

CURRICULUM VITAE

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EDUCATION:

B.Sc. Chemistry, 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 Award

- 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 presented at the American Chemical Society national meeting (Timko, M., *et al.* 2013)
- 2011 Best paper award in *Marine Pollution Bulletin* (Moret *et al.* 2010)
- 2011 University of Rhode Island Distinguished Achievement Award
- 2011 Kavli Fellow
- 2010 Kavli Fellow
- 2009 Kavli Fellow; awarded by the US National Academy of Science; 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.
- 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 PhD 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; PhD defense (2010)

- Chair, Elizabeth Halliday; PhD defense (2012)
- Thesis committee for PhD 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)
- Mike 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 Armstrong, 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 PhD student (Co-advisor, Defended March 12, 2004)
- Helen White, MIT/WHOI PhD student (Co-advisor, Defended December 15, 2005)
- Desiree Plata, MIT/WHOI PhD student (Co-advisor, Defended April 24, 2009)
- Kristin Pangallo, MIT/WHOI PhD student (Advisor, Defended July 10, 2009)
- Karin Lemkau, MIT/WHOI PhD student (Advisor, Defended April 12, 2012)
- Anna Walsh, MIT/WHOI PhD student (Co-Advisor; 09/18-present)

- Gregory 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 Lemkau, Post-doctoral investigator (7/12 to 02/13)
- Christoph Aeppli, Post-doctoral investigator (6/11 to 11/13)
- Robert Swarouth, Post-doctoral investigator (04/14-7/30/15)
- Collin Ward, Post-doctoral investigator (08/16-05/18)
- Ulrich Hanke, Post-doctoral investigator (02/18-present)

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).
- Served on the Ph.D. committees outside of WHOI: Penny Higgins (U 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?* Feb. 16, 2001. University of Massachusetts, Dartmouth.
- 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).
- Organized 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 (Mar. 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, FA (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, March 14, 2013, 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, August 27, 2014, Washington, D.C.
- Briefed staffers from House Transportation and Infrastructure Committee, Coast Guard subcommittee, August 27, 2014, Washington, DC.
- 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 “Townhall” 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.
- Provided over 300 interviews to the print media, radio, and television on environmental science in the past several years.
- 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 Gulf of Maine.

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 Gulf of Maine.

R/V Cape Hatteras (August 2004; Chief Scientist) Collection of sediment cores and water samples in the Gulf of Maine.

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.

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.

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.

1. Ward, C.P., Sharpless, C. M., Valentine, D.L., Aeppli, C., Sutherland, K.M., Wankel, S.D., Reddy, C.M. (2019) Oxygen isotopes ($\delta^{18}\text{O}$) trace photochemical hydrocarbon oxidation at the sea surface. Submitted to *Geophysical Research Letters*.
2. McIntosh
3. +10, K., Sarver, J., Mell, K., Terrero, D.J., Ashby, C.R., Reddy, C., O'Neil, G., Tiwari, A. (2019). Oral and dermal toxicity of alkenones in Sprague Dawley rats. Submitted to *International Journal of Toxicology*.
4. Nelson, R.K. Gosselin, K.M., Hollander, D.J., Murawski, S.A., Gracia, A., Reddy, C.M., Radovic, J. (2019). Exploring the complexity of two iconic crude oil spills in the Gulf of Mexico (Ixtoc I and Deepwater Horizon) using comprehensive two-dimensional gas chromatography (GC×GC). Accepted in *Energy and Fuels*.
5. Kivenson, V., Lemkau, K.L., Pizarro, O.P., Yoerger, D.R., Kaiser, C., Nelson, R.K., Carmichael, C., Paul, B., Reddy, C.M., Valentine, D.L. (2019). Ocean dumping of containerized DDT waste was a sloppy process. *Environmental Science and Technology* **53**, 2971-2980.
6. Lemkau, K.L., Reddy, C.M., Carmichael, C.A., Aeppli, C., Swarthout, R.F., White, H.K. (2019). Hurricane *Isaac* brings more than oil ashore: Characteristics of beach deposits following the *Deepwater Horizon* spill. *PLoSone*. March 18, 2019. <https://doi.org/10.1371/journal.pone.0213464>.
7. Huynh, An, Abou-Dahech, M.S., Reddy, C.M., O'Neil, G.W., Chandler, M., Baki, G. (2019). Alkenones, a renewably sourced, biobased wax as an SPF booster for organic sunscreens. *Cosmetics*, 6, 11; doi:10.3390/cosmetics6010011.
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PEER-REVIEWED BOOK CHAPTERS

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2. Swarthout, R.F.[†], Arey, J.S., Gros, J., Nelson, R.K., Reddy, C.M., Valentine, D.L. (2016). Comprehensive two-dimensional gas chromatography to assess petroleum product weathering. In *Hydrocarbon and Lipid Microbiology Protocols, Volume 3: Chemical and Physical Analysis of Hydrocarbons and Petroleum*. pp. 129-149; McGenity, T.J., Timmis, K.N., and Nogales, B. (Eds.) Springer, Berlin.

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4. Eiserbeck, C. †, Nelson, R.K., Reddy, C.M., Grice, K. (2014) Advances in comprehensive two dimensional gas chromatography (GC×GC). In *Principles and Practice of Analytical Techniques in Geosciences*, Chapter 12; pp. 325-364; Grice, K. (Ed). Royal Society of Chemistry.
5. Reddy, C.M., Stegeman, J.J., and Hahn, M.E. (2008) Organic pollutants: Presence and effects in humans and marine animals. In *Oceans and Human Health*, Chapter 7; pp. 121-144; Walsh, P.J., Smith, S.L., Solo-Gabriele, H., Gerwick, W.H. (eds). Elsevier.
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PEER-REVIEWED PROCEEDINGS AND CONFERENCE PAPERS

1. Damavandi, H.G., Sen Gupta, A., Nelson, R.K., Reddy, C.M. Signal variability and data compression considerations for petroleum forensics in two-dimensional gas chromatography. OCEANS17 MTS/IEEE Aberdeen, Scotland.
2. Forsythe, J. C., De Santo, I., Martin, R., Tyndall, R., Arman, K., Pye, J., O'Donnell, M., Kenyon-Roberts, S., Nelson, R.K., Reddy, C.M., Pomerantz, A.E., Canas, J.A., Zuo, J.Y., Peters, K.E., Mullins, O.C. (2017) Reservoir implications of a spill-fill sequence of reservoir charge coupled with viscosity and asphaltene gradients from a combination of water washing and biodegradation. 2017 SPE Annual Technical Conference and Exhibition. San Antonio, Texas. SPE-187044.
3. Kukulya, A. L, Bellingham, J. G., Kaeli, J.W., Reddy, C.M., Godin, M.A., Conmy, R.A. (2016). Development of a propeller driven long range autonomous underwater vehicle (LRAUV) for under-ice mapping of oil spills and environmental hazards: An Arctic Domain Center of Awareness project (ADAC). Autonomous Underwater Vehicles (AUV), 2016 IEEE/OES. pp. 95 – 100.
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5. H. G. Damavandi, A. S. Gupta, C. Reddy, and R. Nelson, Oil-spill forensics using two-dimensional gas chromatography: Differentiating highly correlated petroleum sources using peak manifold clusters. In *Signals, Systems and Computers, 2015 49th Asilomar Conference on*. IEEE, 2015, pp. 1589–1592.
6. Aeppli, C. †, Nelson, R.K., Carmichael, C.A., Valentine, D.L., Reddy, C.M., (2014). Biotic and abiotic oil degradation after the *Deepwater Horizon* disaster leads to formation of recalcitrant oxygenated hydrocarbons: New insights using GC×GC. 2014 International Oil Spill Conference Proceedings. pp. 1087-1098.
7. McKenna, A.M., Williams, J.T., Putman, J.C., Aeppli, C. †, Reddy, C.M., Valentine, D.L., Lemkau, K.T., Kellerman, M.Y., Savory, J.T., Kaiser, N.K., Marshall, A.G., Rodgers, R.P. (2014). Biodegradation at the seafloor: Ultrahigh resolution FT-ICR mass spectral characterization of natural petroleum seeps. 2014 International Oil Spill Conference Proceedings. pp. 2083-2097.

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1. United States Patent. 7,805,979. Reddy, C.M. et al. High accuracy contamination estimation in hydrocarbon samples using GC×GC. (October 5, 2010).
2. United States Patent. 8,535,906 B2. Reddy, C.M. Biofuel manufacturing methods and systems incorporating radiocarbon analysis techniques. (September 17, 2013).
3. United States Patent. 8,545,791 B2. Plata, D.L. et al. Alkyne-assisted nanostructure growth (October 1, 2013).
4. United States Patent. 8,838393. Sen Gupta, A., Reddy, C.M., and Nelson, R.K. Systems and methods for topographic analysis. (September 16, 2014).
5. United States Patent. 9,394,174. Plata, D.L. et al. Alkyne-assisted nanostructure growth. (July 19, 2016).
6. United States Patent. 9,879,288. Lindell, S., Reddy, C.M., O’Neil, G.W. Use of marine algae for producing polymers. (January 30, 2018).
7. United States Patent. 9,970034. Reddy, C.M., O’Neil, G.W. Lindell, S. Use of marine algae for co-producing alkenones, alkenones derivatives, and co-products. (May 15, 2018).
8. United States Patent. 10,208321. Reddy, C.M., O’Neil, G.W. Use of marine algae for co-producing alkenones, alkenones derivatives, and co-products. (February 19, 2019).

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1. Irvine, G.V., D.H. Mann, M.G. Carls, L. Holland, C. Reddy, R.K. Nelson, and C. Aeppli. (2014). *Lingering oil on boulder-armored beaches in the Gulf of Alaska 23 years after the Exxon Valdez oil spill*, Exxon Valdez Oil Spill Restoration Project Final Report (Restoration Project 11100112), U.S. Geological Survey, Alaska Science Center, Anchorage, Alaska.
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>

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1. Reddy, C.M. *Acceptance response to AGU Ambassador Award*. EOS 2019 (Sheila need to find issue)
2. Reddy, C.M. Ward, C.P. Reassessing guidelines for oil spill cleanups: Sunlight plays a key role overlooked role in the fate of oil in the ocean. *Oceanus*, published online on April 25th, 2018.
3. Reddy, C.M., Arey, J.S. Did dispersants help responders breathe easier? *Oceanus*, published online on August 28th, 2017.
4. Reddy, C.M. To ban or not to ban plastic bags? That's not the best question. *Huffington Post*, published online on March 28th, 2017.
5. Reddy, C.M., Valentine, D.L. Scientists should be active but apolitical. *Huffington Post*, published online on January 2th, 2017.
6. 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 23th, 2016.
7. 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.
8. Reddy, C.M. (2016). Carbon cycle: A hump in ocean–air exchange (*News and Views*). *Nature Geoscience* **9**, 415–416.
9. Reddy, C.M., O'Neil, G.W. A faster way to better reactions. *Oceanus*, published online on May 13, 2016.
10. Reddy, C.M. (2016). Acceptance of the 2014 C.C. Patterson Award. *Geochim. Cosmochim. Acta*. **172**, 461–462.
11. Valentine, D.L., Reddy, C.M. (2015) Latent hydrocarbons from cyanobacteria (*Commentary*). *Proceedings of the Natural Academy of Sciences* **112**, 13434–13435.
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21. Reddy, C.M. In research pacts with industry, scientists guided by principle. (Letter to the editor). *Boston Globe*. June 1, 2014.

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32. Reddy, C.M. (2010) The joys of making a difference in science. *The Chronicle of Higher Education*, October 11th issue.
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35. Reddy, C.M. (2010) What if carbon dioxide were as black as oil? (Opinion), *CNN* website, posted May 28th.
36. Reddy, C.M. (2010) Local oil spills inform Gulf response. (My View), *Cape Cod Times*, May 13th edition.
37. Reddy, C.M. (2010) A different kind of battle in the Gulf. (Op-Ed), *Boston Globe*, May 6th edition.
38. Reddy, C.M. (2010) Earth Day spinning all year long. (My View), *Cape Cod Times*, April 22nd edition.
39. Yoder, J.A., Greene, C.H., Reddy, C.M. (2010) Green energy from the blue ocean. (Essay), *Journal of Environmental Investing*, 1, 80-83.
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42. 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.
43. Reddy, C.M. (2009) Class is in session on jury duty. (My View), *Cape Cod Times*, September 1st edition.

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45. Reddy, C.M. (2009) Let's not forget *Exxon Valdez*. (Op-Ed), *Boston Globe*, March 24th edition.
46. Reddy, C.M. (2009) Scientist citizens. (Editorial), *Science* 323, 1405.
47. Reddy, C.M. (2009) Science fiction? (Letter to the Editor), *New York Times*, February 11th edition.
48. Lamborg, C.; Reddy, C. (2009) Piven case reinforces mercury warnings. (Op-Ed), *Boston Globe*, January 26th edition.
49. Reddy, C.M. (2009) Obama's choice of scientists shows respect for science. (Op-Ed), *Providence Journal Bulletin*, January 7th edition.
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51. Reddy, C.M. (2008) Practical steps to a cleaner bay. (My View), *Cape Cod Times* August 5, 2008 edition.
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56. Reddy, C.M. (2008) Eco-engineering is premature. (Op-Ed), *Providence Journal Bulletin*, February 24th edition.
57. Reddy, C.M. (2007) All oil spills are not the same. (Op-Ed), *Providence Journal Bulletin*, December 18th edition.
58. Dessler A.; Reddy, C. (2007) Prof. Lindzen is wrong. *Providence Journal Bulletin*, December 17th edition.
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60. Reddy, C.M. (2007) Here's an idea: Use greed to go green. (Op-Ed), *Providence Journal Bulletin*, October 19th edition.
61. Reddy, C.M.; Hahn, M. (2007) Risks versus benefits of eating salmon. (Op-Ed), *Providence Journal Bulletin*, August 12th edition.
62. Reddy, C.M. (2007) State must act on lesson of Bouchard. (My view), *Cape Cod Times*, April 27th edition.
63. Reddy, C.M. (2007) Still toxic after all these years. *Oceanus*, 45 (3), 26-29.
64. Reddy, C.M. (2007) A closer look at biodiesel's potential. (Op-Ed), *Providence Journal Bulletin*, April 19th edition.
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66. Dessler A.; Reddy, C. (2007) Disregard inaccurate view on climate. (Guest view), *Newport Daily News*, March 16th edition.
67. Reddy, C.M. (2006) Fix the Earth before revisiting moon. (Op-Ed), *Providence Journal Bulletin*, December 14th edition.

