Co-instructor (with Lonny Lippsett), *How not to write for peer-reviewed journals: Talking to everyone else*, MIT/WHOI Joint Program (Summer 2008, Fall 2010; Fall 2013; Fall 2017)
- Co-instructor (with Lonny Lippsett), *Communicating Science - A workshop for WHOI postdocs*, WHOI post-doctoral association (Short course, Spring 2009)
- Advised or co-advised Ph.D. students: Ana Lima (2004 w/Tim Eglinton); Helen White (2005 w/Tim Eglinton); Desiree Plata (2009 w/Phil Gschwend); Kristin Pangallo (2009); and Karin Lemkau (2012)
- Chair, Eoghan Reeves; Ph.D. defense (2010)
- Chair, Elizabeth Halliday; Ph.D. defense (2012)
- Thesis committee for Ph.D. students: Amy Marie Accardi (2003), Kristen Whalen (2008), Eric Montie (2006), Laura Hmelo (2010), and Alexandra Patricia Teaciuc (2015)

EDUCATION/ADVISING IN WHOI ACADEMIC PROGRAM:

- Aubrey Hounshell, U. of Hawaii (Guest student, summer 2000)
- Carly Tarr, Bates College (Guest student, summer 2000)
- Nicholas Drenzek, RPI (Guest student; Summer Fellow, Summer 1999, 2000)
- Shannon Hughey, Rhode Island College (Guest student, 6/02-8/02)
- Desiree L. Plata, Union College (Summer Fellow, 6/02-8/02)
- Gregory O'Neil, Boston College (Guest student, 6/02-8/02)
- Brian Kile, Bates College (Summer Fellow, 6/03-8/03)
- Heather Bischel, UC Berkeley (Summer Fellow, 6/04-8/04)
- Byron E. Pedler, U. of New Hampshire (Summer Fellow, 6/05-8/05)
- Jared A. DeMello, U. of Conn. (Guest Student, 6/06 to 9/06)
- Emily E. Peacock, Boston University (Guest Student, 1/07 to 7/07; MS committee member)
- Matthew F. Poyton, Providence College (Guest Student, 6/07 to 9/07)
- Catherine A. Carmichael, Trinity College (Guest Student, 6/07 to 9/07)
- Meredith Praamsma, Hope College (Summer Fellow, 6/01 to 8/07)
- Jennifer Culbertson, Boston University (Guest Student, 10/06 to 6/07; PhD committee member)
- Abigail Kernan-Schloss, Kalamazoo College (Guest Student, 6/09-8/09)
- Ellen Murphy, Reed College (Guest Student, 7/09-8/09)
- Michael Barrett, Duke University (Guest Student, 05/10-08/10)
- Jonas Gros, École Polytechnique Fédérale de Lausanne, Switzerland (Guest Student, 03/12-06/12)
- Jagos Radovic, Institute of Environmental Diagnosis and Water Studies (Guest student, 05/12-8/12)
- Andrew Beir, Buckingham Browne & Nichols School (volunteer, 06/10-08/10)
- Bryan James, New Canaan High School, CT (volunteer, 06/11-08/11)
- Blake Hallisey, Greenwich High School, CT (volunteer, 08/11-08/11)
- Thomas Rugh, Cal State San Luis Obispo, CA (volunteer, 06/14-08/14)
- Charlotte Main, Southampton, UK (Guest student, 09/12-12/12)
- Benjamin Freiberg, Skidmore College (Guest student, 06/13-07/13; 06/14-08/14)
- Michael McNulty, Boston College (Guest student, 07/13-08/13; 06/14-08/14)
- Ferdinand Oberle, MARUM (Guest student, 06/13-08/13)
- Hector Koolen, Campinas University, Brazil (Guest student, 05/14 to 11/14)
- Andre Henrique, Federal University of Ceara, Brazil (Guest student, 03/15 to 09/15)
- Hilary Green, UNC Chapel Hill (Guest student, 06/16-08/16)
- Connor Love, UC Santa Barbara (Guest student, 05/17 to 08/17)

- Rose Rossell, Appalachian State (Guest student, 05/17 to 06/17)
- Eleanor Arrington, UC Santa Barbara (Guest student, 05/17 to 06/17)
- Cassia Armstong, Trinity College (Guest student, 06/17 to 08/17)
- Julia Jackson, Dartmouth College (Guest student, 01/17 to 4/17)
- Mohmaded El-Waracky, McMaster College (06/18 to 07/18)
- Brian Forst, Harvard University (volunteer, 07/13-08/13)
- Connor Love, UC Santa Barbara (volunteer, 07/18-present)
- Chalique Umasangaji, University of Aix-Marseilles (Fulbright Fellow, 9/16-12/16)
- Ana Lima, MIT/WHOI Ph.D. student (Co-advisor, Defended March 12, 2004)
- Helen White, MIT/WHOI Ph.D. student (Co-advisor, Defended December 15, 2005)
- Desiree Plata, MIT/WHOI Ph.D. student (Co-advisor, Defended April 24, 2009)
- Kristin Pangallo, MIT/WHOI Ph.D. student (Advisor, Defended July 10, 2009)
- Karin Lemkau, MIT/WHOI Ph.D. student (Advisor, Defended April 12, 2012)
- Anna Walsh, MIT/WHOI Ph.D. student (Co-Advisor; 09/18-present)
- Gregory F. Slater, Post-doctoral scholar/investigator (9/01 to 9/03)
- Emma L. Teuten, Post-doctoral investigator (7/03 to 11/05)
- J. Samuel Arey, Post-doctoral investigator (11/04 to 8/05)
- G. Todd Ventura, Post-doctoral investigator (10/06 to 12/08)
- Ananya Sen Gupta, Post-doctoral investigator (1/11 to 01/12)
- Karin L. Lemkau, Post-doctoral investigator (7/12 to 02/13)
- Christoph Aeppli, Post-doctoral investigator (6/11 to 11/13)
- Robert F. Swarthout, Post-doctoral investigator (04/14-7/30/15)
- Collin P. Ward, Post-doctoral investigator (08/16-05/18)
- Ulrich Hanke, Post-doctoral investigator (02/18-08/19)
- Ulrich Hanke (co-advised with Mark Kurz), Post-doctoral investigator (09/19 to 12/2020)
- Michael G. Mazzotta (co-advising with Collin Ward), Post-doctoral investigator (03/20 to 03/22)
- Taylor Nelson (co-advising with Collin Ward), Post-doctoral investigator (07/20 to 03/22)
- Bryan James (co-advising with Mark Hahn), Post-doctoral scholar (08/21 to present)
- Yanchen Sun

PARTICIPATION IN EDUCATION ELSEWHERE:

- Mentored undergraduates in their special projects in *Marine Pollution* at Massachusetts Maritime Academy (1998, 1999, 2000, 2001)
- Guest lecturer for *Organic Biogeochemistry*, Scripps Institution of Oceanography (Spring 2003)
- Guest lecturer for *Environmental Oceanography*, Boston College (Winter 2004)
- Instructor for course *Environmental Monitoring*, at Massachusetts Maritime Academy (Sept. 2000 to June 2001)
- Co-instructor (with John Farrington) *Biogeochemistry of Organic Contaminants*, Short course at the Austral Summer Institute I, University of Concepcion, Chile (January 22 to 31, 2001)
- Guest lecturer for *Global Coastal Change*, Boston University (Fall 2005, 2006)
- Co-instructor of Internet-based course *GC×GC Systems, Informatics, and Applications: An advanced seminar on comprehensive two-dimensional gas chromatography*, with colleagues from U. of Nebraska and Spelman College (Winter semester 2006, 2007)
- Guest lecturer for *Experimental Methods*, Mount Holyoke College (Spring 2008, 2009)
- Guest lecturer for *Environmental Chemistry*, Massachusetts Maritime Academy (Spring 2008, 2009).

