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EDUCATION

Ph.D., Engineering and Public Policy, Carnegie Mellon University, Pittsburgh, PA, April 1999.

“An Assessment of Air Pollution and Environmental Impacts of International Maritime Transportation Including Engineering Controls and Policy Alternatives”

M.S. Mechanical Engineering, Carnegie Mellon University, Pittsburgh, PA, May 1998.

M.S. Engineering and Public Policy, Carnegie Mellon University, Pittsburgh, PA, May 1997.

B.S., Marine Engineering Technology, California Maritime Academy, Vallejo, CA, May 1985.

Professional Engineer, Mechanical, State of California (License No. M28238), 1993.

PROFESSIONAL EMPLOYMENT

Professor, School of Marine Science and Policy, College of Earth, Ocean, and Environment, University of Delaware, September 2009 – present.

Professor, Civil and Env. Engineering, College of Engineering, University of Delaware, Sep 2009 – present.

Interim Director, Marine Policy Program, College of Marine and Earth Studies, University of Delaware, Sep 2007 – Aug 2008.

Associate Professor, College of Marine and Earth Studies, University of Delaware, Sep 2006 – Sep 2009.

Associate Professor, Civil and Environmental Engineering, University of Delaware, Sep 2006 – Sep 2009.

Principal, Energy and Environmental Research Associates, 2006- present.

Assistant Professor, Graduate College of Marine Studies, University of Delaware, August 2000 – September 2006.

Commissioned Officer, U.S. Naval Reserve, May 1985 – September 2001.

Post-Doctoral Research Engineer, Carnegie Mellon University, June 1999 – August 2000.

Graduate Researcher and Ph.D. Candidate, Carnegie Mellon University, August 1995 - June 1999.

Instructor, Undergraduate Research Ethics Seminars, Carnegie Mellon University, Fall 1997, Spring 1998.

Engineering Instructor, Carnegie Mellon Action Program (CMAP), Pittsburgh, PA, July - August 1996 and 1997.

Teaching Assistant, Introduction to EPP (19-101), Prof. Ed Rubin, Dept of EPP, Fall 1996.

Staff Engineer, Radian International LLC, Walnut Creek, CA, December 1990 – July 1995.

Stationary Engineer, Crystal Cream and Butter Company, June 1990 - December 1990.

Stationary Engineer, Department of Public Works, City of San Francisco, CA, June 1989 - June 1990.

Assistant Teacher of Physics (part time), Lick Wilmerding High School, June 1989 - June 1990.

Teacher, Math and Physics, St. Mary's College High School, Berkeley, CA, September 1987 - June 1989.

Oceangoing Third Assistant Engineer, Exxon Shipping Company, Houston, TX, January 1986 - August 1987.

Field Service Engineer, Westinghouse Corporation, Phoenix, AZ, June 1985 - January 1986.

PUBLICATIONS ResearcherID.com lists 32 cited articles *h-index*=12, ~710 total academic citations as of 1 Jan 2011; 45 Peer-reviewed journal articles; 11 Book chapters or sections; 41 Conference papers; 72 Reports; 6 Other published works including Dictionary and Editorial pieces.

INVITED TALKS, WORKSHOPS AND CONFERENCE PRESENTATIONS More than 138, including more than 35 international venues; testified before United States Senate, Committee on Environment and Public Works

RESEARCH CONTRACTS Principal or co-principal investigator for more than 20 University of Delaware contracts totaling more than \$2.4 Million.

ACADEMIC AND COMMUNITY SERVICE (selected examples) *College and University:* School of Marine Science and Policy (SMSP) Promotion and Tenure Committee, 2009-2011, Chair 2010-2011; University Search Committee for Director of Disaster Research Center, 2009-2010; *Professional Practice:* Member, Committee on Transportation Energy, ADC70, Transportation Research Board, 2008-present; Member, Committee on Marine Environment, AW030, Transportation Research Board, 2006-present; *Community:* Port of Wilmington Maritime Society, Board Member 2010-2013; Testified before United States Senate, Committee on Environment and Public Works, 2005.

COURSES TAUGHT AT UNIVERSITY OF DELAWARE MAST663 Decision Tools for Policy Analysis; CIEG467 Industrial Ecology; MAST802 Case Study in Coastal and Ocean Management; MAST662 Applied Policy Analysis; MAST873 Marine Policy Seminar; MAST817 Research Design and Methods; MAST664 Marine Transportation Policy; MAST679 Shipping and Port Management.