68. Reddy, C.M. (2006) Science fantasy: TV is clueless about the real thing. (Op-Ed), *Seattle Post Intelligencer*, September 13th edition.
69. Reddy, C.M. (2005) Reducing the risk of fire safety. *Providence Journal Bulletin*, August 3rd edition.
70. Reddy, C.M. (2005) A sluggish response to a smoldering problem, *Environmental Forensics* 6, 103-104.
71. Reddy, C.M. (2004) Oil in our coastal backyard. *Oceanus* 43(1), 50-55.
72. Reddy, C.M., Eglinton, T.I., Hounshell, A., White, H.K., Xu, L., Gaines, R.B., and Frysinger, 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.
73. Reddy, C.M. (2002) Book review of *Chlorine in the Environment* by Stringer and Johnson for *Environmental Science and Pollution Research* 9, 356-357.

PRESENTATIONS/POSTERS (presenter is underlined):

(a) At WHOI

1. Reddy, C.M. *Swimming outside of the Ivory Tower*. WHOI Academic Programs Office. August 29, 2018. Woods Hole (Presentation). Invited.
2. Reddy, C.M. *Plastics in the marine environmental: Myth vs Reality*. American Chemical Society visitors. August 23, 2018. Woods Hole (Presentation). Invited.
3. 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 9th, 2018. Woods Hole (Presentation). Invited.
4. Reddy, C.M. *An elevator speech is not going to bring you to the penthouse*. Department of Marine Chemistry and Geochemistry seminar. June 9th, 2018. Woods Hole (Presentation). Invited.
5. Reddy, C.M. *Plastics in the marine environmental: Myth vs Reality*. Davidson College alumni. October 6, 2017. Woods Hole (Presentation). Invited.
6. Reddy, C.M. *Academia and industry: A path to overlapping interests*. Visitors from Eastman. November 7, 2016. Woods Hole (Presentation).
7. Reddy, C.M. *How to avoid a culture clash: Academy vs everybody else during the Deepwater Horizon*. Industry Technical Advisory Committee for Oil Spill Response. October 26, 2015. WHOI, Woods Hole (Presentation). Invited.
8. Reddy, C.M. *Cogs in the machinery of oil exploration and spills: Robots and academia*. Center for Marine Robotics Annual Meeting, December 3, 2015. WHOI, Woods Hole (presentation).
9. Reddy, C.M. *An argument for more research into oil spill response*. Visitors from Shell (regulatory policy), July 31, 2015. WHOI, Woods Hole, MA (presentation).
10. Reddy, C.M. *Celebrating the diversity of environmental weathering following the Deepwater Horizon disaster*. Knight Science Journalism Fellows visit, October 2, 2014. WHOI, Woods Hole, MA (presentation).
11. Reddy, C.M. *Unprecedented weathering of the Deepwater Horizon oil spill*. Woods Hole Tox Roundtable, July 25, 2014. WHOI, Woods Hole, MA (presentation).
12. Reddy, C.M. *Oil spills and art*. Falmouth High School ceramics class, December 17, 2013. WHOI, Woods Hole, MA (presentation).
13. Reddy, C.M. *Recent sheens at the Deepwater Horizon site*. Department of Marine Chemistry and Geochemistry seminar series, February 12, 2013. WHOI, Woods Hole, MA (presentation).

14. Reddy, C.M. *How did academia do during the Deepwater Horizon disaster?* Columbia School of Journalism visitors, April 27, 2012. WHOI, Woods Hole, MA (Presentation).
15. Reddy, C.M. *Deepwater Horizon oil spill: From the pipe to the beaches.* Woods Hole Tox Roundtable. September 2, 2011. WHOI, Woods Hole, MA. (Presentation). Invited.
16. Reddy, C.M. *A few thoughts on the Deepwater Horizon oil spill.* Ocean carbon workshop. July 18, 2010. WHOI, Woods Hole, MA. (Presentation). Invited
17. Reddy, C.M. *Research on the Deepwater Horizon.* Naval Staff College Visit. May 27, 2011. WHOI, Woods Hole, MA. (Presentation).
18. Reddy, C.M. *Where did the oil go?* Public Forum: WHOI in the Gulf of Mexico July 29, 2010. WHOI, Woods Hole, MA. (Presentation).
19. Reddy, C.M. *Oil spills.* Naval Staff College Visit to WHOI. May 21, 2010. WHOI, Woods Hole, MA. (Presentation)
20. Reddy, C.M. *The Gulf of Mexico oil spill: Background and the media response.* Columbia School of Journalism visitors, April 30, 2010. WHOI, Woods Hole, MA (Presentation).
21. Reddy, C.M. *Marine-based biofuels: hype or hope?* New England Regional Journalist Workshop, April, 2 2010. WHOI, Woods Hole, MA (Presentation).
22. Reddy, C.M. *Marine-based biofuels: hype or hope?* Esty Environmental Group, March 30, 2010. WHOI, Woods Hole, MA (Presentation).
23. Reddy, C.M. *Marine-based biofuels: hype or hope?* Knight Science Journalism Fellows visit, October 9, 2009. WHOI, Woods Hole, MA (Presentation).
24. Reddy, C.M. *The discovery of extinct asphalt volcanoes on the southern California margin,* WHOI Exhibit Center Seminar Series, August 25, 2009. WHOI, Woods Hole, MA (presentation)
25. Reddy, C.M. and Lippsett, L. *How to tell people what you did this summer: Communicating science to non-scientists.* Summer Student Fellow program, June 29, 2009. Woods Hole, MA (Presentation).
26. Reddy, C.M. *Natural oil spills.* Visiting Chinese Maritime Students on exchange at Massachusetts Maritime Academy, May 29, 2009. WHOI, Woods Hole, MA (Presentation).
27. Reddy, C.M. *The future of fuels in naval vessels.* Naval Staff College Visit to WHOI. May 27, 2009. WHOI, Woods Hole, MA. (Presentation).
28. Reddy, C.M. *Plastics in the environment.* Massachusetts Science Teachers workshop, May 8, 2009. WHOI, Woods Hole, MA (Presentation).
29. Reddy, C.M. *Natural oil spills.* Columbia School of Journalism visitors, May 1, 2009. WHOI, Woods Hole, MA (Presentation).
30. Reddy, C.M. *The Santa Barbara oil seeps: An oil spill everyday.* Knight Science Journalism Fellows visit, October 10, 2008. WHOI, Woods Hole, MA (Presentation).
31. Reddy, C.M. *A new look at an old oil spill.* Naval Command College Visit. September, 19, 2009. WHOI, Woods Hole, MA (Presentation).
32. Reddy, C.M. *Coal, lead, Chernobyl and China: The chemical legacy of the Industrial Revolution* WHOI Ocean Science Journalism Fellowship Program. September 7, 2008. WHOI, Woods Hole, MA (Presentation).
33. Reddy, C.M. *Petroleum and alternative fuels.* Naval Staff College Visit to WHOI. May 23, 2008. WHOI, Woods Hole, MA. (Presentation).
34. Reddy, C.M. *Oil spills in the ocean.* WHOI Trustee's meeting. May 16, 2008. WHOI, Woods Hole, MA. (Presentation)

35. Reddy, C.M. *The Santa Barbara oil seeps*. Visitors from Saint Margaret School, Buzzards Bay, MA. May 7, 2008. WHOI, Woods Hole, MA. (Presentation).
36. Reddy, C.M. *Natural oil spills in the sea*. WHOI Annual Volunteer Luncheon. September 17, 2007. WHOI, Woods Hole, MA. (Presentation).
37. Reddy, C.M. *Oil Spills, Natural and Unnatural*. WHOI Ocean Science Journalism Fellowship Program. September 14, 2007. WHOI, Woods Hole, MA (Presentation).
38. Reddy, C.M. *Petroleum in marine environment*. Naval Command College Visit to WHOI. August 31, 2007. WHOI, Woods Hole, MA. (Presentation).
39. Reddy, C.M. *Communicating science*. WHOI Summer Student Fellow Lecture Series. July 23, 2007. WHOI, Woods Hole, MA. (Presentation).
40. Reddy, C.M. *Petroleum in marine environment*. Naval Staff College Visit to WHOI. May 4, 2007. WHOI, Woods Hole, MA. (Presentation).
41. Reddy, C.M. *What's the deal with biodiesel? Environmental friend or foe?* Dept. of Marine Chemistry and Geochemistry Seminar Series. February 20, 2007. WHOI, Woods Hole, MA. (Presentation).
42. Reddy, C.M. *Investigating the fate of oil in the marine environment*. Presentation for visitors representing King Abdullah University of Science and Technology. January 25, 2007. WHOI, MA. (Presentation).
43. Reddy, C.M. *Radiocarbon and applications to alternative fuels*. 18th National Ocean Sciences AMS Policy Board Meeting, November 2, 2006. WHOI, Woods Hole, MA (Presentation).
44. Reddy, C.M. *Coal, Lead, and Chernobyl: The Chemical legacy of the Industrial Revolution in New England* Knight Science Journalism Fellows visit, October 12, 2006. WHOI, Woods Hole, MA (Presentation).
45. Reddy, C.M. *Novel views on the fate of petroleum hydrocarbons and alternative fuels in the marine environment*. ONR Site visit, September 25, 2006. WHOI, Woods Hole, MA (Presentation).
46. Reddy, C.M. *Oil spills in the marine environment* Naval Command College Visit to WHOI. August 25, 2006. WHOI, Woods Hole, MA. (Presentation).
47. Reddy, C.M. *Coal, lead, Chernobyl and China: The chemical legacy of the Industrial Revolution* WHOI Summer Student Fellow Lecture Series. July 31, 2006. WHOI, Woods Hole, MA. (Presentation).
48. Reddy, C.M. *Advances in chromatography and their application to understanding subsurface processes acting on petroleum* Schlumberger Doll Research Visit. March 7, 2006. WHOI, Woods Hole, MA. (Presentation).
49. Reddy, C.M. *Sources of halogenated organic compounds in the marine environment: Tales from the last voyage of the Charles W. Morgan* Dept. of Marine Chemistry and Geochemistry Seminar Series. December 6, 2005. WHOI, Woods Hole, MA. (Presentation).
50. Reddy, C.M. *Natural oil spills* FIRST LEGO League (FLL) Visit. November 15, 2005. WHOI, Woods Hole, MA. (Presentation).
51. Reddy, C.M. *Buzzards Bay oil spills; Using ¹⁴C to study the biodegradation of petroleum hydrocarbons*. Sippican Philosophical Society (hosted by Karl Von Reden at NOSAMS). November 14, 2005. WHOI, Woods Hole, MA. (Presentation).
52. Reddy, C.M. *A quantitative model of water-washing and evaporation after the Bouchard 120 oil spill*. Special Symposium on Coastal Organic Biogeochemistry held in honor of John Farrington. November 8, 2005. WHOI, Woods Hole, MA. (Presentation).

(b) Elsewhere

1. 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.
2. Reddy, C.M. *Swimming outside of the Ivory Tower*. Guest lecture, Sea Education Association, Woods Hole, MA. February 13, 2019. (Oral). Invited.
3. C.P., Ward, 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).
4. Reddy, C.M., Nelson, R.K. The usage of comprehensive two-dimensional gas chromatography (GC×GC) following the *Deepwater Horizon* disaster. Gulf of Mexico Oil Spill & Ecosystem Science Conference, New Orleans, LA. February 5, 2019. (Presentation). Invited.
5. Hanke, U.M., Galy, V., Eglinton, T.I., McNichol, A.P., Donnelly, J., Reddy, C.M. *Addressing the conundrum of sedimentary terrigenous organic matter burial via isotope mass balance calculations*. AGU Fall Meeting, Washington DC. December 13, 2018. (Oral).
6. Reddy, C.M., Nelson, R.K., Radovic, J. Tapping the Vast Resources of New Chromatographic Realms: *Using the USS Arizona as an example*. Gulf Coast Conference, Galveston, TX. October 16, 2019. (Oral). Invited. Keynote.
7. Nelson, R.K., Reddy, C.M. *Comprehensive Two-dimensional Gas Chromatographic (GC×GC) Petroleum Fingerprinting Utilizing Traditional and Non-traditional Biomarkers and High Resolution Time of Flight Mass Spectrometry Petroleum Spectral Analysis Tools*. Gulf Coast Conference, Galveston, TX. October 16, 2019. (Oral).
8. Elwaraky, M., Slater, G.F., Nelson, R.K., Reddy, C.M., Warren, L. *Assessment of the identity and biodegradation potential of hydrocarbon in an oil sands pit lake*. The Geological Society of America 130th Annual Meeting. Indianapolis, IN 46225. November 7, 2018. (Presentation).
9. Reddy, C.M. *Marine Algae: From Climate change to jet fuel and lipstick*. Bucatino Restaurant & Wine Bar, Falmouth, MA. October 10, 2018. (Oral). Invited
10. Reddy, C.M. *From the size of a watermelon to a room: Mass spectrometers that solve environmental questions*. Ions@WORK Mass Spectrometry Symposium. Texas A&M University, College Station, TX. October, 5, 2018. (Oral). Invited.
11. Hanke, U.M., Eglinton, T.I., Galy, V., Reddy, C.M. *Perylene imparts an estimate for the age of organic matter in sediments*. Goldschmidt Conference, Boston, MA. August 15, 2018. (Oral).
12. Love, C., Gosselin, K., Reddy, C., Arrington, E., Van Mooy, B., Nelson, R., Valentine, D. *Low-light marine cyanobacteria drive hydrocarbons flux in oligotrophic ocean*. IsoEcol 2018, 11th International Conference on the Applications of Stable Isotope Techniques to Ecological Studies, Viña Del Mar, Chile. July 31, 2018. (Poster).
13. Nelson, R.F., Gosselin, K., Ward, C., Reddy, C. *Environmental forensic analysis of crude and refined petroleum products utilizing GC×GC-FID, GC×GC-TOF-MS, and GC×GC-HRT-MS*. Forensic Environmental Chemistry session, National Environmental Monitoring Conference (NEMC), New Orleans, LA. August 7, 2018. (Oral).
14. Hanke, U.M., Nelson, R.K., Glaser, B., Reddy, C.M. *Molecular mapping of oxidatively-degraded mixtures of combustion condensates and residues with GC×GC HRT-MS*. Gordon Research Conference on Organic Geochemistry, Holderness, NH. July 30, 2018. (Poster).