- Organized and taught with Karen Weintraub (Boston Globe) a one-day seminar entitled *How to speak to the media* at MIT for post-docs (January 2009)
- Guest lecturer for *Science News Writing*, Boston University's Science Journalism graduate program (Fall 2010)
- Guest lecturer for *Marine Biogeochemistry*, Boston University (Spring 2011)
- Guest lecturer for *Natural Products*, Western Washington University (Spring 2011)
- Guest lecturer for *Topics in Energy*, US Naval War College, Newport, RI (Spring 2011)
- Guest lecturer for *Marine Pollution*, US Coast Guard Academy, New London, CT (Fall 2011, 2012, Spring 2014, 2015, 2016; 2017; 2018)
- Guest lecturer for *Concepts in Contemporary Science*, Berklee College of Music, Boston, MA (Spring 2012)
- Guest lecturer for *Energy and the Ocean Environment*, Sea Education Association, Falmouth, MA (Spring 2012, 2013, 2014)
- Guest lecturer for general science class, St. Philomena School, Portsmouth, RI (Spring 2012)
- Guest lecturer for *Translating Science*, Wesleyan University, Middletown, CT (Spring 2013)
- Guest lecturer for NOAA's "Science of Oil Spills" course, NOAA, Falmouth, MA (Fall 2013)
- Guest lecturer for *Molecular Science: Theory and Methods*, Worcester Polytechnic Institute, Worcester, MA (Fall 2014)
- Guest lecturer for NOAA's "Science of Oil Spills" course (via webinar from WHOI to Seattle, WA), Falmouth, MA (Spring 2016)
- Guest lecturer for Marine Biological Laboratory's *Semester in Science*, Woods Hole, MA (Fall 2019)
- Served on the Ph.D. committees outside of WHOI: Penny Higgins (Univ. of Toronto); Shelby Walker (Virginia Institute of Marine Sciences); Rachel Adams (MIT); Xanat Flores (MIT); Jennifer Culbertson (Boston University); Emily Peacock (MS thesis, Boston University); Amy Kelly (MIT); Andrew Wozniak (Virginia Institute of Marine Sciences); Jonas Gros (EPFL); Birgit Nabbefeld (outside reader, Curtin University); Konstantinos Kotzakoulakis (examiner, Macquarie University)

PROFESSIONAL RESPONSIBILITIES:

- Reviewed manuscripts for *Analytical Chemistry*; *Analytical and Bioanalytical Chemistry*; *Applied Energy*; *Applied and Environmental Microbiology*; *BioScience*; *CLEAN-Soil, Air, and Water*; *Environmental Forensics*; *Environmental Science and Technology*; *Estuaries*; *Geochim. Cosmochim. Acta*, *JGR Atmospheres*; *JGR Biogeosciences*; *Journal of the American Oil Chemists' Society*; *Journal of Chromatography A*; *Journal of Food and Agricultural Chemistry*; *Journal of Hazardous Materials*; *Limnology and Oceanography*; *Marine Chemistry*; *Marine Environmental Research*; *Marine Pollution Bulletin*; *Nature*; *Organic Geochemistry*; *Proceeding of the National Academy of Sciences*; *Science, Soil and Sediment Contamination*; and *Water, Air & Soil Pollution*
- Session chair at V.M. Goldschmidt Conference (Environmental geochemistry field studies), Aug. 26, 1999, Cambridge, MA
- Grant reviewer for the Hudson River Foundation, Sea Grant, DOE, NOAA, PRF, and NSF.
- Moderator for, *Beyond Crisis Science and Emergency Legislation: What do we really know about oil spills?* University of Massachusetts, Dartmouth. Feb. 16, 2001
- Organized *Biogeochemistry of Marine Organic Matter in the Contemporary Environment and Ancient sediments*, Div. of Geochemistry, American Chemical Society, Boston, MA. Aug. 19, 2001
- Presided over *Biogeochemistry of Organic Contaminants in the Aquatic Ecosystems*, Division of Environmental Chemistry, American Chemical Society, Boston, MA. Aug. 18, 2001
- Organized and presided over *Application of Forensic Chemistry in Environmental Investigations*, Pittsburgh Conference, Chicago, IL. Mar. 9, 2004