AFFILIATIONS National Society of Professional Engineers, American Society of Mechanical Engineers, Society of Naval Architects & Marine Engineers, American Geophysical Union, Transportation Research Board

JOURNAL PUBLICATIONS

1. **Corbett, J.J.**; Winebrake, J.; Green, E., An assessment of technologies for reducing regional short-lived climate forcers emitted by ships with implications for Arctic shipping. *Carbon Management* **2010**, *1*, (2), 207-225.
2. Comer, B.; **Corbett, J. J.**; Hawker, J. S.; Korfmacher, K.; Lee, E. E.; Prokop, C.; Winebrake, J. J., Marine Vessels as Substitutes for Heavy-1 Duty Trucks in Great Lakes Freight Transportation. *Journal of Air and Waste Management*, 2010.
3. **Corbett, J. J.**; Lack, D. A.; Winebrake, J. J.; Harder, S.; Silberman, J. A.; Gold, M., Arctic shipping emissions inventories and future scenarios. *Atmos. Chem. Phys.* **2010**, *10*, (19), 9689-9704.
4. **Corbett, J. J.**; Lack, D. A.; Winebrake, J. J.; Harder, S.; Silberman, J. A.; Gold, M., Arctic shipping emissions inventories and future scenarios. *Atmos. Chem. Phys. Discuss.* **2010**, *10*, (4), 10271-10311.
5. **Corbett, J. J.**; Winebrake, J. J., The Role of International Policy in Mitigating Global Shipping Emissions. *Brown Journal of World Affairs* **2010**, *16.2*, (Spring/Summer).
6. **Corbett, J. J.**; Wang, H.; Winebrake, J. J., [The effectiveness and costs of speed reductions on emissions from international shipping](#). *Transportation Research Part D: Transport and Environment*, *14*, (8), 593-598, 2009.
7. Lauer, A.; Eyring, V.; **Corbett, J. J.**; Wang, C.; Winebrake, J. J., An assessment of near future policy instruments for international shipping: Impact on atmospheric aerosol burdens and the Earth's radiation budget. *Environmental Science and Technology*, **43**(15), 5992-5998, 2009.
8. Winebrake, J. J.; **Corbett, J. J.**; Green, E. H.; Lauer, A.; Eyring, V., Mitigating the Health Impacts of Pollution from International Shipping: An Assessment of Low-Sulfur Fuel Mandates. *Environmental Science and Technology*, doi: 10.1021/es803224q, **43**(13), 4776-4782, 2009.
9. Eyring, V.; Isaksen, I. S. A.; Berntsen, T.; Collins, W. J.; **Corbett, J. J.**; Endresen, O.; Grainger, R. G.; Moldanova, J.; Schlager, H.; Stevenson, D. S., Assessment of Transport Impacts on Climate and Ozone: Shipping. *Atmospheric Environment*, doi: 10.1016/j.atmosenv.2009.04.059, webpublished 19 May, 2009.
10. Lack, D.; **Corbett, J. J.**; Onasch, T.; Lerner, B. M.; Massoli, P.; Quinn, P. K.; Bates, T. S.; Covert, D. S.; Coffman, D.; Sierau, B.; Herndon, S.; Allan, J.; Baynard, T.; Lovejoy, E.; Ravishankara, A. R.; Williams, E. J., Particulate Emissions from Commercial Shipping. Chemical, Physical and Optical Properties. *Journal of Geophysical Research*, **114** (D00F04), 2009.
11. A. S. M. Vanderlaan; **Corbett, J. J.**; S. L. Green.; J. A. Callahan; C. Wang; R. Kenney; C. T. Taggart; J. Firestone, Probability and Mitigation of Vessel Encounters with North Atlantic Right Whales. *Endangered Species Research*, **6**(3), p.273-285, 2009.
12. Winebrake, J. J.; **Corbett, J. J.**; Falzarano, A.; Hawker, J. S.; Korfmacher, K.; Ketha, S.; Zilora, S., Assessing Energy, Environmental, and Economic Tradeoffs in Intermodal Freight Transportation, *Journal of the Air & Waste Management Association*, **58**(8), 2008.
13. **Corbett, J. J.**, J. J. Winebrake, Emissions Tradeoffs Among Alternate Marine Fuels: Total Fuel Cycle Analysis Of Residual Oil, Marine Gas Oil And Marine Diesel Oil, *Journal of the Air and Waste Management Association*, **58**(4), 538-542, 2008.
14. Wang, C., **J.J. Corbett**, and J. Firestone, Improving Spatial Representation of Global Ship Emissions Inventories, *Environmental Science & Technology*, **42**(1), p. 193-199, 2008.
15. Firestone, J., S.B. Lyons, C. Wang, and **J.J. Corbett**, Statistical Modeling of North Atlantic Right Whale Migration along the Mid-Atlantic Region of the Eastern Seaboard of the United States, *Biological Conservation*, **141**(1), p. 221-232, 2008.
16. **Corbett, J.J.**, J.J. Winebrake, E.H. Green, P. Kasibhatla, V. Eyring, and A. Lauer, Mortality from Ship Emissions: A Global Assessment, *Environmental Science & Technology*, **41**(24), 8512-8518, 2007. *Recognized by ACS Publications as a Most-Accessed Article for 4th quarter 2007, 1st quarter 2008, and for the full year 2007.*
17. Wang, C., **J.J. Corbett**, and J.J. Winebrake, Cost-effectiveness of Reducing Ship Sulfur Emissions, *Environmental Science & Technology*, **41**(24), 8233-8239, 2007. *Recognized by ACS Publications as a Most-Accessed Article for 4th quarter 2007.*
18. **Corbett, J.J.**, and J.J. Winebrake, Sustainable Movement of Goods: Energy and Environmental Implications of Trucks, Trains, Ships, and Planes, *Environmental Management*, November: p 8-12, 2007.
19. Wang, C., and **J.J. Corbett**, The Costs and Benefits of Reducing SO₂ Emissions from Ships in the US West Coastal Waters, *Transportation Research Part D*, **12**(8): p. 577-588, 2007. *One of the "Top 25 Hottest Articles" in this journal for October-December 2007, and January-March 2008.*