15. Nelson, R.K., Reddy, C.M. *Application of GC×GC-HRT-MS petroleomics based spectral analysis of two iconic oil spills in the Gulf of Mexico*. American Society for Mass Spectrometry 2018 Annual Meeting. San Diego, CA. June 4, 2018. (Presentation). Invited.
16. Nelson, R.K., Radovič, J., Reddy, C.M. *Application of GC×GC-HRT-MS Petroleomics Based Spectral Analysis of Two Iconic Oil Spills from the Gulf of Mexico for Environmental Forensics*. ASMS 2018. San Diego, CA. June 4, 2018. (Poster).
17. Nelson, R.K., Reddy, C.M. *Environmental forensics work at the Woods Hole Oceanographic Institution utilizing GC×GC-FID, GC×GC-TOF, and GC×GC-HRT*. LECO Corporation. Saint Joseph, MI. July 24, 2018. (Presentation). Invited.
18. Nelson, R.K., Reddy, C.M. *Environmental forensic analysis of crude oils from the Gulf of Mexico utilizing GC×GC-FID, GC×GC-TOF-MS, and GC×GC-HRT-MS*. International Society for Capillary Chromatography 2018/15th GC×GC Symposium. Riva del Garda, Italy. May 14, 2018. (Presentation)
19. Armstrong, C.J., Ward, C.P., Conmy, R. N., French-McCay, D. P., Reddy, C.M. *Characterizing how sunlight impacts the efficacy of current oil spill response tools*. American Chemical Society National Meeting, New Orleans, LA. March 21, 2018. (Poster)
20. Sharpless, C.M, Ward, C.P., Reddy, C.M *Apparent Quantum Yields of Singlet Oxygen and Photochemical Oxygen Consumption for Crude Oils*. American Chemical Society National Meeting, New Orleans, LA. March 21, 2018. (Poster)
21. Reddy, C.M., Ward, C.P. *The production of spillphatenes following the 2010 Deepwater Horizon disaster*. American Chemical Society National Meeting, New Orleans, LA. March 21, 2018. (Presentation)
22. Ward, C.P., Reddy C.M., Cory, R.M. *Evaluating the magnitude of partial photo-oxidation of organic carbon in sunlit surface waters*. American Chemical Society National Meeting, New Orleans, LA. March 18, 2018. (Presentation)
23. Reddy, C.M., Nelson, R.K., Valentine, D.L. *Archaean Biomarkers: Adding These Compounds to Environmental Forensics with GCxGC*. PITTCON Conference & Expo. Orlando, FL. March 1, 2018. (Presentation)
24. Ward, C. P., Armstrong, C. J., Conmy, R. N., French-McCay, D. P., Reddy, C. M. *Photochemical oxidation reduces the efficacy of aerial dispersants applied in response to oil spills*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, New Orleans, LA. February 7, 2018. (Presentation)
25. Ward, C.P., Sharpless, C.M., Aeppli, C., French-McCay, D.P., Valentine, D.L., Rodgers, R. P., Gosselin, K.M., Nelson, R.K., & Reddy, C.M. *Partial photochemical oxidation was a dominant fate of Deepwater Horizon surface oil*. Gulf of Mexico Oil Spill & Ecosystem Science Conference. New Orleans, LA. February 7, 2018. (Presentation)
26. Reddy, C.M., Camilli, R. *Revisiting the science and law of the Deepwater Horizon disaster*. Sea Education Association, Woods Hole, MA. October 27, 2017. (Presentation). Invited.
27. Reddy, C.M. *Degradation and fate of oil in Arctic waters (ice-infested waters)*. Arctic Domain Awareness center's Arctic-related Incidents of National Significance (Arctic IoNS) Oil-spill focused workshop, entitled, "Coping with the unthinkable...an Arctic maritime oil spill." University of Anchorage, Alaska. October 24, 2017. (Plenary Presentation). Invited
28. Reeves E., Ono, S., Sylva S., Seewald J., Green W., Reddy C., Nelson R. *Organosulfur Radical Acceleration and D/H Isotope Exchange Effects during Petroleum Decomposition*. Goldschmidt Conference, Paris, France. August 18, 2017. (Presentation).

29. Reddy C., Gosselin K., Nelson R., Sylva S., Aeppli C., Sharpless, C., Valentine D. *A Biogenic Input of Heptadecane in Surface Waters Prior to and during the Anthropocene*. Goldschmidt Conference, Paris, France. August 18, 2017. (Presentation).
30. Lemkau K., Aeppli, C., Carmichael, C., Reddy, C., Swarthout, R., White, H. *Lessons Learned from Hurricane Isaac, 2012: False Positives and Weathering of Oil from the Deepwater Horizon spill*. Goldschmidt Conference, Paris, France. August 18, 2017. (Presentation).
31. Reddy, C.M. *Chemistry of surface usage of dispersants from the Deepwater Horizon*. National Academy of Science's Evaluation of the Use of Chemical Dispersants in Oil Spill Response. Washington, DC, MA, August 7, 2017. (Presentation). Invited.
32. Reddy, C.M. *The Gulf of Mexico Research Initiative's hydrocarbon intercomparison experiment*. International Oil Spill Conference, Long Beach, CA., May 17, 2017. (Presentation). Invited.
33. Ward, C.P., and Reddy, C.M. *Characterizing the role of photochemical processes in the oxidation of hydrocarbons released during the Deepwater Horizon disaster*. American Chemical Society, San Francisco, CA. April 5, 2017. (Presentation).
34. Gros, J., Socolofsky, S.A., Dissanayake, A.L., Jun, I., Zhao, L., Boufadel, M.C., Reddy, C.M., Arey, J.S. *Detailed modeling of the dynamic behavior of petroleum in the sea during the Deepwater Horizon accident*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, New Orleans, LA. February 9, 2017. (Presentation).
35. Overton, E.B., Reddy, C.M. *Understanding what happens to the composition of crude oils spilled in marine environments*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, New Orleans, LA. February 9, 2017. (Presentation).
36. Ward, C.P., and Reddy, C.M. *Assessing the contribution of photochemical processes to the formation of oxidized hydrocarbons following the Deepwater Horizon oil spill: Insights from preliminary laboratory experiments*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, New Orleans, LA. February 8, 2017. (Presentation).
37. Reddy, C.M. *Am I wrong or should more work be done on the formation of oxygenated hydrocarbons?* Gulf of Mexico Oil Spill & Ecosystem Science Conference, New Orleans. February 8, 2017. (Presentation). Invited. (Via pre-taped narration)
38. Gros, J., Reddy, C. M., Socolofsky, S. A., Arey, J. S. *Using estimates of environmental partitioning properties mapped on GC×GC chromatograms to predict the properties of petroleum fluids and the environmental behavior of petroleum compounds*. Eighth multidimensional chromatography workshop, January 6, 2017. Toronto, Canada. (Presentation).
39. Green, H.S., Fuller, S.A., Meyer, A.W., Joyce, P., Aeppli, C., Nelson, R.K., Gosselin, K.M., Swarthout, R.F., White, H.K., Valentine, D.L., Reddy, C.M. *Tar balls collected in the North Atlantic over the past two decades vary substantially*. American Geophysical Union Fall Meeting, December 12, 2016. San Francisco, CA. (Poster).
40. Nelson, R.K., Reddy C.M. *Petroleum analysis and fingerprinting using comprehensive two-dimensional gas chromatography (GC×GC)*. 19th Australian Organic Geochemistry Conference December 4-7, 2016. Fremantle, Western Australia. (Poster).
41. Bellingham, J. and Reddy, C.M. *Under ice mapping of oil spills and environmental hazards with a long-range AUV*. Annual meeting for the Arctic Domain Awareness Center (ADAC), Alexandria, VA, November 10, 2016. (Presentation).
42. Reddy, C.M. *How to avoid a culture clash*. COME ABOARD! Chemical Oceanography Meeting: A Bottom-up Approach to Research Directions, University of Hawaii, Honolulu, HI, October 14, 2016. (Presentation). Invited.

43. Reddy, C.M. *A Big Bang in oil spill science*. National High Field Magnetic Laboratory site visit, Florida State University, Tallahassee, FL. August 30, 2016. (Presentation). Invited.
44. Gros, J., Socolofsky, S.A., Dissanayake, A.L., Jun, I., Boufadel, M.C., Zhao, L., Nelson, R.K., Reddy, C.M., Arey, J.S. *Simulating the aqueous dissolution of petroleum emitted into the Gulf of Mexico during the 2010 Deepwater Horizon disaster*, Environmental Sciences: Water Gordon Research Conference, Holderness, NH. June 27, 2016. (Poster).
45. O'Neil, G.W., Knothe, G., Reddy, C. *Unique lipids from a common algae: Investigating the biofuel potential of commercial Isochrysis*. Annual meeting of the American Oil Chemists Society, Salt Lake City, Utah, May 3, 2016. (Presentation).
46. Hanke, U. M., Schmidt, M. W. I., McIntyre, C. P., Reddy, C. M., Wacker, L., Eglinton, T. I. *Compound specific radiocarbon analyses to apportion sources of combustion products in sedimentary pyrogenic carbon deposits*. In *EGU General Assembly 2016*, Copernicus Publications: Vienna, 2016; Vol. 18. April 22, 2016. (Poster).
47. Reddy, C.M. *Mapping the shape and composition of subsurface plumes in 2010*. SEA GRANT oil spill seminar on the DWH oil spill; Where did it go? NOAA's Gulf of Mexico Disaster Response Center, Mobile, Alabama. April 14, 2016. (Presentation). Invited.
48. Aluwihare, L.I., Shaul, N., Pedler, B., Ho, E., Borgen, M., Kumar, A., Fenical, W. Franks, D., Reddy, C., Hahn, M. *Marine natural products and human health: Exploring the worldwide distribution and biological activity of halogenated methyl bipyrrroles*. Oceans and Human Health Grantee Meeting, Research Triangle Park, NC. April 13-14, 2016. (Poster).
49. Reddy, C.M. *Science and policy of a giant oil spill*. Department of Geological Sciences, University of Delaware, Newark, DE. March 17, 2016. (Presentation). Invited
50. Sharpless, C., Stewart, O., Walters, M., Swarthout, R., Aeppli, C., Reddy, C. *Comparison of photooxidation rates and patterns in glass- and water-based oil slick experiments with daily weathering observed in the Gulf of Mexico*. American Chemical Society meeting, San Diego, CA. March 16, 2016. (Presentation).
51. Arey, J.S., Gros, J., Socolofsky, S., Dissanayake, A., Jun, I., Nelson, R., Reddy, C. *Computer simulation of the buoyant ascent and liquid-gas-water repartitioning of petroleum hydrocarbons in the deep water column during the Deepwater Horizon disaster*. American Chemical Society meeting, San Diego, CA. March 15, 2016. (Presentation). Best presentation award from the Division of Environmental Chemistry.
52. Sharpless, C.M., Stewart, O.C., Walters, M., Swarthout, R.F., Aeppli, C., Valentine, D.L., Reddy, C. *Comparison of experimental photooxidation rates and patterns in glass- and water-based oil slicks with daily weathering observed in the Gulf of Mexico*. 2016 Ocean Sciences Meeting, New Orleans, LA. February 26, 2016. (Poster).
53. Aeppli, C., Prince, R., Radovic, J., Reddy, C. *Prevalence of oxygenated hydrocarbon as oil degradation products after oil spills*. 2016 Ocean Sciences Meeting, New Orleans, LA. February 26, 2016. (Poster).
54. Swarthout, R.F., Reddy, C., Nelson, R., Hamilton, S., Aeppli, C., Valentine, D., Fundaun, S., Oliveira, A. *The other major 2010 Oil Spill: Oil weathering after the Kalamazoo River Dilbit Spill*. 2016 Ocean Sciences Meeting, New Orleans, LA. February 26, 2016. (Poster).
55. Bostic, J., Ziolkowski, L., Reddy, C., Aeppli, C., Swarthout, R.F. *How bioavailable is highly weathered Deepwater Horizon oil?* 2016 Ocean Sciences Meeting, New Orleans, LA. February 26, 2016. (Poster).
56. Gros, J., Reddy, C.M., Nelson, R.K., Socolofsky, S.A., Arey, J.S. *Thermodynamic modeling of gas-liquid-water partitioning and fluid properties for Macondo reservoir fluid at deep-water*

- conditions*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Tampa, FL. February 3, 2016. (Presentation).
57. Rodgers, R.P., Reddy, C.M., Aeppli, C.A. *The state-of-the-art unraveling of the biotic and abiotic chemical evolution of Macondo Oil: 2010-2018*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Tampa, FL. February 1, 2016. (Poster).
 58. Reddy, C.M. *Lost signals from the Deepwater Horizon: The missed and misunderstood*. EAWAG, Zurich, Switzerland, January 11, 2016. (Presentation). Invited.
 59. Reddy, C.M. *Lost signals from the Deepwater Horizon: The missed and misunderstood*. ETH, Zurich, Switzerland, January 11, 2016. (Presentation). Invited.
 60. Reddy, C.M. *What can you bring to the table during a hazard event?: Its more than exchanging business cards before a crisis*. American Geophysical Union meeting, December 17, 2015, San Francisco, CA. Presentation. (Invited). (Presented in a pre-tape).
 61. Reddy, C.M. *Lost signals from the Deepwater Horizon: The missed and misunderstood*. Yale Langer Graduate Student Symposium, Yale University, New Haven, CT, December 11, 2015. (Presentation). Invited.
 62. Reddy, C.M. *Chemistry of oil spill response*. Centre for Global Change Science seminar, University of Toronto, December 1, 2015. (Presentation). Invited.
 63. Reddy, C.M. *Letting history repeat itself: Brominated flame retardants in consumer goods*. 20th Annual Richard K. Gehrenbeck Memorial Lecture, Rhode Island College, Providence, RI, November 24, 2015. (Presentation). Invited.
 64. Reddy, C.M. *How academia can be involved in oil spill response*. Area Committee Meeting (for first responders to oil spills). Massachusetts Maritime Academy, Bourne, MA. October 21, 2015. (Presentation). Invited.
 65. Reddy, C.M. *Alkenones from Earth history to biofuels: Or treat your interns like colleagues*. Marine Science Program seminar series. University of South Carolina, Columbia, SC. September 18, 2015. (Presentation). Invited.
 66. Reddy, C.M. *Four overlooked aspects of the Deepwater Horizon disaster*. NOAA Office of Response and Restoration salt marsh workshop, Waquoit Bay, Falmouth, MA, September 3, 2015. (Presentation). Invited.
 67. Tcaciuc, A.P., Nelson, R., Reddy, C., Gschwend, P. *Application of GC×GC and passive dosing for characterizing mixture toxicity of hydrophobic organic chemicals (HOCs)*. American Chemical Society meeting, Boston, MA. August 19, 2015. (Presentation).
 68. Reddy, C.M. *Alkenones from Earth history to biofuels*. 25th Anniversary Goldschmidt Conference, August 17, 2015. (Presentation). Invited. *Acceptance talk for the 2014 C.C. Patterson Award*.
 69. Reddy, C.M. *Chemistry of oil spill response*. National Academy of Science's Board on Chemical Sciences and Technology meeting, Woods Hole, MA, August 14, 2015. (Presentation). Invited.
 70. Marshall, A.G., McKenna, A.M., Corilo, Y.E., Lobodin, V.V., Krajewski, L.C., Aeppli, C., Reddy, C.M., Nelson R.K., Rodgers, R.P. *Anatomy of an oil spill and its subsequent chemical evolution by ultrahigh-resolution Fourier Transform Ion Cyclotron Resonance Mass Spectrometry*. EnviroAnalysis 2015, Banff, Alberta, Canada, July 13, 2015. (Presentation).
 71. Krajewski, L., Chen, H., Rodgers, R.P., Reddy, C.M., Lemkau, K., Aeppli, C., Swarthout, R.F., McKenna, A.M. *Compositional comparison of weathering trends for four different oil spills determined by ultrahigh resolution FT-ICR mass spectrometry*. American Society for Mass Spectrometry national meeting, St. Louis, MO, June 4, 2015. (Presentation).