- Testified on oil spills for Joint Committee on Natural Resources and Agriculture, State of Massachusetts, Boston, MA. May 25, 2004
- Organizer of *International Society of Environmental Forensics: Theory, Applications and Case Studies*, N. Charleston, SC. Nov. 8-9, 2004
- Testified on oil spills for United States Coast Guard at Rulemaking hearings, New Bedford, MA. Nov. 16, 2004
- Moderator of *International Society of Environmental Forensics: Petroleum Hydrocarbons, Analytical Techniques, and Case Studies*, Rio de Janeiro, Brazil. Nov. 22-23, 2004
- Organized and moderated *Advances in Coastal BioGeoChemistry*, Woods Hole Oceanographic Institution, Woods Hole, MA. Nov. 8, 2005
- Discussion leader for *The Interplay of Nature and Industry: Halogenated Organic Compounds in the Environment* at the Organic Geochemistry Gordon Conference, Holderness School, Plymouth, NH, Aug. 6 to 11, 2006
- Advised offices of Senator Edward Kennedy (MA), Senator John Kerry (MA), and Representative William Delahunt (MA) on oil spills, Washington, DC, Sept. 12 to 13, 2006
- Advised Massachusetts Dept. of Environmental Protection on alternatives fuels and lubricants, Boston, MA. Mar. 13, 2007
- Board of Trustees, *Salt Pond Areas Bird Sanctuaries*, Falmouth, MA. 2007-Present
- Board member, *Metcalf Institute for Marine and Environmental Reporting*, University of Rhode Island, 2007-2010
- Advised city, state, and federal officials following the *M/V Cosco Busan* oil spill in San Francisco Bay, Nov. 2007
- Judged the Secretary of the Navy's environmental achievement awards, Feb. 2008
- Organizer and Session Chair for *Changing Chemistry of Estuaries, Coasts, and the Ocean*, Ocean Sciences Meeting, Orlando, FL, Mar. 7, 2008
- Advised Senator John Kerry (MA) on nanotechnology legislation, May 2008
- Board member, *Coalition for Buzzards Bay*, 2008-2011
- Testified on oil inputs from ocean-going vessels for House Committee on Transportation and Infrastructure, Washington, DC, June 12, 2008
- Led a half-day workshop on how to communicate with the lay public, media, and policymakers at the New England Estuarine Research society, Block Island, RI, Oct. 2008
- Participant in *Research & Development Priorities: Oil Spill Workshop*, The Coastal Response Research Center, U. of New Hampshire, March 2009
- Panelist for *Careers in Science* for Woods Hole Partnership Educational Program (PEP), Woods Hole, MA, June 2009
- Overseer for the *Sea Education Association*, Woods Hole, MA, 2009-Present
- Advised the President's Council on Environmental Quality on biofuel spills in the coastal environment, Washington, DC, July 2009
- Reviewed *Literature Synthesis for North and Central Atlantic* for the Mineral Management Service, Sept. 2009
- Participant in *Response to Liquid Asphalt Releases in Aquatic Environments*, The Coastal Response Research Center, U. of New Hampshire, Oct. 2009
- Organized and Session chair (with Dr. Kara Lavender Law, Sea Education Association), *Plastic Debris in the Ocean: Quantifying the Problem and Investigating Its Impacts*, Ocean Sciences meeting, Portland, OR, Feb. 24, 2010
- Panelist in *Standing up for Science session*, MIT Museum, Cambridge, MA, Apr. 2010
- Member, Organizing committee for the *Kavli Frontiers of Science Symposium*, 2010

- Testified on dispersant usage following the *Deepwater Horizon* disaster for House subcommittee on Energy and Commerce, Washington, DC, June 10, 2010
- Testified on NOAA's response following the *Deepwater Horizon* disaster for House subcommittee on Insular Affairs, Oceans, and Wildlife, Washington, DC, June 15, 2010
- Panelist for the President's National Commission on the BP *Deepwater Horizon* oil spill and offshore drilling, New Orleans, LA, July 13, 2010
- Briefed Lt. Governor Elizabeth Roberts (Rhode Island) and Emergency Management Council on oil spills, Warwick, RI, August 10, 2010
- Briefed the President's National Commission on the BP *Deepwater Horizon* oil spill and offshore drilling. Washington, DC, August 19, 2010
- Academic liaison at the Unified Area Command of the *Deepwater Horizon* Disaster, New Orleans, LA, September 2010
- Panelist in *Sense about Science*, "Standing up for Science media workshop" Cambridge, MA, October 2010
- Panelist for the Consortium for Ocean Leadership's Marine Geoscience Leadership Symposium, "Science informing policy: Gulf Oil Spill", Washington, DC, April 21, 2011
- Moderator in "*Oil Spill Tracking Technology*", Gulf Oil Spill SETAC meeting, Pensacola, FL, April 26, 2011
- Briefed Congressman Keating (MA) on basic science, alternative fuels, and oil spills, Washington, DC, May 11, 2011
- Panelist in "*Deepwater Horizon* panel; oil weathering and fate", SETAC meeting, Boston, MA, November 15, 2011
- Chair, Organizing committee for the *Kavli Frontiers of Science Symposium*, 2011
- Briefed Congresswoman Castor (FL) and Congressman Markey (MA) on restoring the Gulf of Mexico, Washington, DC, December 6, 2011
- Briefed Congressman Keating (MA) on restoring the Gulf of Mexico, Washington, DC, December 13, 2011
- Briefed former Congressman Taylor (Miss) on restoring the Gulf of Mexico, Bay St. Louis, June 21, 2012
- Dissertations in Chemical Oceanography (DISCO), invited alumnus, Kauai, Hawaii, October 7-11, 2012
- Briefed the Honorable Jane Lubchenco, Director of NOAA, on the *Deepwater Horizon* oil spill, Silver Spring, MD, November 12, 2012
- Briefed Deputy staff director of the House Natural Resources committee on current activities at the *Deepwater Horizon* site, Washington, DC, November 16, 2012
- Briefed Senator Kerry's (MA) office on Arctic oil spills, Washington, DC, November 16, 2012
- Briefed Congressman Keating's (MA) office on oil spills, Washington, DC, November 16, 2012
- Briefed majority staff of the House Appropriations Commerce-Science-Justice Subcommittee on oil spills, Washington, DC, November 28, 2012
- Briefed minority staff of the House Appropriations Commerce-Science-Justice Subcommittee on oil spills, Washington, DC, November 28, 2012
- Session chair for "*Chemical methods for comprehensive oil spill analysis*", Gulf of Mexico Oil Spill & Ecosystem Science Conference, New Orleans, LA, January 22, 2013
- Reviewed NAS report, *Effects of the Deepwater Horizon Mississippi Canyon-252 Oil Spill in the Gulf of Mexico*
- Briefed US Senator Jack Reed's (RI) staff on the progress of the *Deepwater Horizon* disaster Washington, DC, February 6, 2013

- Met with US Senator Begich's (AK) staff to update about oil spills in the Arctic, Washington, DC, March 14, 2013
- Met with US Senator Murkowski's (AK) staff to discuss about oil spills in the Arctic, Washington, DC, March 14, 2013
- Provided written testimony, as per request, by Senator Begich (Alaska) for a hearing held by the Senate Subcommittee on Oceans, Atmosphere, Fisheries and Coast Guard on "Arctic offshore petroleum drilling season and maritime safety", March 27, 2013
- Presented oral and written testimony to the Rhode Island Senate Committee on environmental and agriculture on plastic legislation. Providence, RI, April 3, 2013
- Session organizer for "*Beyond n-alkanes and PAHs: What have we learned about petroleum geochemistry since the Deepwater Horizon?*", American Chemical Society national meeting, New Orleans, LA, April 10, 2013
- Briefed National Academy of Science Gulf Program Advisory Group via teleconference, October 2, 2013
- Session organizer for "*Fate and transport of oil spill residues and their impacts on nearshore coastal environments*" Gulf of Mexico Oil Spill & Ecosystem Science Conference, Mobile, AL, January 28, 2014
- Panelist for 16th Annual Northeastern Student Chemistry Research Conference and Career Symposium, Boston University, Boston, MA, April 13, 2014
- Workshop leader and panelist, "Microplastics and human health" workshop, National Academy of Science, Washington, DC, April 22, 2014
- Briefed staffers from House Science, Space and Technology Committee, Research and Technology Subcommittee on *Deepwater Horizon* disaster, Washington, D.C., August 27, 2014
- Briefed staffers from House Transportation and Infrastructure Committee, Coast Guard subcommittee, Washington, DC, August 27, 2014
- Member of the NOAA SAB Restoration Science Program Advisory Working Group, 2014 to 2017.
- Testified on the lessons learned on the 5th anniversary of the *Deepwater Horizon* disaster for the Senate Committee on Science, Commerce, and Technology, Washington, DC, April 20, 2015
- Board member National Academy of Science Gulf Studies Board, 2015-2017
- Co-led "Participation of academia in oil spills" for the USCG Sector Southeastern New England PREP 2016 Cape and Buzzards Bay Response Workshop, New Bedford, MA, March 11, 2016
- Discussion member of "Scene 2" in Eve Ensler's *In the Body of the World*, American Repertory Theater, Cambridge, MA, May 28, 2016
- Discussion leader for *The Anthropocene*, Organic Geochemistry Gordon Conference, Holderness School, Holderness, NH, July 28, 2016
- Organizing committee for COME ABOARD! Chemical Oceanography Meeting: A Bottom-up Approach to Research Directions, University of Hawaii, Honolulu, HI, October 14 to 16, 2016.
- Session co-chair, "*Integrating Science into Response*", International Oil Spill Conference, Long Beach, CA, May 16, 2017
- Worked as a scientific liaison to state, Federal, and local officials as well as the community on the 2018 Woods Hole "*Ocean King*" oil spill
- Hosted and co-organized a "Town Hall" community update on the "*Ocean King*" spill; January 25, 2018
- Organizer and session chair for the George Olah Award Ceremony at the American Chemical Society meeting, New Orleans, LA, March 21, 2017
- Provided analytical assistance and report to NOAA and US Coast Guard for oil sheen event at the Woods Hole Steamship Authority, November 19, 2018

- Briefed staff from US Congresswomen Katherine Clark (MA) and Eddie Bernice Johnson (TX; Chair of the House Science Committee), Woods Hole, June 25, 2019
- Briefed staffers for the Inspector General of the EPA on best practices in plastic research, Woods Hole, February 26, 2020
- Advised Brazilian navy on the 2019 Brazilian mystery oil spill
- Advised Russian Federation following 2020 Siberian oil spill
- Advised various stakeholders following the 2020 MV *Wakashito* oil spill (Mauritius)
- Advised various stakeholders following the 2021 MV *XpressPearl* disaster
- Advised various stakeholders following the 2022 Peru oil spill (2022)
- Advised various stakeholders with oil tanker (FSO Safer) off the coast of Yemen (2022)
- Provided over 300 interviews to the print media, radio, and television on environmental science in the past several year
- Editorial board for *Environmental Forensics*, 2001-present
- Editorial board for *Marine Environmental Research*, 2003-2007
- Editorial board for *Environmental Research Letters*, 2014-2015
- American Chemical Society Expert, 2016-present

FIELD EXPERIENCE:

Cruises

R/V *Endeavor* (July 1994) Collection of water samples in the northwest Atlantic Ocean.

R/V *Argo Maine* (September 1995) Collection of water samples and sediment traps in the northwest Atlantic Ocean.

R/V *Pelican* (April 1997) Collection of sediment cores in the Gulf of Mexico.

R/V *New Horizon* (May to June 2001) Collection of sediment cores and water samples along the California coastline.

R/V *Oceanus* (April 2004; Chief Scientist) Collection of sediment cores and water samples in the northwest Atlantic Ocean.

R/V *Cape Hatteras* (August 2004; Chief Scientist) Collection of sediment cores and water samples in the northwest Atlantic Ocean.

R/V *Atlantis* (July 2007) Collection of sediment as well as gas and oil samples at the Santa Barbara oil seeps via the DSV *Alvin* (dives #4322, 4328, and 4332).

R/V *Atlantis* (September 2009) Sampling of asphalt volcanoes off the coast of California via the DSV *Alvin* (dive #4544).

R/V *Endeavor* (June 2010) Investigating subsurface plumes in the Gulf of Mexico resulting from the *Deepwater Horizon* disaster.

HOS *Sweetwater* (August 2011) Sampling sediments in the Gulf of Mexico.

R/V *Atlantis* (September 2011) Sampling of water and sediments off the coast of California.

R/V *Atlantis* (June 2015; co-Chief Scientist) Sampling of naturally seeped oil in the Gulf of Mexico (DSV *Alvin* dives #4792 and 4797).

Additional fieldwork

Siskiwit Lake, Isle Royale, Lake Superior (July 1998) Collection of sediment cores.

Hudson River, Glen Falls, NY (July 1999) Collection of sediment cores.

Lowes Cove, Walpole, ME (April 2002, June 2002, July 2003) Collection of benthic animals.

San Francisco Bay (November 2007, December 2007, January 2008, March 2008, September 2008, June 2009) Collection of oil-covered samples following the *Cosco Busan* spill.

Gulf coast (LA, MI, AL, and FA; 2010 to present) >25 visits following the *Deepwater Horizon* (beach surveys, small boats, and overflights).

Pearl Harbor, HI (July/August 2018) Collection of oil residues around the USS *Arizona* Memorial.

Santa Barbara, CA (September 2018) ROV surveys around Platform Holly.
Santa Barbara, CA (July 2019) Kayak-based sampling along coastal Santa Barbara

In addition, I have participated in many one-day cruises for the collection of water, sediments, and biota in Narrow River, Narragansett Bay, New Bedford Harbor, Buzzards Bay, Woods Hole, coastal California, and in a variety of local rivers and lakes in New England.

In the news (100s of interviews in total, below only mentions since Oct. 2019)

1. [“Officials say West Virginians are safe from Ohio train derailment impacts, citing water and air monitoring results”](#), Charleston Gazette-Mail, 02/17/2023.
2. [“Health concerns related to the East Palestine train derailment: What to know”](#), Pittsburgh Post-Gazette, 02/16/2023.
3. [“Residents of Ohio town say they don't trust safety claims after train derailment, chemical spill”](#), ABC News, 02/15/2023.
4. [“Fact-checking the reporting of the explosion in East Palestine, Ohio”](#) Newswise, 02/14/2023
5. [“The other risk from the East Palestine disaster”](#) Washington Post, 02/14/2023
6. [“Fact Check: ALC-0315 Ingredient In Pfizer's COVID Vaccine Is NOT Unsafe”](#), Lead Stories, 02/13/2023
7. [“What is vinyl chloride, the chemical released from the East Palestine train cars?”](#) Pittsburgh Post-Gazette, 02/07/2023.
8. [“Grappling with the biggest marine plastic spill in history.”](#), Chemical and Engineering News, 01/23/23.
9. [“Velsicol closed its chemical plant 10 years ago. Memphis still endures its toxic legacy”](#), Tennessee Lookout, 11/14/22.
10. [“Beauty Products Keep Getting Recalled for Benzene. Just How Dangerous Is It?”](#) Harper’s Bazaar, 11/11/2022.
11. [“Everything You Need to Know about the Dry Shampoo Recall”](#) Glamour, 10/28/2022.
12. [“Is Vinegar Safer Than Bleach for Preserving Carved Pumpkins?”](#) Snopes, 10/22/22.
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PUBLICATIONS

Listed below are peer-reviewed publications that I have co-authored. I have annotated the names of other co-authors as follows: graduate students that I have advised or co-advised; post-docs I have advised; and graduate students, summer student fellows, guest students, and others that have worked in my laboratory with an *, †, and ‡, respectively.