72. Socolofsky, S.A., Dissanayake, A.L., Jun, I., Gros, J., Arey, J.S., Reddy, C.M. *Texas A&M oil spill calculator (TAMOC): Modeling suite for subsea spills*. 38th AMOP Technical Seminar on Environmental Contamination and Response, Vancouver, BC, Canada, June 3, 2015. (Presentation).
73. Koolen, H., Swarthout, R., Nelson, R., Chen, H., Krajewski, L., Aeppli, C., McKenna, A., Rodgers, R.P., Reddy, C.M. *Unprecedented inventory of coal tar compounds by an integrative approach comprising GCxGC-TOF MS and APPI(+)-FT-ICR MS*. American Society for Mass Spectrometry national meeting, St. Louis, MO, June 1, 2015. (Poster).
74. Stewart, O., Sharpless, C., Reddy, C., Swarthout, R., Aeppli, C. *Effect of photochemical weathering on the composition and spectroscopic properties of crude oil*. American Chemical Society, Denver, CO, March 25, 2015. (Poster).
75. Drollette, B.D., Schreglmann, K., Warner, N.R., Darrah, T.H., O'Connor, M.P., Karatum, O., Nelson, R.K., Elsner, M., Reddy, C.M., Vengosh, A., Jaskson, R.B., Plata, D.L. (2015). *Trace levels of diesel range organic compounds in in shell groundwater wells in northeastern Pennsylvania elevated near Marcellus gas wells*. American Chemical Society, Denver, CO, March 23, 2015. (Presentation).
76. McKenna, A., Putman, J., Rowland, S., Valentine, D., Kellermann, M., Aeppli, C., Reddy, C.M., Rodgers, R. *Chromatographic fractionation and structural diversity of petroporphyrins isolated from natural petroleum seeps by FT-ICR MS*. American Chemical Society, Denver, CO, March 22, 2015. (Presentation).
77. Reddy, C.M., Nelson, R., Swarthout, R., Koolen, H. *Unprecedented insights into the chemical complexity of coal tar from comprehensive two-dimensional gas chromatography*. PittCon, New Orleans, LA, March 11, 2015. (Presentation). Invited.
78. Reddy, C.M. *What can we learn from "fuel oil" spills for understanding the fate of Dilbit?* National Academy of Sciences, "Effects of Diluted Bitumen on the Environment: A Comparative Study." workshop. Washington, DC, March 9, 2015, (Presentation). Invited.
79. Krajewski, L., Chen, H., Corilo, Y.E., Rodgers, R.P., Reddy, C.M., Lemkau, K., Aeppli, C., Swarthout, R.F., McKenna, A.M. *Compositional comparison of weathering trends for four different spills reveal the unique chemical signature of Deepwater Horizon contamination*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Houston, TX, February 17, 2015. (Presentation).
80. McKenna, A.M., Chen, H., Krajewski, L., Corilo, Y.E., Aeppli, C., Reynolds, J., Putman, J.C., Rodgers, R.P., Swarthout, R.F., Reddy, C.M., Kellerman, M.Y., Valentine, D.L. *Molecular-level identification of metal-containing compounds from oil contamination released from natural seeps and anthropogenic spill*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Houston, TX, February 17, 2015. (Presentation).
81. Reddy, C.M., Nelson, R., Koolen, H., Swarthout, R., Aeppli, C., Sharpless, C., Stewart, O., Radovic, J., Valentine, D., Hall, G., O'Neil, G., McKenna, A., Chen, H., Krajewski, L., Rodgers, R. *The oxidation of Macondo well oil: An update and vision*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Houston, TX, February 17, 2015. (Presentation). Invited.
82. Gros, J., Reddy, C.M., Socolofsky, S.A., Arey, J.S. C.M. *Validating formulas for the prediction of ascent speed and mass transfer coefficient for liquid oil droplets and gas bubbles under pressure*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Houston, TX, February 17, 2015. (Poster).
83. Gros, J., Nelson, R.K., Reddy, C.M., Socolofsky, S.A., Arey, J.S. *Predicting the state and properties of Deepwater Horizon oil under pressure using the Peng-Robinson equation of state*.

- Gulf of Mexico Oil Spill & Ecosystem Science Conference, Houston, TX, February 18, 2015. (Poster).
84. Nelson, R.K., Swarthout, R., Koolen, H., Reddy, C.M., *GCxGC comparison of Deepwater Horizon crude and Kirby intermediate fuel oil (IFO)*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Houston, TX, February 18, 2015. (Poster).
 85. Reddy, C.M. *Exploring Oil Spills on a Molecular Basis*, National Ocean Science Bowl Professional Development Webinar, (broadcasted from Woods Hole, MA), January 13, 2015. (Presentation). Invited.
 86. Lemkau, K.L., Kivenson, V. B., Carmichael, C.A., Bagby, S.C., Wentz, K., Baxter, A., Paul, B.G., Aeppli C., Pizarro, O., Yoerger, D.R., Reddy, C.M., Valentine, D.L. *Discovery and biogeochemical investigation of chlorinated industrial waste in the deep ocean*. American Geophysical Union Fall Meeting, December 16, 2014. San Francisco, CA. (poster)
 87. Reddy, C.M. *An intersection of interests: Academia during the Deepwater Horizon*. Oil Spill Response: 25 years after the *Exxon Valdez* and in the wake of the *Deepwater Horizon*, Durham, NH, October 29, 2014. (Presentation). Invited.
 88. Reddy, C.M., Aeppli, C. *Unprecedented weathering of petroleum hydrocarbons following the Deepwater Horizon*, Gulf of Mexico Research Initiative webinar series, (broadcasted from Woods Hole, MA), October 22, 2014. (Presentation). Invited.
 89. Reddy, C.M., Aeppli, C. *Oil spill fingerprinting: Now and the future*, U.S. Coast Guard's National Pollution Funds Center (NPFC), Arlington, VA, August 27, 2014. (Presentation). Invited.
 90. McKenna, A. M., Chen, H., Lemkau, K. L., Nelson, R. K., Valentine, D., Reddy, C. M., Rodgers, R. P., Marshall, A. G. *Biodegradation at the seafloor: Ultrahigh resolution FT-ICR mass spectral characterization of natural petroleum seeps in the Gulf of Mexico*, Int'l Oil Spill Conference, Savannah, GA, May 7, 2014. (Presentation).
 91. Kellermann, M.Y., Lemkau, K.L., Reddy, C.M., Aeppli, C. Nelson, R.K., Valentine, D.L. *Chasing early chemical changes in surface oil slicks*. Goldschmidt Conference, Sacramento, CA. June 11, 2014. (Poster).
 92. Nelson, R.K., Aeppli, C., Reddy, C.M. *High resolution forensic analysis of surface sheens helps pinpoint source of oil leakage from the Deepwater Horizon*. Int'l Oil Spill Conference, Savannah, GA, May 6, 2014. (Poster).
 93. Lemkau, K.L., Arey, J.S., Nelson, R.K., Reddy, C.M. *Modeling the effects of evaporation and dissolution for a heavy fuel oil: The M/V Cosco Busan spill*. Int'l Oil Spill Conference, Savannah, GA, May 6, 2014. (Poster).
 94. Aeppli, C., Nelson, R.K., Carmichael, C.A., Valentine, D.L. Reddy, C.M. *Formation of recalcitrant oxygenated hydrocarbons by natural weathering after the Deepwater Horizon disaster*. Int'l Oil Spill Conference, Savannah, GA, May 6, 2014. (Presentation).
 95. Irvine, G. V., Mann, D. H., Carls, M., Reddy, C., Nelson, R. K. *Exxon Valdez oil after 23 years on rocky shores in the Gulf of Alaska: Boulder armor stability and persistence of slightly weathered oil*. Ocean Sciences meeting, Honolulu, HI, February 26, 2014. (Poster).
 96. Aeppli, C., Nelson, R. K., Kinnaman, F. S., Valentine, D. L., Reddy, C. M. *Identification of microbial and abiotic oil degradation processes using high-resolution gas chromatography and stable isotopes*. Ocean Sciences meeting, Honolulu, HI, February 24, 2014. (Presentation).
 97. Reddy, C.M. *Towards a characterization of recalcitrant oxygenated compounds in naturally weathered Macondo well*. Department of Chemistry seminar series, Bridgewater State College, Bridgewater, MA. February 7, 2014. (Presentation).

98. Aeppli, C., Nelson, R.K., Kinnaman, F.S., Valentine, D.L., Reddy, C.M. *Identification of microbial and abiotic degradation of Macondo Well oil at the sea surface and on beaches*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Mobile, AL, January 28, 2014. (Presentation).
99. Reddy, C.M. *Oil sheen weathering post-Deepwater Horizon*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Mobile, AL, January 28, 2014. (Presentation). Invited.
100. Carmichael, C.A., Nelson, R.K., Aeppli, C., Reddy, C.M. *Building a comprehensive sample repository to track the long-term impacts of the Macondo well oil spill: An opportunity to engage Citizen Scientists*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Mobile, AL, January 27, 2014. (Poster).
101. Gros, J., Reddy, C.M., Aeppli, C., Nelson, R.K., Carmichael, C.A., Arey, J.S. *A new biodegradation index for weathered oils based on saturated hydrocarbons: insights from the Deepwater Horizon disaster*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Mobile, AL, January 27, 2014. (Poster).
102. Lemkau, K.L., McKenna, A.M., Podgorski, D.C., Rodgers, R.P., Kujawinski, E.B., Reddy, C.M. *Molecular evidence of heavy oil degradation following the M/V Cosco Busan spill*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Mobile, AL, January 27, 2014. (Poster)
103. Nelson, R.K., Aeppli, C., Carmichael, C.A., Reddy, C.M. *High resolution forensic analysis of surface sheens helps pinpoint source of oil leakage from the Deepwater Horizon*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Mobile, AL, January 27, 2014. (Poster)
104. James, B.D., Reddy, C.M., Aeppli, C., Carmichael, C.A., Nelson, R.K. *Variability in the hydrocarbon composition of oil films on rocks along the Gulf coast post the Deepwater Horizon disaster*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Mobile, AL, January 27, 2014. (Poster)
105. Kellerman, M.Y., Redmond, M.C., Reddy, C.M., Aeppli, C., Nelson, R.K., Valentine, D.L. *Oil sheen weathering post-Deepwater Horizon*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Mobile, AL, January 27, 2014. (Poster)
106. Worton, D.R., Zhang, H., Aeppli, C., Reddy, C.M., Gouw, J.de, Wilson, K.R., Goldstein, A.H. *Comprehensive characterization of the formerly 'Unresolved Complex Mixture' reveals evolution of chemical composition during weathering of crude oil in the Gulf Of Mexico*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Mobile, AL, January 27, 2014. (Poster).
107. Prince, R.C., Butler, J., Nelson, R.K., Reddy, C.M., Aeppli. *NEBA of dispersant use should consider persistent residues formed by competing weathering processes*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Mobile, AL, January 27, 2014. (Poster).
108. Reddy, C.M. *An Education at Elmer's Island: How I spent \$2K on CAT scans*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Mobile, AL, January 26, 2014. (Presentation). Invited.
109. Reddy, C.M. Standard reference materials for oil spill research. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Mobile, AL, January 26, 2014. (Presentation). Invited.
110. Reddy, C.M. *Communicating science beyond academia*. January 24, 2014. National Collegiate Research Conference, Harvard College, Cambridge, MA (Presentation). Invited.
111. Irvine, G.V., Mann, D.H., Carls, M., Reddy, C.M., Nelson, R.K., Aeppli, C. *Slightly weathered oil from the Exxon Valdez spill persists on rocky Gulf of Alaska shores after 23 years*. Alaska Marine Science Symposium, Anchorage, Alaska January 21, 2014. (Presentation)