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2. Murray, J.A., Sander, L.C., Wise, S.A. and C. Reddy. (2016). *Gulf of Mexico Research Initiative 2014/2015 Hydrocarbon Intercalibration Experiment: Description and Results for SRM 2779 Gulf of Mexico Crude Oil and Candidate SRM 2777 Weathered Gulf of Mexico Crude Oil*. NIST Internal Report 8123. National Institute of Standards and Technology, Gaithersburg, MD. Available at <http://dx.doi.org/10.6028/NIST.IR.8123>

PUBLISHED MANUSCRIPTS, COMMENTARIES, LETTERS, REVIEWS, ESSAYS, and EDITORIALS (NOT PEER REVIEWED):

1. Reddy, C.M. The Exxon Valdez spill was a nightmare. A looming environmental disaster in Yemen could be even worse (2022). CNN, posted online March 22.
2. James, B.D., Hahn, M.E., Reddy, C.M. (2022). Biomaterials science can offer a valuable second opinion on nature's plastic malady. Scientific Viewpoint. *Environmental Science & Technology* **56**, 1475-1477.
3. Reddy, C.M. Don't assume the worst about the Mauritius oil spill (2020). CNN, posted online August 23.
4. Reddy, C.M. A dangerous leak of diesel fuel in the Arctic (2020). CNN, posted online June 9.
5. Ward, C.W., Reddy, C.M., Overton, E.B. Why Sunlight matters for marine oil spills (2020) EOS, posted online April 28.
6. Reddy, C.M. Lessons from Deepwater Horizon for coronavirus (2020) *Boston Globe*, posted online on March 31.
7. Hanke, U. †, Ward, C.P., Reddy, C.M. Leveraging the lessons learned from black carbon research to study plastics in the environment. (2019) Scientific Viewpoint. *Environmental Science & Technology* **53**, 6599-6600.
8. Reddy, C.M. *Acceptance response to AGU Ambassador Award*. EOS, 100, <https://doi.org/10.1029/2019EO113287>. Published on 07 January 2019.
9. Reddy, C.M., Ward, C.P. Reassessing guidelines for oil spill cleanups: Sunlight plays a key overlooked role in the fate of oil in the ocean. *Oceanus*, published online on April 25, 2018.
10. Reddy, C.M., Arey, J.S. Did dispersants help responders breathe easier? *Oceanus*, published online on August 28, 2017.
11. Reddy, C.M. To ban or not to ban plastic bags? That's not the best question. *Huffington Post*, published online on March 28, 2017.
12. Reddy, C.M., Valentine, D.L. Scientists should be active but apolitical. *Huffington Post*, published online on January 2, 2017.
13. Reddy, C.M., Valentine, D.L. (2016) Where did *Deepwater Horizon* oil go? Did dispersants help microbes break down oil? *Oceanus*, published online on December 23, 2016.
14. Reddy, C.M., Valentine, D.L., and Ziebold, J. Academia and the military can be valuable partners. *EOS* 97, doi: 10.1029/2016EO062795, published online on November 10, 2016.
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16. Reddy, C.M., O'Neil, G.W. A faster way to better reactions. *Oceanus*, published online on May 13, 2016.
17. Reddy, C.M. (2016). Acceptance of the 2014 C.C. Patterson Award. *Geochim. Cosmochim. Acta*. **172**, 461-462.
18. Valentine, D.L., Reddy, C.M. (2015) Latent hydrocarbons from cyanobacteria (*Commentary*). *Proceedings of the National Academy of Sciences* **112**, 13434–13435.
19. Reddy, C.M. (2015) Lessons learned from a first-time dad (and scientist). (Blog post) *Huffington Post*, posted online on June 12.
20. Reddy, C.M. (2015) Five years after oil spill, how bad is the Gulf of Mexico today? (Opinion), *Boston Globe*, published online on April 20.
21. Reddy, C.M. (2015) The significance of one email: How prepared are we for the next major oil spill? (Blog post) *Huffington Post*, posted online on April 20.
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23. Reddy, C.M. (2015) Celebrating the dynamic between Spock and Captain Kirk. (Blog post) *Huffington Post*, posted online on March 2.
24. Reddy, C.M. (2015) To dump or not to dump? (Opinion) *Providence Journal*, February 18 edition.
25. Reddy, C.M., O'Neil, G.W. (2015). Jet fuel from algae? *Oceanus*, published online on January 28.
26. Reddy, C.M., Valentine, D.L. (2014). Frightening tool to fight oil spills? (Opinion), *CNN* website, posted December 26.
27. Reddy, C.M., Valentine, D.L. (2014) Where did *Deepwater Horizon* oil go? *Oceanus*, published online on October 27.
28. Reddy, C.M. In research pacts with industry, scientists guided by principle. (Letter to the editor). *Boston Globe*. June 1, 2014.
29. Nelson, R.K., Carmichael, C.A., Reddy, C.M., Aeppli, C., Kellerman, M.Y., Valentine, D.L. (2013). GC×GC Forensic analysis of oil sheens at the Deepwater Horizon disaster site helps pinpoint the source of oil leakage. *LCGC North America: The application notebook*, 31, 18-19.
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31. White, H.K., Hsing, P., Cho, W., Shank, T.M., Cordes, E.E., Quattrini, A., Nelson, R.K., Camilli, R., Demopoulos, A., German, C.R., Brooks, J.M., Roberts, H.H., Shedd, W., Reddy, C.M., Fisher, C.R. (2012). Reply to Boehm and Carragher: Multiple lines of evidence link deep-water coral damage to *Deepwater Horizon* oil spill. *Proceedings of the National Academy of Sciences*, 109 (40) E2648.
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34. Reddy, C.M. (2012). What scientists under pressure can learn from Spock, (Opinion), *WIRED* magazine, posted January 19.
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36. Reddy, C.M. (2011). When science and media mix, (Editorial), *Science* 332, 13.