112. Kellerman, M.Y., Redmond, M.C., Reddy, C.M. Christoph Aeppli, C., Nelson, R.K. Valentine, D.L., *Oil sheen weathering post Deepwater Horizon*. December 12, 2013. AGU Fall Meeting, San Francisco, CA (poster).
113. Lemkau, K. L., Reddy, C.M., Solow, A.R., Comparison of combustion-derived PAH records from North America/Europe and China. December 11, 2013. AGU Fall Meeting, San Francisco, CA (poster).
114. Aeppli, C., Nelson, R.K., Carmichael, C.A., Reddy, C.M. *Towards a characterization of recalcitrant oxygenated compounds in naturally weathered Macondo well*. Deep-C Consortium “All-Hands” Meeting, September 10, 2013. Tallahassee, FL (Poster).
115. Carmichael, C.A., Nelson, R.K., Aeppli, C., Reddy, C.M. *Building a comprehensive sample repository to track the long-term impacts of the Macondo Well oil spill: An opportunity to engage Citizen Scientists*. Deep-C Consortium “All-Hands” Meeting, September 10, 2013. Tallahassee, FL (Poster).
116. Chen, H., Aeppli, C., Valentine, D., Nelson, R.K., Reddy, C.M., Ruddy, B., Kellerman, M., Rodgers, R., Marshall, A., McKenna, A. *Temporal and spatial characterization of beachfront natural oil seeps by FT-ICR mass spectrometry*. Deep-C Consortium “All-Hands” Meeting, September 10, 2013. Tallahassee, FL (Poster).
117. Gros, J., Reddy, C.M., Aeppli, C., Nelson, R.K., Carmichael, C.A., Arey, J.S. *A new biodegradation index for weathered oils based on saturated hydrocarbons: insights from the Deepwater Horizon disaster*. Deep-C Consortium “All-Hands” Meeting, September 10, 2013. Tallahassee, FL (Poster).
118. Lemkau, K.L., Reddy, C.M., White, H.K. *The impact of Hurricane Isaac (2012) on the delivery of oiled materials from the Deepwater Horizon oil spill to Gulf Coast beaches*. Deep-C Consortium “All-Hands” Meeting, September 10, 2013. Tallahassee, FL (Poster).
119. McNulty, M., Nelson, R.K., Reddy, C.M., Oberle, F. *Using petroleum hydrocarbons from the Prestige oil spill sediment as proxies for sediment turbation by fish trawling*. Deep-C Consortium “All-Hands” Meeting, September 10, 2013. Tallahassee, FL. (Poster).
120. Nelson, R.K., Aeppli, C., Carmichael, C.A., Reddy, C.M. *High resolution forensic analysis of surface sheens helps pinpoint source of oil leakage from the Deepwater Horizon*. Deep-C Consortium “All-Hands” Meeting, September 10, 2013. Tallahassee, FL. (Poster).
121. James, B.D., Reddy, C.M., Aeppli, C., Carmichael, C.A., Nelson, R.K. *Variability in the hydrocarbon composition of oil films on rocks along the Gulf coast post the Deepwater Horizon disaster*. Deep-C Consortium “All-Hands” Meeting, September 10, 2013. Tallahassee, FL. (Poster).
122. Corilo, Y.E., Podgorski, D.C., McKenna, A.M., Rodgers, R.P., Lemkau, K.L., Reddy, C.M., Marshall, A.G. *Oil Spill Source Identification by Principal Component Analysis of Electrospray Ionization Fourier Transform Ion Cyclotron Resonance Mass Spectra*. American Society of Mass Spectrometry Annual Conference, June 9, 2013. Minneapolis, MN. (Poster).
123. McKenna, A.M., Aeppli, C., Valentine, D., Chen, H., Rodgers, R., Nelson, R.K., Podgorski, D., Lemkau, K.T., Reddy, C.M., Rowland, S., Robbins, W., Marshall, A., Kaiser, N. *Structural diversity of petroporphyrins isolated from natural petroleum seeps and weathered oil by FT-ICR MS*. American Society of Mass Spectrometry Annual Conference, June 9, 2013. Minneapolis, MN. (Presentation).
124. Radovic, J.R., Aeppli, C., Nelson, R.K., Díez, S., Bayona, J.M., Albaigés, J., Reddy, C.M. *Assessment of photochemical processes in marine oil spill fingerprinting*. 4th EuCheMS International Conference on Chemistry and the Environment ICCE 2013, June 25, 2013. Barcelona, Spain. (Presentation).

125. Lemkau, K.L., McKenna, A.M., Podgorski, D.C., Rodgers, R.P., Marshall, A.G., Kujawinski, E.B., Reddy, C.M. *Exploring environmental weathering of oil spills by use of ultrahigh resolution fourier transform ion cyclotron resonance mass spectroscopy*. 9th North American FT MS Conference, April 29, 2013. Key West, FL. (Presentation).
126. Reddy, C.M. *Fate of DH Crude Oil on Louisiana Environments*. Louisiana Research Perspectives on the Deepwater Horizon 2010 Spill: The Good, The Bad, and The Ugly. LSU, April 22, 2013. Baton Rouge, LA (Presentation). Invited.
127. McKenna, A.M. *The Good, the Bad, and the Ugly: Molecules of the Deepwater Horizon Oil Spill*. Conservation Lecture Series. FSUCML, April 11, 2013. St. Teresa, FL. (Presentation). Invited.
128. Aeppli C., Nelson, R.K., Carmichael, C.A., Arakawa N., Aluwihare, L.I., Valentine, D.L, Reddy, C.M. *Characterization of recalcitrant oxygenated hydrocarbons formed upon oil weathering after the Deepwater Horizon disaster*. 245th ACS National Meeting & Exposition, April 7-11, 2013. New Orleans, LA (Presentation).
129. Rodgers, R.P., Ruddy, B.M., Lobodin, V.V., Nyadong, L., McKenna, A.M., Marshall, A.G., Nelson, R.K., Reddy C.M. *Recent advances in the analytical characterization of petrogenic material from the Deepwater Horizon incident*. 245th ACS National Meeting & Exposition, April 7-11, 2013. New Orleans, LA (Presentation).
130. Reddy C.M., Nelson, R.K., Valentine, D.L., Kellermann, M. *Analysis of drilling mud in oil sheens by comprehensive 2D gas chromatography*. 245th ACS National Meeting & Exposition, April 7-11, 2013. New Orleans, LA (Presentation).
131. McKenna, A.M., Lemkau, K.T., Aeppli, C., Carmichael, C.A., Valentine, D.L., Reddy, C.M., Nelson, R.K., de Corilo, Y., Marshall A.G., Ruddy, B.M., Rodgers, R.P. *Expanding the analytical window of oil spill characterization by FT-ICR mass spectrometry: From the reservoir to the beach*. 245th ACS National Meeting & Exposition, April 7-11, 2013. New Orleans, LA. (Presentation).
132. McKenna, A.M., Lemkau, K.T., Nelson, R.K., Valentine, D.L., Reddy, C.M., Feng, X., Marshall A.G., Rodgers, R.P. *Biodegradation at the seafloor: Ultrahigh resolution FT-ICR mass spectral characterization of natural petroleum seeps in the Gulf of Mexico*. 245th ACS National Meeting & Exposition, April 7-11, 2013. New Orleans, LA. (Presentation).
133. Timko, M.T., Schmois E., Patwardhan, P., Kida, Y., Class, C., Green, W.H., Nelson, R.K., Reddy C.M. *Sulfur group type response to an oxidative desulfurization treatment*. 245th ACS National Meeting & Exposition, April 7-11, 2013. New Orleans, LA. (Presentation).
134. Reddy, C.M. *Recent sheens near the Deepwater Horizon site*. Department of Chemistry seminar series, Franklin and Marshall College, March 7, Lancaster, PA. (Presentation). Invited.
135. Reddy, C.M. *The Deepwater Horizon disaster: How did academia do?* Common Hour Lecture series, Franklin and Marshall College, March 7, 2013. Lancaster, PA. (Presentation). Invited.
136. Aeppli, C.A., Kellermann, M., Valentine, D.L., Lorensen, T.D., Nelson, R.K., Reddy, C.M. *Oil spill vs. natural seepage: Contrasting weathering characteristics of oil from the Macondo well and Southern California oil seeps*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, January 23, 2013. New Orleans, LA. (Poster).
137. Aeppli, C.A., Carmichael C.A., Nelson R.K., Valentine, D.L., Arakawa, N., Aluwihare, L.I., Reddy, C.M. *Characterization of oxygenated hydrocarbons formed upon oil weathering after the Deepwater Horizon disaster*. Gulf of Mexico Oil Spill & Ecosystem Science Conference, January 22, 2013. New Orleans, LA. (Presentation).
138. Reddy, C.M., Rodgers, R. *Mainstreaming new methods into oil spill science: What do we need to do?* Gulf of Mexico Oil Spill & Ecosystem Science Conference, January 22, 2013. New Orleans, LA. (Presentation).

139. Gros, J., Reddy, C.M., Nelson, R.K., Arey, J.S. *Quantifying composition alteration through biodegradation for Deepwater Horizon oil in surface environments using GC×GC.* Gulf of Mexico Oil Spill & Ecosystem Science Conference, January 22, 2013. New Orleans, LA. (Presentation).
140. Corilo, Y., Podgorski, D.C., McKenna, A.M., Reddy, C.M., Marshall, A.G., Rodgers, R.P. *Oil spill source identification by principal component analysis of electrospray ionization Fourier transform ion cyclotron resonance mass spectrometry.* Gulf of Mexico Oil Spill & Ecosystem Science Conference, January 22, 2013. New Orleans, LA. (Presentation).
141. Carmichael, C. A., James, B.D., Aeppli, C., Nelson, R.K., Murphy, E., Radovic, J., Reddy, C.M. *Variability in oiled sand-patties collected: How different are samples collected within meters on a beach?* Gulf of Mexico Oil Spill & Ecosystem Science Conference, January 22, 2013. New Orleans, LA. (Poster).
142. Hall, G. J., Frysinger, G.S., Aeppli, C., Carmichael, C.A. Gros, J., Lemkau, K.L., Nelson, R.K., Reddy, C.M. *Precursors of oxygenated hydrocarbons in weathered oil identified by comprehensive two-dimensional chromatography and chemometric analysis.* Gulf of Mexico Oil Spill & Ecosystem Science Conference, January 22, 2013. New Orleans, LA. (Poster).
143. Lemkau, K., White, H.K., Reddy, C.M. *Characterization of oiled materials collected before and after Hurricane Isaac at Fort Morgan, AL.* Gulf of Mexico Oil Spill & Ecosystem Science Conference, January 22, 2013. New Orleans, LA. (Poster).
144. Main, C.E., Nelson, R.K., Aeppli, C., Carmichael, C.A., Lemkau, K.L., Reddy, C.M. *Comparing laboratory- and field-weathered oil from the Macondo well.* Gulf of Mexico Oil Spill & Ecosystem Science Conference, January 22, 2013. New Orleans, LA. (Presentation).
145. McKenna, A. M., Lemkau, K.T., Nelson, R.K., Valentine, D. L., Robbins, W.K., Reddy, C.M., Podgorski, D.C., de Corilo, Y., Rodgers, R. P. *Molecular-Level Characterization of Petroleum Seeps and Asphalt Volcanoes from the Santa Barbara Basin by FT-ICR Mass Spectrometry.* Gulf of Mexico Oil Spill & Ecosystem Science Conference, January 22, 2013. New Orleans, LA. (Presentation).
146. Nelson, R.K., Carmichael, C.A., Radovic, J.R., Aeppli, C., Main, C.E., Reddy, C.M. *Advanced petroleum fingerprinting using comprehensive two-dimensional gas chromatography (GC×GC).* Gulf of Mexico Oil Spill & Ecosystem Science Conference, January 22, 2013. New Orleans, LA. (Poster).
147. Radovic, J.R., Aeppli, C., Nelson, R.K., Diez, S., Bayona, J.M., Reddy, C.M. *Photooxidation of triaromatic steroids in Macondo well oil.* Gulf of Mexico Oil Spill & Ecosystem Science Conference, January 22, 2013. New Orleans, LA. (Poster).
148. Ruddy, B., Huettel, M., Kostka, J., Lobodin, V., Bythell, B., McKenna, A.M., Aeppli, C., Reddy, C.M., Nelson, R.K., Marshall, A., Rodgers, R. *New insights into the weathering of Macondo well Oil: Analysis of contaminated sands from Pensacola Beach.* Gulf of Mexico Oil Spill & Ecosystem Science Conference, January 22, 2013. New Orleans, LA. (Poster).
149. Williams, P.L., Reddy, C.M., White, H.K. *Exploring the heterogeneity of oil in sand patties from the Gulf of Mexico.* Gulf of Mexico Oil Spill & Ecosystem Science Conference, January 22, 2013. New Orleans, LA. (Poster).
150. Rodgers, R., Nyadong, L., Lobodin, V.V., Ruddy, B.M., Corilo, Y.E., Podgorski, D.C., McKenna, A.M., Marshall, A.G., Nelson, R.K., Reddy, C.M. *A petroleomic approach to environmental analytical chemistry.* Gulf of Mexico Oil Spill & Ecosystem Science Conference, January 22, 2013. New Orleans, LA. (Presentation).

151. Aeppli, C.A., Valentine, D.L., Arakawa, N., Aluwihare, L., Redmond, M.C., Nelson, R.K., Reddy, C.M. *Oxygenation of petroleum hydrocarbons after the Deepwater Horizon disaster*. American Geophysical Union Meeting, December 14, 2012. San Francisco, CA. (Poster).
152. Reddy, C.M. and Lippsett, L. *How not to write for peer-reviewed publications: Talking to everyone else*. American Geophysical Union Meeting, December 14, 2012. San Francisco, CA. (Presentation).
153. Reddy, C.M. *On a path towards long-term sampling following the Deepwater Horizon*. American Geophysical Union Meeting, December 14, 2012. San Francisco, CA. (Presentation). Invited.
154. Valentine, D.L., Redmond, M.C., Mendes, S.D., Aeppli, C., Reddy, C.M., Ryerson, T. B. *Hydrocarbon biodegradation following the Deepwater Horizon: A compound specific point of view*. American Geophysical Union Meeting, December 14, 2012. San Francisco, CA. (Presentation). Invited.
155. Reddy, C.M. *Weathering of Macondo Well oil: Looking where everybody else isn't*. Dean's distinguished lecture series. Texas A & M Corpus Christi, November 9, 2012. Corpus Christi, TX. (Presentation). Invited.
156. Reddy, C.M., *Manmade threats to the oceans*. Friends of Snow Library, Lifetime Learning Program, Orleans, MA, November 2, 2012. (Presentation). Invited.
157. Reddy, C.M. *An overview on the Deepwater Horizon disaster and comments on a career in oceanography*. Dissertations in Chemical Oceanography (DISCO) XXIII, October 8, 2012. Kauai, Hawaii. (Presentation). Invited.
158. McKenna, A.M., Lemkau, K.L., Nelson, R.K., Valentine, D.L., Robbins, W.K., Reddy, C.M., Podgorski, D.C., de Corilo, Y., Rodgers, R.P., Marshall, A.G. *Molecular-level characterization of petroleum seeps and asphalt volcanoes from Santa Barbara Basin by FT-ICR mass spectrometry*. American Chemical Society meeting, Philadelphia, PA, August 20, 2012 (presentation).
159. Tcaciuc, A.P., Nelson, R.K., Reddy, C.M., Gschwend, P.M. *Estimating the polyethylene-water partition coefficients of organic chemicals using comprehensive two-dimensional gas chromatography*. American Chemical Society meeting, Philadelphia, PA, August 19, 2012 (presentation).
160. Eiserbeck, C., Grice, K., Nelson, R.K., Curiale, J., Reddy, C.M. *Separation success of angiosperm biomarkers using GC×GC/TOFMS*. Gordon Research Conference: Organic Geochemistry, Holderness, NH, July 30, 2012 (Poster).
161. Lemkau, K.L., McKenna, A.M., Podgorski, D.C., Rodgers, R.P. Marshall, A.G., Kujawinski, E.B., Reddy, C.M. *Oil spill weathering: Expanding the analytical window beyond gas chromatography*. Gordon Research Conference – Organic Geochemistry, July 30, 2012, Holderness NH. (Poster).
162. Reddy, C.M. *Arithmetic with chromatograms: New insights on the fate of spilled oil following the Deepwater Horizon disaster*. Gordon Research Conference: Organic Geochemistry, Holderness, NH, July 29, 2012 (Presentation). Invited.
163. Reddy, C.M. *The Deepwater Horizon disaster: science and academia*. Quissett Harbor Preservation Trust, 6th Annual Wheeler Lecture, Woods Hole, MA, July 24, 2012 (Presentation). Invited.
164. Reddy, C.M. *Oil spills: natural and manmade*. The Gulf of Maine Institute, Newbury, MA, July, 5, 2012 (Presentation). Invited.
165. Lemkau, K.L., Arey, J.S., Nelson, R.K., Reddy, C.M. *Quantifying hydrocarbon input from oil-covered rocks into San Francisco Bay following the M/V Cosco Busan oil Spill*. Gordon

- Research Conference – Environmental Sciences: Water, June 26, 2012, Holderness NH. (Poster).
BEST POSTER.
166. Corilo, Y.E., Podgorski, D.C., McKenna, A., Rodgers, R.P., Lemkau, K.L., Reddy, C.M., Marshall, A.G. *Identifying robust, source identification components in oil spills by FT-ICR MS and PCA*. The 13th International Conference on Petroleum Phase Behavior and Fouling, St. Petersburg Beach, Florida, June 11, 2012. (Poster).
 167. Reddy, C.M., Nelson, R.K., Carmichael, C.A., Arey, J.S., Gros, J. *Advances in the analysis of petroleum via comprehensive two-dimensional gas chromatography*. The 13th International Conference on Petroleum Phase Behavior and Fouling, St. Petersburg Beach, Florida June 11, 2012 (Keynote presentation). Invited.
 168. Nelson, R.K.; Reddy, C.M., *GC×GC analysis of petroleum biomarkers: Fingerprinting using molecular fossils*. The 13th International Conference on Petroleum Phase Behavior and Fouling, St. Petersburg Beach, Florida June 10, 2012 (Poster).
 169. Reddy, C.M. *The Deepwater Horizon disaster: From pipe to plume*. American Association of Mass Spectrometry, Vancouver, British Columbia, Canada. May 20, 2012 (Plenary lecture). Invited.
 170. Reddy, C.M. *The Deepwater Horizon: Science and the media*. American Association of Anatomists meeting, April 21, 2012, San Diego, CA. (Presentation). Invited.
 171. Reddy, C.M. *Academia and the energy industry: We are closer than we think (or can be)*. School of Earth and Atmospheric Sciences, Georgia Tech, April 5, 2012, Atlanta, GA. (Presentation). Invited.
 172. Reddy, C.M. *Expanding past traditional analytical techniques for studying the Deepwater Horizon oil spill*. 243rd ACS National Meeting & Exposition, March 28, 2012, San Diego, CA. (Presentation). Invited.
 173. Marshall, A., McKenna, A.M., Nelson, R.K., Reddy, C.M., Rodgers, R.P., Savory, J.T., Kaiser, N.K., Hendrickson, C.L. *Next generation analytical characterization of the 2010 Gulf of Mexico Macondo well petroleum by FT-ICR mass spectrometry and GCxGC*. 243rd ACS National Meeting & Exposition, March 28, 2012, San Diego, CA. (Presentation). Invited.
 174. Reddy, C.M., Camilli, R., Yoerger, D.R. *Deepwater Technology Revolution: The Future of Ocean Science and the Energy Industry*, CERA2012. March 7, 2012, Houston, TX. (Presentation). Invited.
 175. Reddy, C.M. *From pipe to the beach: Studying the polar component of Macondo well oil*. Ocean Sciences Meeting, February 23, 2012, Salt Lake City, UT. (Presentation).
 176. Kinsey, J.C., Yoerger, D.R., Jakuba, M.V., Camilli, R. Reddy, C.M. *Estimating mid-water hydrocarbon fluxes with an autonomous underwater vehicle and an in-situ mass spectrometer*. Ocean Sciences Meeting, February 23, 2012, Salt Lake City, UT. (Poster).
 177. Reddy, C.M. *A disaster fit for oceanography*. Ocean Sciences Meeting, February 22, 2012, Salt Lake City, UT. (Plenary lecture). Invited.
 178. Reddy, C.M. *The future of oil spill science*. National High Magnetic Field Laboratory, Florida State University. December 7, 2012, Tallahassee, FL (Presentation). Invited.
 179. Aeppli, C., Carmichael C.A., Nelson R.K., Reddy C.M. *Identifying and characterizing a polar and recalcitrant fraction in weathered Macondo 252 well oil*. Society of Environmental Toxicologists and Chemists 32nd National meeting. November 15, 2011, Boston, MA. (Presentation).

180. Reddy, C.M. *What if 160 million gallons of oil started to spill tomorrow?* Society of Environmental Toxicologists and Chemists 32nd National meeting. November 14, 2011, Boston, MA. (Presentation-plenary lecture). Invited.
181. Reddy, C.M. *The Deepwater Horizon: From pipe to the plume.* Geological Sciences Department. Brown University, November 10, 2011. Providence, RI. (Presentation). Invited
182. Reddy, C.M. *Basic research support by the DOE: The Deepwater Horizon.* Council on Earth Sciences Meeting, Department of Energy. October 25, 2011. Gaithersburg, MD. (Presentation). Invited
183. Reddy, C.M. *The Deepwater Horizon: From pipe to the beach.* Dean's Lecture series, University of New Orleans. October 17, 2011. New Orleans, LA. (Presentation). Invited
184. Reddy, C.M. *Mr. Spock as the scientist role-model during crises.* TEDx Woods Hole. Marine Biological Laboratory. October 15, 2011, Woods Hole, MA. (Presentation) Invited. (Video was TED editor's choice for the week of Jan 24, 2012)
185. Reddy, C.M. *Basic science meets the Deepwater Horizon disaster.* Which Hazards Are in Your Backyard? A Showcase of NSF-Funded Hazards Research. September 7, 2011, Hart Senate Building, Washington, DC. (Poster) Invited.
186. Reddy, C.M. *Basic science meets the Deepwater Horizon disaster.* Which Hazards Are in Your Backyard?: An NSF Hazards Research Expo. September 6, 2011, Arlington, VA. (Poster) Invited.
187. Rodgers, R.P., McKenna, A.M., Robbins, W.R., Hsu, C.S., Lu, J., Hendrickson, C.L., Reddy, C.M. Nelson, R.K., Marshall, A.G. *Petroleomics: Past, present, and future.* American Chemical Society Fall meeting, August 31, 2011, Denver, CO. (Presentation).
188. Reddy, C.M. *The Deepwater Horizon: From pipe to the beach.* Distinctive Voices Lecture series. National Academy of Science. August 10, 2011. Woods Hole, MA. (Presentation). Invited.
189. McKenna, A.M., Rodgers, R.P., Nelson, R.K., Reddy, C.M., Podgorski, D.C., Savory, J.T., Kaiser, N.K., Marshall, A.G. *Catastrophe in the Gulf of Mexico: Molecular Characterization of the Deepwater Horizon Oil Spill by FT-ICR MS and Comprehensive GC×GC.* American Society for Mass Spectrometry annual meeting. June 6, 2011. Denver, CO. (Poster).
190. Frysjinger, G.S., Hall, G.J., Pourmonir, A.L., Bischel, H.N., Peacock, E.E., Nelson, R.K., Reddy, C.M. *Tracking and modeling the degradation of a 30-year-old fuel oil spill with comprehensive two-dimensional gas chromatography.* 2011 INTERNATIONAL OIL SPILL CONFERENCE. March 14, 2011 Portland, Oregon. (Presentation).
191. Reddy, C.M. *A geochemist's view on WW II wrecks.* Wrecks of the World: Evaluating and Addressing Potential Underwater Threats" (WOW) II. Maritime Institute of Technology and Graduate Studies (MITAGS). June 6, 2011, Linthicum Heights, MD. (Presentation). Invited.
192. Reddy, C.M. *What I know about the Deepwater Horizon spill.* 11th International Estuarine Biogeochemistry Symposium. May 18, 2011 Atlantic Beach, NC. (Presentation). Invited.
193. Reddy, C.M. *From Plume to Pipe: The Deepwater Horizon oil spill.* 17th Annual CNSF Exhibition May 11, 2011, Washington, DC. (Presentation). Invited.
194. Reddy, C.M. *An update on the Deepwater Horizon disaster.* Center for Environmental and Energy Policy Research workshop, Massachusetts Institute of Technology, May 5, 2011, Cambridge, MA (Presentation). Invited.
195. Reddy, C.M. *The success of academia using basic science and The failure of academia to perform outside the Ivory Tower.* Blowout: Legal Legacy of the Deepwater Horizon Catastrophe. Roger Williams College, April 13, 2011, Bristol, RI (Presentation). Invited

196. Reddy, C.M. *Hunting for subsurface plumes in the Gulf of Mexico after the Deepwater Horizon Disaster*. Are we in DEEPWATER? Applying Lessons Learned from our SONS Experiences, March 22, 2011, Portsmouth, NH (Presentation). Invited.
197. Reddy, C.M. *Hunting for subsurface plumes in the Gulf of Mexico after the Deepwater Horizon Disaster*. New England Association of Environmental Biologists (NEAEB), March 17, 2011, Sturbridge, MA (Presentation) Invited.
198. Reddy, C.M. *The fate of oil and dispersants in the Gulf of Mexico after the Deepwater Horizon Disaster*. Consortium for Ocean Leadership, March 9, 2011, Washington, DC. (Presentation). Invited.
199. Reddy, C.M. *Boxscores, discovering the lost continent of Atlantis, and a side of cancer*. The 2011 Vetlesen Lectures: “The State of Our Oceans” sponsored by the G. Unger Vetlesen Foundation and the URI Graduate School of Oceanography, March 8, 2011, Kingston, RI. (Presentation). Invited.
200. Reddy, C.M. *Hunting for subsurface plumes in the Gulf of Mexico after the Deepwater Horizon Disaster*. Chevron, March 4, 2011, Richmond, CA. (Presentation). Invited.
201. Reddy, C.M. *Hunting for subsurface plumes in the Gulf of Mexico after the Deepwater Horizon Disaster*. Jean Dreyfus Boissevain Lecture, Department of Chemistry, University, March 1, 2011, Los Angeles, CA. (Presentation). Invited.
202. Reddy, C.M. *Hunting for subsurface plumes in the Gulf of Mexico after the Deepwater Horizon Disaster*. Earth science seminar series, Scripps Institution of Oceanography, February 28, 2011, La Jolla, CA. (Presentation). Invited.
203. Reddy, C.M. *Hunting for subsurface plumes in the Gulf of Mexico after the Deepwater Horizon Disaster*. Jean Dreyfus Boissevain Lecture, Department of Chemistry, Western Washington University, February 18, 2011, Bellingham, WA. (Presentation). Invited.
204. Reddy, C.M. *Hunting for subsurface plumes in the Gulf of Mexico after the Deepwater Horizon Disaster*. Distinguished Lecture Series in Environmental Science, Technology, and Policy. Carnegie Mellon University, February 10, 2011, Pittsburgh, PA. (Presentation). Invited.
205. Reddy, C.M. *Hunting for subsurface plumes in the Gulf of Mexico after the Deepwater Horizon Disaster*. Department of Earth Sciences, Boston University, January 20, 2011, Boston, MA. (Presentation). Invited.
206. Reddy, C.M. *Hunting for subsurface plumes in the Gulf of Mexico after the Deepwater Horizon Disaster*. Department of Earth and Environmental Sciences, Northeastern University University, January 18, 2011, Boston, MA. (Presentation). Invited.
207. Reddy, C.M. *Hunting for subsurface plumes in the Gulf of Mexico after the Deepwater Horizon Disaster*. Department of Chemistry seminar series. Lafayette College, November 19, 2010, Easton, PA. (Presentation). Invited.
208. Reddy, C.M. *Hunting for subsurface plumes in the Gulf of Mexico after the Deepwater Horizon Disaster*. Department of Chemistry. Haverford College, November 18, 2010, Haverford, PA. (Presentation). Invited.
209. Reddy, C.M. *Hunting for subsurface plumes in the Gulf of Mexico after the Deepwater Horizon Disaster*. Department of Oceanography and Coastal Sciences seminar series. Louisiana State University, November 12, 2010, Baton Rouge, LA. (Presentation). Invited.
210. Reddy, C.M. *Mixing oil and ecosystems*. MIT Soapbox Series, November 10, 2010, Cambridge, MA (Presentation). Invited.
211. Reddy, C.M. *The Deepwater Horizon Disaster: What do we know, don't know, and lies in the future*. The Philanthropy Roundtable, November 9, 2010, Mobile, AL. (Presentation). Invited.