37. Reddy, C. M. (2011). The messy and human world of science, (Opinion), *CNN* website, posted January 31.
38. Reddy, C.M. (2010). Dude, you are speaking Romulan. *EOS*, p.384, vol. 91, No. 2, October 19 issue.
39. Reddy, C.M. (2010). The joys of making a difference in science. *The Chronicle of Higher Education*, October 11 issue.
40. Reddy, C.M. (2010). How reporters mangled science on Gulf oil spill. (Opinion), *CNN* website, posted August 25.
41. Reddy, C.M. (2010). Why Mother Nature needs a hand. (Op-Ed), *Providence Journal Bulletin*, May 29 edition.
42. Reddy, C.M. (2010). What if carbon dioxide were as black as oil? (Opinion), *CNN* website, posted May 28.
43. Reddy, C.M. (2010). Local oil spills inform Gulf response. (My View), *Cape Cod Times*, May 13 edition.
44. Reddy, C.M. (2010). A different kind of battle in the Gulf. (Op-Ed), *Boston Globe*, May 6 edition.
45. Reddy, C.M. (2010). Earth Day spinning all year long. (My View), *Cape Cod Times*, April 22 edition.
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47. Reddy, C.M. (2010). Real ocean problems. (Op-Ed), *Providence Journal Bulletin*, March 8 edition.
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49. Reddy, C.M. (2009). Comment on “Occurrence and Concentrations of Benzotriazole UV Stabilizers in Marine Organisms and Sediments from the Ariake Sea, Japan”. *Env. Sci. and Technol.* 43, 7998.
50. Reddy, C.M. (2009). Class is in session on jury duty. (My View), *Cape Cod Times*, September 1 edition.
51. Reddy, C.M. (2009). While oil gently seeps from the seafloor. *Oceanus*, published online May 14, 2009.
52. Reddy, C.M. (2009). Let's not forget *Exxon Valdez*. (Op-Ed), *Boston Globe*, March 24 edition.
53. Reddy, C.M. (2009). [Scientist citizens. \(Editorial\). *Science* 323, 1405.](#)
54. Reddy, C.M. (2009). Science fiction? (Letter to the Editor), *New York Times*, February 1 edition.
55. Lamborg, C., Reddy, C. (2009). Piven case reinforces mercury warnings. (Op-Ed), *Boston Globe*, January 26 edition.
56. Reddy, C.M. (2009). Obama's choice of scientists shows respect for science. (Op-Ed), *Providence Journal Bulletin*, January 7 edition.
57. Reddy, C.M. (2008). When *Quick and Dirty* should not be quick and dirty. (Editorial), *Sea Technology*, August issue.
58. Reddy, C.M. (2008). Practical steps to a cleaner bay. (My View), *Cape Cod Times* August 5, 2008 edition.

59. Reddy, C.M. (2008.) Recycling comes to Middletown. (Op-Ed), *Providence Journal Bulletin* June 15 edition.
60. Reddy, C.M. (2008). Biofuels for jet travel. (Letter to the Editor), *New York Times* May 18 edition.
61. Reddy, C.M. (2008). A cautionary tale about evaluating analytical methods to assess contamination after oil spills. (Correspondence), *Marine Pollution Bulletin* 56, 1380.
62. Reddy, C.M. (2008). Ways to be 'green' on St. Patrick's Day. (Op-Ed), *Providence Journal Bulletin*, March 17 edition.
63. Reddy, C.M. (2008). Eco-engineering is premature. (Op-Ed), *Providence Journal Bulletin*, February 24 edition.
64. Reddy, C.M. (2007). All oil spills are not the same. (Op-Ed), *Providence Journal Bulletin*, December 18 edition.
65. Dessler A., Reddy, C. (2007). Prof. Lindzen is wrong. *Providence Journal Bulletin*, December 17 edition.
66. Reddy, C.M. (2007). Would spills of bunker fuel alternatives be even worse? (Open Forum), *San Francisco Chronicle*, December 14 edition.
67. Reddy, C.M. (2007). Here's an idea: Use greed to go green. (Op-Ed), *Providence Journal Bulletin*, October 19 edition.
68. Reddy, C.M., Hahn, M. (2007). Risks versus benefits of eating salmon. (Op-Ed), *Providence Journal Bulletin*, August 12 edition.
69. Reddy, C.M. (2007). State must act on lesson of Bouchard. (My View), *Cape Cod Times*, April 27 edition.
70. Reddy, C.M. (2007). Still toxic after all these years. *Oceanus*, 45 (3), 26-29.
71. Reddy, C.M. (2007). A closer look at biodiesel's potential. (Op-Ed), *Providence Journal Bulletin*, April 19 edition.
72. Reddy, C.M. (2007) The growing menace of chemical warfare. (Op-Ed), *Providence Journal Bulletin*, April 1 edition.
73. Dessler A., Reddy, C. (2007). Disregard inaccurate view on climate. (Guest view), *Newport Daily News*, March 16 edition.
74. Reddy, C.M. (2006). Fix the Earth before revisiting moon. (Op-Ed), *Providence Journal Bulletin*, December 14 edition.
75. Reddy, C.M. (2006). Science fantasy: TV is clueless about the real thing. (Op-Ed), *Seattle Post Intelligencer*, September 13 edition.
76. Reddy, C.M. (2005). Reducing the risk of fire safety. *Providence Journal Bulletin*, August 3 edition.
77. Reddy, C.M. (2005). A sluggish response to a smoldering problem, *Environmental Forensics* 6, 103-104.
78. Reddy, C.M. (2004). Oil in our coastal backyard. *Oceanus* 43(1), 50-55.
79. Reddy, C.M., Eglinton, T.I., Hounshell, A., White, H.K., Xu, L., Gaines, R.B., and Frysiner, G.S. (2003). Response to comment on "The West Falmouth oil spill after thirty years: the persistence of petroleum hydrocarbons in marsh sediments", *Env. Sci. and Technol.* 37, 2021-2022.

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PRESENTATIONS/POSTERS (presenter is underlined; since 2018):

(a) At WHOI

1. Reddy, C.M. *Current state of plastic pollution in the ocean*, Naval War College Visit, September 16, 2022, Presentation. Invited
2. Walsh, A.N., Mazzotta, M.G., Nelson, T.F., Reddy, C.M., Ward, C.P. *Synergy between sunlight, titanium dioxide, and microbes enhances degradation of cellulose-diacetate-based plastics in the ocean*. WHOI Marine Chemistry and Geochemistry Department Seminar, Woods Hole, MA, August 9, 2022. Presentation.
3. Reddy, C.M. *Plastic pollution: Current challenges and future solutions*, Summer Student Fellow Lecture series, June 8, 2022. Presented. Invited.
4. Reddy, C.M., with Asha deVos. *Ocean Pollution, Solutions for clean-up, recovery, and prevention*, WHOI Ocean Encounters series, April 6, 2022. Presentation. Invited.
5. Reddy, C.M. *Has the pandemic led to increased shipping accidents?*, Naval War College Visit, September 13, 2021, Presentation. Invited.
6. Reddy, C.M. *Science in a time of crisis* Presented to Paul Salem at the request of Peter de Menocal, November 16, 2020, Presentation.
7. Reddy, C.M. *Not normal and mutated; Science in a time of crisis*, Department of Marine Chemistry and Geochemistry seminar series, May 5, 2020, Presentation.
8. Reddy, C.M. *Lessons from the Deepwater Horizon; 10 years later*, Hosted by WHOI communications and development, April 20, 2020. Presentation. (Invited; webinar).
9. Hahn, M. and Reddy, C.M. *Halogenated Marine Natural Products: A Potential Risk to Human Health?* Woods Hole Sea Grant, March 6, 2020. Presentation.
10. Reddy, C.M. *Swimming outside of the Ivory Tower*. WHOI Academic Programs Office. August 29, 2018. Woods Hole (Presentation). Invited.
11. Reddy, C.M. *Plastics in the marine environment: Myth vs Reality*. American Chemical Society visitors. August 23, 2018. Woods Hole (Presentation). Invited.
12. Reddy, C.M. *Marine microplastics: How can an oceanographic and ocean engineering perspective advance our understanding?* Visit from his Serene Highness Albert II, Sovereign Prince of Monaco. July 9, 2018. Woods Hole (Presentation). Invited.
13. Reddy, C.M. *An elevator speech is not going to bring you to the penthouse*. Department of Marine Chemistry and Geochemistry seminar. June 9, 2018. Woods Hole (Presentation). Invited.