212. Reddy, C.M. *From the mid-Atlantic to the NY Times (and how I saved \$500)*. Sea Education Association trustees meeting, November 7, 2010, Falmouth, MA. (Presentation). Invited.
213. Reddy, C.M. *Investigating the evidence of subsurface plumes in the Gulf of Mexico after the Deepwater Horizon Disaster*. Kavli Frontier of Science, National Academy of Science, November 4, 2010, Irvine, CA. (Poster). Invited.
214. Reddy, C.M. *Hunting for subsurface plumes in the Gulf of Mexico after the Deepwater Horizon Disaster*. SES seminar series. Marine Biological Laboratory, October 15, 2010, Woods Hole, MA. (Presentation). Invited.
215. Reddy, C.M. *Where did the oil go?* WHSTEP. Falmouth High School, October 13, 2010, Falmouth, MA. (Presentation). Invited.
216. Reddy, C.M. *Investigating the evidence of subsurface plumes in the Gulf of Mexico after the Deepwater Horizon Disaster*. NUTMEG meeting. Marine Biological Laboratory, October 8, 2010, Woods Hole, MA. (Presentation). Invited.
217. Reddy, C.M. *Transport and fate of oil following the Deepwater Horizon disaster*. JSOST meeting, October 5, 2010, St. Pete's Beach, Florida (Presentation). Invited.
218. Reddy, C.M. *Investigating the evidence of subsurface plumes in the Gulf of Mexico after the Deepwater Horizon Disaster*. Graduate School of Oceanography. University of Rhode Island, September 29, 2010, Narragansett, RI (Presentation). Invited.
219. Reddy, C.M. *Investigating the evidence of subsurface plumes in the Gulf of Mexico after the Deepwater Horizon Disaster*. Dept. of Earth and Environmental Sciences seminar series. Tulane University, September 17, 2010, New Orleans, LA. (Presentation). Invited
220. Reddy, C.M. *The geochemistry of the Deepwater Horizon Disaster*. Narragansett Bay Classroom, Graduate School of Oceanography. University of Rhode Island, July, 28, 2010, Narragansett, RI. (Presentation). Invited.
221. Reddy, C.M. *Nature's equivalent to Dupont's, Monsanto's, and 3M's best stuff: Unusual chemicals found in the marine environment*. Department of Chemistry, University of Minnesota. April 22, 2010. Minneapolis, MN. (Presentation) Invited.
222. Reddy, C.M. *An introduction to GC×GC and applications to petroleum processes*. Department of Chemical Engineering, MIT, April 14, 2010. Invited.
223. Reddy, C.M. *Natural oil spills*. Robertson Elementary School, Warwick, RI, April 12, 2010. (Presentation). Invited.
224. Meshot, E., Plata, D.L., Reddy, C.M., Gschwend, P.M., Hart, A.J. *Efficient hydrocarbon precursors for rapid and clean carbon nanotube growth*. Materials Research Society's spring meeting. April 6, 2010. San Francisco, CA (Presentation).
225. Hoh, E., Lehotay, S.J., Pangallo, K.C., Reddy, C.M., *Untargeted analysis of organic contaminants in dolphin blubber using DSI-GC×GC/TOF-MS*. American Chemical Society. March 24, 2010, San Francisco, CA (Presentation).
226. Atolia, E., McKenna, A.M., Rodgers, R.P., Reddy, C.M., Nelson, R.K., Marshall, A.G. *3D graphical analysis of ultrahigh-resolution FT-ICR mass spectrometry data: Compositional comparison of a crude oil and associated production deposit*. American Chemical Society. March 21, 2010, San Francisco, CA (Poster).
227. Lavender Law, K., Moret-Ferguson, S., Reddy, C. M., Peacock, E.E., Maximenko, N.A. *A 22-year Record of Plastic Marine Debris in the Atlantic Ocean*. Ocean Sciences meeting, Portland, OR, February 24, 2010. (Presentation)

228. Moret-Ferguson, S., Lavender Law, K., Peacock, E.E., Proskurowski, G., Reddy, C.M. *Physical Characterization of Plastic Debris in the North Atlantic Ocean*. Ocean Sciences meeting, Portland, OR, February 24, 2010. (Presentation).
229. Takada, H., Hirai, H., Ogata, Y., Yuyama, M., Yamashita, R., Ochi, D., Watanuki, Y., Moore, C., Gray, H., Laursen, D., Zettler, E., Farrington, J.W., Reddy, C.M., Peacock, E.E., Ward, M. *Organic micropollutants in marine plastics and their potential transfer to seabirds*. Ocean Sciences meeting, Portland, OR, February 24, 2010. (Presentation)
230. Proskurowski, G., Lavender Law, K. Moret-Ferguson, S, Reddy, C.M. *The impact of wind stress on the concentration of plastic debris in the open ocean*. Ocean Sciences meeting, Portland, OR, February 24, 2010. (Poster)
231. Murphy, E., Reddy, C.M, Peacock, E.E., Moret-Ferguson, S., Lavender Law, K. *Establishing a robust characterization of beach plastics*. Ocean Sciences meeting, Portland, OR, February 24, 2010. (Poster)
232. Reddy, C.M. *Future fuels of naval vessels*. United States Naval War College Seminar Series, December 7, 2009, Newport, RI. (Presentation). Invited.
233. Hoh, E., Lehotay, S.J., Pangallo, K.C., Reddy, C.M. *Untargeted analysis of marine mammal exposure to multiple classes of manmade and naturally occurring halogenated organic chemicals*. SETAC North America 30th Annual Meeting November 20, 2009, New Orleans, LA. (Poster with abstract).
234. Reddy, C.M. *Disentangling oil weathering at a marine seep using GC×GC*. Eastern Analytical Symposium, November 18, 2009, Somerset, NJ. (Presentation with abstract). Invited.
235. Reddy, C.M. *Marine-based biofuels: hype or hope?* Kavli Frontiers of Science, November 13, 2009. National Academy Sciences, Irvine, CA (Poster with abstract). Invited
236. Reddy, C.M. *Marine-based biofuels: hype or hope?* Quaker Meeting House Science Series, November 8, 2009. North Falmouth, MA (Presentation). Invited
237. Reddy, C.M. *Nature's equivalent to Dupont's, Monsanto's, and 3M's best stuff: Unusual chemicals found in the marine environment*. University of Connecticut, Department of Marine Sciences. October 23, 2009. Avery Point, CT. (Presentation with abstract). Invited.
238. Reddy, C.M. *Algal-based biofuels*. 4th Annual Military Energy and Alternative Fuels Conference October 19, 2003, Alexandria, VA. (Presentation). Invited.
239. Ventura, G.T., Frysinger, G., Hall, G., Nelson, R., Raghuraman, B., Mullins, O., Reddy, C. *Analysis of petroleum compositional similarity using multiway principle components analysis (MPCA) of comprehensive two-dimensional gas chromatographic data*. International Meeting on Organic Geochemistry, Bremen, Germany, September 9, 2009. (Presentation with abstract).
240. Ventura, G.T., Simoniet, B., Nelson, R., Reddy, C. *Resolving the origin of unresolved complex mixtures in hydrothermal petroleum – novel methods for comprehensive two-dimensional gas chromatography*. International Meeting on Organic Geochemistry, Bremen, Germany, September 9, 2009. (Presentation with abstract).
241. Schubotz, F., Ventura, G.T., Nelson, R.K., Reddy, C.M., Hinrichs, K-U. *Deciphering mechanistic details of asphalt degradation and weathering at the ocean floor with GCxGC*. International Meeting on Organic Geochemistry, Bremen, Germany, September 8, 2009. (Presentation with abstract).
242. Reddy, C.M. *Organic compounds in marine animals: Contaminants or natural products*. American Chemical Society Meeting, Special session on the Chemistry of the Oceans for undergraduates, Washington, DC, August 16, 2009. (Presentation with abstract). Invited.

243. Schubotz, F., Ventura, G.T., Nelson, R.K., Knittel, K., Wegener, G., Wilhelm, T., Zabel, M., Kasten, S., Boetius, A., Reddy, C.M., Hinrichs, K.-U. *Structure and function of a cold seep nurtured by seepage of heavy oil*. Goldschmidt Conference, Davos, Switzerland, June 25, 2009. (Presentation with abstract). Invited.
244. Harris, Kate, Bosak, T., Nelson, R., Reddy, C., Casillas, L., Lugo, J. Biomarker lipid diversity as a function of growth conditions in *Rhodospirillum rubrum*, Goldschmidt Conference, Davos, Switzerland, June 24, 2009. (Poster with abstract).
245. Redman A., McGrath J., Arey J.S., Reddy C.M., Parkerton, T., Di Toro, D. *Relating ecotoxicity of weathered heavy fuel oil to chemical composition with PETROTOX*. SETAC Europe 19th Annual Meeting, Göteborg, Sweden June 1, 2009. (Poster with abstract).
246. Reddy, C.M. *Moving past pretty pictures: Analysis of petroleum hydrocarbons by GC×GC*. 6th GC×GC Conference, Portland, OR, May 18, 2009. (Presentation with abstract). Invited
247. Meshot, E.R., Plata, D.L., Reddy, C.M., Gschwend, P.M., Hart, A.J. *Co-optimizing carbon nanotube synthesis: control of diameter, structural quality, and growth kinetics along with simultaneous cost minimization*. American Physical Society meeting, Pittsburgh, PA, March 16, 2009. (Presentation with abstract).
248. Reddy, C.M. *Nature's equivalent to Dupont's, Monsanto's, and 3M's best stuff: Unusual chemicals found in the marine environment*. Marine and Atmospheric Research Center, Stonybrook University, NY, February 27, 2009. (Presentation). Invited.
249. Lavender, K., Moret, S., Hyrenbach, D., Reddy, C.M. *Plastic debris in the ocean and at SEA*. Sail Martha's Vineyard, Martha's Vineyard, MA, February 11, 2009. (Presentation)
250. Lemkau, K.L., Peacock, E.E., Nelson, R.K., Ventura, G.T., Kovacs, J., Reddy, C.M. *An Initial Look at a No. 6 Fuel Oil Spill: M/V Cosco Busan*. American Geophysical Union Meeting, December 19, 2008. San Francisco, CA. (Poster with abstract)
251. Wardlaw, G.D., Reddy, C.M., Nelson, R.K., Valentine, D.L. *Hydrocarbon specificity during aerobic oil biodegradation revealed in marine microcosms with the use of comprehensive two-dimensional gas chromatography*. American Geophysical Union Meeting, December 19, 2008. San Francisco, CA. (Poster with abstract)
252. Reddy, C.M. Nelson, R., Ventura, G., Arey, J.S., Wardlaw, G., Valentine, D. *Disentangling oil weathering at a marine seep using GC×GC: Applications form environmental forensics*. SETAC North America Annual Meeting, November 20, 2008. Tampa, FL. (Presentation with abstract). Invited. Attended.
253. Xu, L., Zheng, M., Ding, X., Reddy, C.M., Edgerton, E. *Carbon isotope analysis of individual organic compounds in the SEARCH study*. AAAR 27th Annual Conference. October 24, 2008. (Presentation with abstract).
254. Reddy, C.M., Ventura, G.T., Nelson, R.K., Betancourt, S., Lambertus, G., Mullins, O., Pomerantz, A., Raghuraman, B. *Advances in petroleum analysis via comprehensive two-dimensional gas chromatography*, Federation of Analytical Chemistry and Spectroscopy Society, Reno, NV, September 29, 2008. (Presentation with abstract).
255. Reddy, C.M. An initial update on the M/V Cosco Busan oil spill. Breakfast at George and Kate Rowe's home, San Francisco, CA, September 23, 2008. (Presentation). Attended
256. Lavender, K., Reddy, C.M. *Plastics in the ocean*. Sea Education Association trustee meeting, Woods Hole, MA, September 19, 2008. (Presentation). Attended.
257. Plata, D.L., Sharpless, C.M., Reddy, C.M. *Photochemical degradation of polycyclic aromatic hydrocarbons in oil films*. American Chemical Society National Meeting, Philadelphia, PA, August 19, 2008. (Presentation with abstract, best paper award).

258. Plata, D.L., Reddy, C.M., Gschwend, P.M. *Thermal stability of carbon nanotubes: Toward detection in environmental matrices*. American Chemical Society National Meeting, Philadelphia, PA, August 17, 2008. (Presentation with abstract).
259. Nelson, R.K., Summons, R., Hürlimann, M.D., Ventura, G.T., Reddy, C.M. *Comprehensive Two-Dimensional Gas Chromatographic Analysis (GC×GC) of Biscadinanes in Crude Oil - A Comparison of Oils from the Ardjuna Basin, Northwest Java; The Seria Oil Field, Brunei; and Two Oils from South Texas, USA*. Gordon Research Conference, Organic Geochemistry. Holderness School, Plymouth, NH, August 7, 2008. (Presentation with abstract). Invited.
260. Schubotz, F., Nelson, R.K., Ventura, G.T., Reddy, C.M., Henrichs, K.U. *Comparative Analysis of Asphaltene-Rich Oils from the Campeche Knolls, Deciphered by Two-Dimensional Gas Chromatography*. Gordon Research Conference, Environmental Sciences: Water. Holderness School, Plymouth, NH, August 7, 2008. (Presentation with abstract). Invited.
261. Ventura, G.T., Simoneit, B., Nelson, R.K., Reddy, C.M. *Resolving the origin of unresolved complex mixtures in hydrothermal petroleum-novel methods for comprehensive two-dimensional gas chromatography*. Gordon Research Conference, Environmental Sciences: Water. Holderness School, Plymouth, NH, August 5, 2008. (poster with abstract).
262. Strapoc, D., Picardal, F., Lin, Y., Henrichs, K.U., Schaperdoth, I., Macalady, J., Turich, C., Mastalerz, M., Schimmelmann, A., Wakeham, S., Reddy, C., Nelson, R.K., Holba, A. *Bugs - Biodegradation - Gas A Geochemical Story Behind Ongoing CBM Generation in the Illinois Basin*. Gordon Research Conference, Environmental Sciences: Water. Holderness School, Plymouth, NH, August 5, 2008. (poster with abstract).
263. Pangallo, K.C., Reddy, C.M. *Bioaccumulating halogenated organic compounds: natural vs. anthropogenic*. 37th Northeast Regional Meeting of the American Chemical Society, Burlington, VT, United States, July 1, 2008. (Presentation with abstract).
264. Flores-Cervantes, D.X., Reddy, C.M., Gschwend, P.M. *Pyrene fluorescence loss measurements of black carbon in seawater*. American Chemical Society Meeting, New Orleans, LA April 8, 2008. (Presentation with abstract).
265. Reddy, C.M., Pangallo, K. *Bioaccumulation of halogenated natural products*. Ocean Sciences Meeting, Orlando, FL March 7, 2008. (Presentation with abstract).
266. Pangallo, K., Reddy, C.M. *Not so conservative? Chlorine and bromine in chemical oceanography?* Ocean Sciences Meeting, Orlando, FL March 7, 2008. (Presentation with abstract).
267. Ventura, G.T., Reddy, C.M., Simoneit, B.R.T., Nelson, R.K. *Resolving the unresolved complex mixture of hydrothermal petroleum*. Ocean Sciences Meeting, Orlando, FL March 7, 2008. (Presentation with abstract).
268. Fitzgerald, W.F., Hammerschmidt, C.R., Engstrom, D.R., Lamborg, C.H., Balcom, P.H., Reddy, C.M. *Modern and historic mercury deposition: insights from dated lake sediments and a varved estuarine core*. Ocean Sciences Meeting, Orlando, FL March 7, 2008. (Presentation with abstract).
269. Reddy, C.M. *Studying an oil spill older than me*. Mount Holyoke College chemistry seminar series, March 4, 2008. South Hadley, MA. (Presentation) Invited.
270. Reddy, C.M. *Alternative fuels. Love Your Earth Day*. Dennis Yarmouth Regional High School. February 14, 2008. South Yarmouth, MA (Presentation) Invited.
271. Reddy, C.M., *Chemistry and weathering of the oil*. Cosco Busan Oil Spill Technical Workshop January 25, 2008. Oakland, CA (Presentation). Invited.