(b) Elsewhere

1. Reddy, C.M. *Pollution Revolution*. The Briar Club, Houston, TX. February 16, 2023. Presentation. Invited.
2. Reddy, C.M. *POLLUTION*. Alcuin School, Dallas, TX. February 16, 2023. Presentation. Invited.
3. Reddy, C.M. *Pollution Revolution*. Royal Oaks Country Club, Dallas, TX. February 15, 2023. Presentation. Invited.
4. Reddy, C.M. *A pressing need to study the immediate fate and effects of oil spills*. 5th Fortaleza

- Austral Spring School, Brazil. November 22, 2022. Presentation. Invited.
5. Reddy, C.M. *What's the future of plastic pollution?* Marion Natural History Museum. October 12, 2022. Presentation. Invited.
 6. Nelson, R.K., Scarlett, A., Gagnon, M., Holman, A., Reddy, C.M., Sutton, P., Grice, K. *Characterization of low-sulfur marine fuel oils using comprehensive two-dimensional gas chromatography coupled with high-resolution mass spectrometry.* American Chemical Society Fall Meeting, Chicago, IL, August 25, 2022. Presentation.
 7. Walsh, A.N., Mazzotta, M.G., Nelson, T.F., Reddy, C.M., Ward, C.P. *Synergy between sunlight, titanium dioxide, and microbes enhances cellulose diacetate degradation in the ocean.* American Chemical Society Fall Meeting, Chicago, IL, August 24, 2022. Presentation.
 8. James, B.D., de Vos, A., Aluwihare, L., Youngs, S.A., DiBenedetto, M., Ward, C.P., Michel, A.P.M., Colson, B.C., Mazzotta, M.G., Walsh, A.N., Nelson, R.K., Hahn, M., Reddy, C.M. *The many forms of plastic pollution: Lessons learned from X-Press Pearl nurdle spill.* American Chemical Society Fall Meeting. Chicago, IL. August 22, 2022. Presentation. Invited.
 9. Reddy, C.M. *A look into plastic pollution.* Buzzards Bay Action Committee. New Bedford, MA. June 21, 2022. Presented. Invited.
 10. Walsh, A.N., Mazzotta, M.G., Nelson, T.F., Reddy, C.M., Ward, C.P. *Sunlight and titanium dioxide accelerate microbial degradation of cellulose diacetate in the ocean.* Gordon Research Seminar Environmental Sciences: Water, Holderness, NH, June 18, 2022. Presentation
 11. Reddy, C.M., Belden, E. *A three-pronged approach for reducing plastic pollution in the ocean.* AIChE Metro NY Meeting, April 11, 2022. Presentation. Invited. Online.
 12. Walsh, A.N., Reddy, C.M., Niles, S.F., McKenna, A.M., Hansel, C.M., Ward, C.P. *Plastic formulation is an emerging control of its photochemical fate in the ocean.* American Chemical Society Spring Meeting, San Diego, CA, March 23, 2022. Presentation.
 13. Mara, P., Nelson, R., Reddy, C., Teske, A., Edgcomb, V. *Hydrocarbon profile of Guaymas Basin hydrothermal sediments and implications of fungal biodegradation.* 2022 Ocean Sciences Meeting, Honolulu, HI, March 4, 2022. Presentation.
 14. Edgcomb, G., Mara, P., Nelson, R., Reddy, C.M., Lott, S., Burgaud, G., Teske, A. *Fungal diversity and activities in subsurface sediments of hydrothermally-active Guaymas Basin.* 2022 Ocean Sciences Meeting, Honolulu, HI, March 4, 2022. Presentation.
 15. Bercow, D., Wood, A., Reddy, C., Nelson, R., White, H. *Chemical analysis of oiled field samples collected from the 2020 Delaware Bay mystery oil spill.* 2022 Ocean Sciences Meeting, Honolulu, HI, March 3, 2022. Poster.
 16. Youngs, S., Michel, A., de Vos, A., James, B., Dibenedetto, M., Reddy, C., *Chemical Analysis of Nurdles from the M/V X-Press Pearl Fire: A Study of rapid degradation, weathering, and metal accumulation,* 2022 Ocean Sciences Meeting, Honolulu, HI, March 1, 2022. Poster.
 17. Reddy, C.M. *The FSO Safer is not the Exxon Valdez.* Atlantic Council, February 25, 2022. Panelist, Invited.
 18. Reddy, C.M. *Academia and oil spills.* Exxon Mobil OSR Knowledge Transfer, February 1, 2022, Presented. Invited.
 19. Reddy, C.M. *Alkenones for next generation cosmetics.* Alkenone workshop, Collegium Helveticum, Swiss Federal Institute of Technology Zurich; October 27, 2021. Presented. Invited speaker.
 20. Reddy, C.M. *Lessons from an 18-yr, 8,500-mile-long journey, The Role of Science in Extreme Pollution Events,* Marine Biological Laboratory Semester in Environmental Science (SES) Distinguished Scientist Seminar Series, October 15, 2021, Presentation. Invited.

21. Mazzotta, M.G., Reddy, C.M., Amarpuri, G., Edwards, B., Izallalen, M., Mazumder, S., Ward, C.P. (2021) *Orthogonal techniques for observing the degradation of plastics in a natural seawater mesocosm: cellulose diacetate degrades within 3 months*. American Chemical Society National Meeting. Virtual. Submitted poster. Abstract published. August 25, 2021.
22. Nelson, R.K., Scarlett, A.G., Gagnon, M., Holman, A., Reddy, C.M., Grice, K. *Comprehensive two-dimensional gas chromatographic analysis of a spilled fuel oil on Mauritius*. American Chemical Society Fall 2021 Meeting, August 22, 2021, (Virtual Presentation).
23. Baki, G., O'Neil, G.W., Reddy, C.M., Liberatore, M.W., Chandler, M. *Retooling geochemical proxies for next-generation cosmetics*. Society of Cosmetic Chemists webinar. July 28, 2021 (virtual presentation, invited).
24. Reddy, C.M. *Plastic pollution. Afloat in misunderstanding and misinformation*. The Salon lecture series sponsored by the Spirit of the Senses. July 18, 2021 (virtual presentation, invited).
25. Reddy, C.M. Beyond Nurdles: A broader look at marine environmental incidents. American Spaces program, US Embassy, Sri Lanka, July, 1, 2021 (virtual presentation, invited).
26. Reddy, C.M. Nelson, R.K., Valentine, D.L. A pressing need for GC×GC-based untargeted analysis of dumped waste in the ocean. 18th International GC×GC symposium, June 11, 2021 (virtual presentation, keynote; invited).
27. Mazzotta, M.G.; Reddy, C.M.; Amarpuri, G.; Edwards, B.; Izallalen, M.; Mazumder, S.; Ward, C.P. "Marine plastic pollution- lessons from the Vineyard Sound". American Chemical Society, Small Chemical Business Seminar, June 11, 2021. Invited talk.
28. Reddy, C.M. A crisis is an opportunity: Want to collaborate? Brazil-USA Oil Spill Workshop, May 26, 2021 (virtual presentation, invited).
29. Reddy, C.M. and R.P. Rodgers. Advance geochemical analysis of the 2019 Brazilian oil spill. April 23, 2021. (virtual presentation). Networking Friday with LABOMAR Atlantic International Research Centre.
30. Walsh, A.N., Reddy, C.M., Niles, S.F., McKenna, A.M., Hansel, C.M., Ward C.P. (2021) Plastic formulation is an emerging control of its photochemical fate in the ocean. American Chemical Society Spring 2021 Meeting. Virtual. Poster/video presentation, April 5-16, 2021.
31. Scarlett, A.G., Nelson, R.K., Gagnon, M., Holman, A., Reddy, C.M., Grice, K. Comparison of very low sulphur fuel oil with spilled oil following the grounding of the MV Wakashio in Mauritius, 2020. *International Meeting on Organic Geochemistry, Bremen, Germany*. January 9, 2021. (Oral Presentation with abstract). DOI: 10.3997/2214-4609.202134190.
32. MullerDahlberg, F., Sen Gupta, A., Nelson, R.K., Lemkau, K., Arrington, E., Kivenson, V., Valentine, D., Reddy, C. Comparing the Results of Peak Topography Mapping Across Different Compound Groups for Fingerprinting the Refugio Oil Spill. *eCF Paper Id: 200702-001, Global Oceans Conference & Exposition – Singapore, October 5-14, 2020 (presentation – virtual)*.
33. Reddy, C.M. Watching for plastics and oil spills. Global Ocean Watch OceanSITES - Optimal Approaches for 2030. September 16, 2020. (virtual presentation and invited).
34. Reddy, C.M. *Good news and Bad news: Pollution in Narragansett Bay*, Masonic Grand Lodge of Rhode Island, May 18, 2020 Presentation. (Invited; webinar).
35. Reddy, C.M. Plastics in the environment: Separating myth from reality. Massachusetts College of Liberal Arts, Green Living Seminar Series; North Adams, MA, January 30, 2020. Presentation. (Invited)
36. Reddy, C.M. Radović, J.R., Nelson, R.K., Frysinger, G., Hall, G., Sanders, R., Pawlowski, S. *Environmental forensics of oil leaking from the USS Arizona*. 53rd Annual Conference on Historical and Underwater Archaeology, Boston, MA, January 11, 2020. Presentation.

37. Reddy, C.M., Ward, C.P. *Navigating the science of plastics in uncertain seas*. MIT Water Summit, Massachusetts Institute of Technology, Cambridge, MA, November 21, 2019. Presentation and panelist (Invited).
38. Reddy, C.M. *Navigating policy, media, and the public: Oil spills, fisherman, and Anthony Bourdain*. Sea Education Association, Woods Hole, MA, October 2, 2019. Presentation (Invited).
39. Reddy, C.M. *Navigating policy, media, and the public: Oil spills, fisherman, and Anthony Bourdain*. Leading Voices in Public Health seminar series. Eastern Tennessee State University, Johnston City, Tennessee, September 19, 2019. Presentation (Invited).
40. Reddy, C.M., Valentine, D., Love, C., Kivenson, K., White, H., *Cyanobacteria production of alkanes: An intersection of basic and applied science*. Goldschmidt Conference, Barcelona, Spain, August 21, 2019. Presentation (Invited keynote).
41. Nelson, R.K., Reddy, C.M., Radović, J.R. *The second largest oil spill in the Gulf of Mexico (That you may or may not have heard of or remember); Exploring the complexity of Ixtoc I crude oil using GC×GC-HRT*. North American Chemical Residue Workshop (NACRW). Naples, FL. July 23, 2019. Presentation.
42. Nelson, R.K., Kivenson, V., Lemkau, K.L., Pizarro, O., Yoerger, D.R., Kaiser, C., Carmichael, C., Paul, B.G., Reddy, C.M., Valentine, D.L. *Analysis of ocean dump site samples for single class persistent organic pollutants (POPs) using comprehensive gas chromatography coupled with high resolution mass spectrometry*. North American Chemical Residue Workshop (NACRW). Naples, FL. July 22, 2109. Presentation.
43. Reddy, C.M., *Navigating policy, media, and the lay public*, Gordon Research Conference seminar, Holderness, NH, July 14, 2019. Presentation (Invited keynote).
44. Walsh A., Ward C., Armstrong C., Jackson J., Reddy C. *Rapid and complete photochemical oxidation of polystyrene in the ocean*. Ocean Outlook meeting, Bergen, Norway, May 8, 2019. Poster.
45. Ward, C.P., Sutherland, K., Wankel, S, Reddy, C. *Stable oxygen isotopes as a novel, sensitive tracer of hydrocarbon oxidation on the sunlit sea surface*, American Chemical Society meeting, Orlando, Florida, March 31, 2019. Presentation.
46. Reddy, C.M., Hahn, M. *Mother Nature's DDT and PCBs*. Ocean Health and human health workshop, Principality of Monaco, March 27, 2019. (Presentation) Invited.
47. Ward, C.P., Reddy, C.M. *Impacts of weathering on carbon and polymer degradation*, Eastman Chemical lecture series, Eastman Chemicals, Kingsport, TN. March 7, 2019. (Presentation). Invited.
48. Reddy, C.M. *Swimming outside of the Ivory Tower*. Guest lecture, Sea Education Association, Woods Hole, MA. February 13, 2019. (Oral). Invited.
49. Ward, C.P., Reddy, C.M. (2019) *Stable oxygen isotopes as a novel, sensitive tracer of petroleum hydrocarbon oxidation at the sunlit sea surface*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, New Orleans, LA. February 6, 2019. (Poster).