272. Ventura, G.T., Simoneit, B.R., Reddy, C.M., Nelson, R.K., *Resolving the unresolved complex mixtures of hydrothermal petroleum using comprehensive two dimensional gas chromatography-time of flight mass spectrometry*. American Geophysical Union Meeting, December 14, 2007. San Francisco, CA. (Poster with abstract).
273. Valentine, D.L., Reddy, C., Nelson, R.K., Ventura, G.T. *Discovery and description of extinct asphalt volcanoes along the Southern California Margin* American Geophysical Union Meeting, December 13, 2007. San Francisco, CA. (Presentation with abstract).
274. Vinhateiro, N., King, J., Robinson, R., Reddy, C. *Holocene stratigraphy and environmental history of a shallow water embayment in Narragansett Bay, RI*. Estuarine Research Federation, Providence, RI. November 7, 2007 (Poster with abstract).
275. Culbertson, J.B., Valiela, I., Pickart, M., Peacock, E., Reddy, C.M. *Response of salt marsh grass to residual petroleum spilled 38 years ago in Wild Harbor, MA*. Estuarine Research Federation, Providence, RI. November 5, 2007 (Presentation with abstract).
276. Ventura, G.T., Kenig, F., Reddy, C.M., Schieber, J., Nelson, R.K., Dinel, E., Frysinger, G.S. *Molecular evidence of Late Archean archea and the presence of a subsurface hydrothermal biosphere*. Geological Society of America. October 30, 2007. Denver, CO. (Presentation with abstract). Invited.
277. Slater, G.F., Mills, C.T., Mandernack, K., Reddy, C.M. *Natural abundance ^{14}C as a tool to constrain subsurface microbial methanogenesis and methanotrophy*. Geological Society of America. October 29, 2007. Denver, CO. (Presentation with abstract).
278. Plata, D. L., Gschwend, P.M., Reddy, C.M. *Coproducts of carbon nanotube synthesis: Emerging contaminants associated with the nanomaterial revolution*. 234th ACS National Meeting, Boston, MA, United States, August 22, 2007 (Poster with abstract).
279. Smith, K.J., Reddy, C. M., Hofstetter, T. *Halogenated methyl bipyroles in the Northwestern Atlantic Ocean*. 234th ACS National Meeting, Boston, MA, United States, August 22, 2007 (Poster with abstract).
280. Arey, J.S., Nelson, R.K., Reddy, C. M. *Disentangling oil weathering in the environment using GCxGC*. 234th ACS National Meeting, Boston, MA, August 20, 2007. (Presentation with abstract). Attended.
281. Gaines, R.B., Frysinger, G.S., Reddy, C.M., Nelson, R. K. *Comprehensive 2-D gas chromatography (GCxGC) in environmental forensics*. 234th ACS National Meeting, Boston, MA, August 20, 2007. (Presentation with abstract). Attended.
282. Gustafsson, O., Mandalakis, M., Zencak, Z., Reddy, C.M., Klanova, J., Holoubek, I., Stephanou, E.G., *Distinguishing natural and anthropogenic sources of aliphatic and aromatic hydrocarbons using natural abundance radiocarbon measurements*. 234th ACS National Meeting, Boston, MA, August 20, 2007. (Presentation with abstract). Attended.
283. Haddad, R., Reddy, C.M., Nelson, R.K., Xu, L. *Sources of polar organic matter in petroleum-contaminated groundwater: New insights into biogeochemical processes and fate and transport implications*. 234th ACS National Meeting, Boston, MA, August 20, 2007. (Presentation with abstract). Attended.
284. Reddy, C.M. *Long-term studies on a 40-year old oil spill*. 234th ACS National Meeting, Boston, MA, August 20, 2007. (Presentation with abstract). Invited. Attended.
285. Sylva, S.P., Ball, L., Nelson, R.K., Reddy, C.M. *Compound specific $^{81}\text{Br}/^{79}\text{Br}$ analysis by capillary gas chromatography multicollector inductively coupled plasma mass spectrometry (GC-MC-ICPMS)*. 234th ACS National Meeting, Boston, MA, August 20, 2007. (Presentation with abstract). Attended.

286. Reddy, C.M. *An Environmental chemist's perspective on biodiesel*. Cape Cod Renewable Fuels Partnership Seminar series. April 27, 2007. Eastham, MA. (Presentation). Invited. Attended.
287. Valentine, D.L., Wardlaw, G.D., Franklin, S., Mau, S., Reddy, C.M., Nelson, R.K., Arey, J.S., *Biodegradation of hydrocarbons associated with subsurface reservoirs and natural seepage*. AAPG Annual Meeting, Long Beach, CA. April 3, 2007 (Presentation and abstract). Invited.
288. Reddy, C.M. *Radiocarbon and the last voyage of the whaling ship The Charles W. Morgan: Insights into the sources of halogenated organic compounds in the environment* Virginia Institute of Marine Science Seminar series. January 16, 2007. Gloucester Point, VA. (Presentation). Invited. Attended.
289. Kent, J.M. and Lippsett, L. *Electrons? Paper? Yes: lessons on building a hybrid publication*. American Geophysical Union Meeting, December 15, 2006. San Francisco, CA. (Presentation with abstract). {Please note that I prepared and presented this talk after Jim Kent left WHOI. Jim and Lonny Lippsett did write the abstract}. Attended.
290. Reddy, C. M. *Who is my audience, what is my message, and know my reporters deadline: How to be more effective communicating with the media*. American Geophysical Union Meeting, December 14, 2006. San Francisco, CA. (Presentation with abstract). Attended.
291. Wardlaw, G.D., Reddy, C. M., Nelson, R. K., Ehrhardt, C. J., Valentine, D. L. (2006). *Petroleum oxidation in marine microcosms by natural microbial assemblages*. American Geophysical Union Meeting, December 12, 2006. San Francisco, CA. (Poster with abstract).
292. Ventura, G.T., Kenig, F., Reddy, C.M., Schieber, J., Nelson, R.K., Frysinger, G.S., Gaines, R.B., *Molecular fossil evidence of Archaea and a deep biosphere during the Late Archean*. American Geophysical Union Meeting, December 11, 2006. San Francisco, CA. (Presentation with abstract). Attended.
293. Reddy, C.M. *Studying the long-term fate of an acute dose of highly-reduced carbon into Buzzards Bay, MA* University of Connecticut, Department of Marine Sciences. December 1, 2006. Avery Point, CT. (Presentation). Invited. Attended.
294. Reddy, C.M. *Coal, Lead, and Chernobyl: The chemical legacy of the Industrial Revolution in New England*. 5th Annual Environmental Research Symposium, Bridgewater State College. November 11, 2006. Bridgewater, MA. (Presentation). Invited. Attended.
295. King, J.W., Heil, C., Hubeny, J.B., Lewis, C.F.M., Reddy, C.M. *Environmental magnetic studies in the Great Lakes watershed: Closed lake status for the Great Lakes from 9400-7700 CAL BP*, GSA Annual Meeting, October 23, 2006. (Presentation with abstract).
296. Reddy, C.M. *Biodiesel: Some initial results from its composition and environmental chemistry*. Environmental Engineering and Science Seminar Series, Stanford University, October 6, 2006. Stanford, CA. (Presentation). Invited. Attended.
297. Reddy, C.M. *Sources of halogenated organic compounds in the marine environment: Tales from the last voyage of the Charles W. Morgan* United States Coast Guard Academy Seminar Series. September 6, 2006. New London, CT. (Presentation). Invited. Attended.
298. Flores, D.X., Gschwend, P.M., Reddy, C.M. *Importance of black carbon measurements in seawater samples*. Gordon Research Conference, Environmental Sciences: Water Holderness School, Plymouth, NH, June 28, 2006. (Poster with abstract).
299. Plata, D.L., Reddy, C.M., Gschwend, P.M. *Detecting carbon nanotubes in environmental matrices*. Gordon Research Conference, Environmental Sciences: Water Holderness School, Plymouth, NH, June 27, 2006. (Poster with abstract).
300. Arey, J.S., Nelson, R.K., Nelson, R.K., Wardlaw, G.D., Valentine, D.L. Reddy, C.M. *Disentangling Evaporation and Water-washing Signatures in Weathered Oil Mixtures using*

- Comprehensive Two-Dimensional Gas Chromatography (GCxGC)* Gordon Research Conference, Environmental Sciences: Water. Holderness School, Plymouth, NH, June 27, 2006. (Poster with abstract).
301. Wardlaw, G.D., Reddy, C.M., Nelson, R.K., Valentine, D. *Petroleum Weathering Associated with Hydrocarbon Migration and Seepage, a Case Study from the Santa Barbara Channel, CA*, University of California Toxic Substance Research and Teaching Program, San Diego, CA, April 28, 2006. (Poster with abstract).
302. Peacock, E.E., Reddy, C.M., Hampson, G. *The persistence of petroleum hydrocarbons in two Buzzards Bay salt marshes*. New England Estuarine Research Society, Hull, MA, April 7, 2006, (Presentation with abstract).
303. Flores, D.X., Gschwend, P.M., Reddy, C.M. *Assessing the presence of black carbon in coastal POC*. HUMIC SCIENCE & TECHNOLOGY IX, Northeastern University, Boston, MA, USA, March 22, 2006. (Presentation with abstract).
304. Fryzinger, G.S., Gaines, R.B., Reddy, C.M., Nelson, R.K. *Exploring the Cyclic Hydrocarbon Composition of Environmental and Geological Samples*. The Pittsburgh Conference 2006, Orlando, FL, March 16, 2006 with abstract. (Presentation with abstract).
305. Reddy, C.M. *Four decades of research on the West Falmouth oil spill: A review*. Marine and Atmospheric Chemistry Seminar Series, Graduate School of Oceanography, University of Rhode Island, Narragansett, RI, March 3, 2006. (Presentation). Invited. Attended.
306. Slater, G.F., Nelson, R.K., Kile, B.M., Reddy, C.M., Eglinton, T.I. *Direct evidence of petroleum biodegradation from ¹⁴C analysis of microbial lipids*. Ocean Sciences Meeting, Honolulu, HI, February 20, 2006. (Poster with abstract). Attended
307. Reddy, C.M., Teuten, E.L., Xu, L. *Molecular-level radiocarbon analysis of halogenated organic compounds*. Ocean Sciences Meeting, Honolulu, HI, February 20, 2006. (Poster with abstract). Attended
308. Hockaday, W.C., Purcell, J., Reddy, C.M., Gschwend, P.M., Hatcher, P.G. *Molecular-level characterization of coastal marine dissolved organic matter*. Ocean Sciences Meeting, Honolulu, HI, February 21, 2006. (Presentation with abstract). Attended
309. Lima, A.L., Reddy, C.M., Eglinton, T.I. *Apportioning sources of pyrogenic polycyclic aromatic hydrocarbons (PAHs) using radiocarbon measurements*. Ocean Sciences Meeting, Honolulu, HI, February 20, 2006. (Presentation with abstract). Attended.
310. White, H.K., Slater, G.F., Eglinton, T.I., Reddy, C.M. *Constraints on the origin and fate of natural and anthropogenic organic compounds in salt marsh sediments from radiocarbon analysis*. Ocean Sciences Meeting, Honolulu, HI, February 20, 2006. (Presentation with abstract). Attended
311. Drenzek, N., Poussart, P., Lima, A.L., Hughen, K., Reddy, C.M., Eglinton, T.I., *Investigating the temporal relationship between the synthesis and sediment incorporation of vascular plant biomarkers using molecular level ¹⁴C analysis*. Ocean Sciences Meeting, Honolulu, HI, February 20, 2006. (Poster with abstract). Attended.
312. Gustafsson, O., Mandalakis, M., Elmquist, M., Zencak, Z., Reddy, C.M., *Radiocarbon-based studies of black carbon and molecular combustion markers in sediments and air*. Ocean Sciences Meeting, Honolulu, HI, February 20, 2006. (Presentation with abstract). Attended.
313. Wardlaw, G.D., Reddy, C.M., Nelson, R.K., Valentine, D. *Petroleum Weathering Associated with Hydrocarbon Migration and Seepage, a Case Study from the Santa Barbara Channel, CA*, American Geophysical Union meeting, San Francisco, CA, December 6, 2005. (Poster with abstract).

314. Teuten, E.L., Reddy, C.M. *Identification of bioaccumulated halogenated natural products*. SETAC North America 26th Annual Meeting, Baltimore, MD, November 17, 2005. (Presentation with abstract).
315. Culbertson, J.B., Valiela, I., Peacock, E.E., Reddy, C.M., Carter, A. *Behavioral effects on the salt marsh fiddler crab, Uca pugnax, chronically exposed to petroleum hydrocarbons*. SETAC North America 26th Annual Meeting, Baltimore, MD, November 16, 2005. (Presentation with abstract).
316. Brownawell, B., Dick, J., Li, X., McElroy, A., Reddy, C., Nelson, R., *Sources of petroleum hydrocarbons in sediments of the NY/NJ harbor complex*. SETAC North America 26th Annual Meeting, Baltimore, MD, November 15, 2005. (Presentation with abstract).
317. Arey, J.S., Nelson, R.K., Xu, L., Reddy, C.M. *Modeling the effects of water-washing and evaporation on petroleum hydrocarbon mixture composition using comprehensive two-dimensional gas chromatography*. SETAC North America 26th Annual Meeting, Baltimore, MD, November 15, 2005. (Presentation with abstract).
318. Reddy, C.M. *Halogenated organic compounds in the marine environment: natural or industrial?* Environmental Sciences Seminar, November 2, 2005, University of Massachusetts at Boston, Boston, MA. (Presentation). Invited. Attended.
319. Reddy, C.M. *The chemical legacy of the Industrial Revolution* Chemistry Seminar Series, University of Mary Washington, Fredericksburg, VA October 20, 2005. (Presentation). Invited. Attended.
320. Culbertson, J. B., Valiela, I., Peacock, E. E., Reddy, C., A. Carter. *Continued effects on the salt marsh fiddler crab, Uca pugnax, following long-term petroleum hydrocarbon exposure*. Estuarine Research Federation 18th biennial conference, October 18, 2005. (Presentation with abstract).
321. Reddy, C.M. *Halogenated organic compounds in the marine environment: natural or industrial?* Aquatic Science Seminar, October 5, 2005, Massachusetts Institute of Technology, Cambridge, MA. (Presentation)