20. Wang, C., **J.J. Corbett**, and J. Firestone, Modeling Energy Use and Emissions from North American Shipping: Application of the Ship Traffic, Energy, and Environment Model, *Environmental Science and Technology*, **41** (9), 3226-3232, 2007.
21. Winebrake, J.J., **J.J. Corbett**, and P.E. Meyer, Energy Use and Emissions from Marine Vessels: A Total Fuel Cycle Approach, *Journal of Air and Waste Management*, **57**(January), 102-110, 2007.
22. **Corbett, J.J.**, and D.S. Chapman, An Environmental Decision Framework Applied to Marine Engine Control Technologies, *Journal of Air and Waste Management*, **56**(June), 841-851, 2006.
23. Schuster, T., J.B. Byrne, **J.J. Corbett**, and Y. Schreuder, Assessing the Potential Extent of Carsharing in the United States: A New Method and Its Implications, *Transportation Research Record*, **1927**, 2005.
24. Wang, C., and **J.J. Corbett**, Geographical Characterization of Ship Traffic and Emissions, *Transportation Research Record*, **1909**, 2005.
25. Firestone, J., and **J.J. Corbett**, Coastal and Port Environments: International Legal and Policy Responses to Reduce Ballast Water Introductions of Potentially Invasive Species, *Ocean Development and International Law*, **36**(3), 291-316, 2005. Condensed for republication in: Firestone, J., and J.J. Corbett, Coastal and Port Environments: International Legal and Policy Responses to Reduce Ballast Water Introductions of Potentially Invasive Species, *Sustainable Development Law & Policy*, **VII** (1 (Fall 2006)), 45-49, 2006.
26. Winebrake, J.J., **J.J. Corbett**, C. Wang, A.E. Farrell, and P. Woods, Optimal Fleetwide Emissions Reductions for Passenger Ferries: An Application of a Mixed-Integer Nonlinear Programming Model for the New York-New Jersey Harbor, *Journal of Air & Waste Management*, **55**(4), 458-466, 2005.
27. Chen, G., L.G. Huey, M. Trainer, D. Nicks, **J.J. Corbett**, T. Ryerson, D. Parrish, J.A. Neuman, J. Nowak, D. Tanner, J. Holloway, C. Brock, J. Crawford, J.R. Olson, A. Sullivan, R. Weber, S. Schauffler, S. Donnelly, E. Atlas, J. Roberts, F. Flocke, G. Hübler, and F. Fehsenfeld, An Investigation of the Chemistry of Ship Emission Plumes during ITCT 2002, *Journal of Geophysical Research - Atmospheres*, **110**(D10), 2005.
28. Theis, M., N.D. Cass, J.B. Byrne, and **J.J. Corbett**, The Role of Technology in Achieving Environmental Policy Goals in the MTS, *Transportation Research Record*, **1871**, 42-49, 2004.
29. Gurian, P.L., and **J.J. Corbett**, Inland Sulfate Deposition in North America from Marine Emissions, *Transportation Research Record*, **1871**, 50-54, 2004.
30. **Corbett, J.J.**, and H.W. Koehler, Considering Alternative Input Parameters In An Activity-Based Ship Fuel Consumption And Emissions Model, *Journal of Geophysical Research - Atmospheres*, **109**(D23303), 2004.
31. **Corbett, J.J.**, and H.W. Koehler, Updated Emissions from Ocean Shipping, *Journal of Geophysical Research - Atmospheres*, **108**(D20), doi:10.1029/2003JD003751, 4650-4666, 2003.
32. **Corbett, J.J.**, New Directions: Designing Ship Emissions and Impacts Research to Inform Both Science and Policy, *Atmospheric Environment*, **37**(33): 4719-4721, 2003.
33. Farrell, A., D. H. Redman, **J.J. Corbett**, J.J. Winebrake, Comparing Air Pollution From Ferry and Landside Commuting, *Transportation Research D: Energy and Environment*, **8**(5): 343-360, 2003.
34. Farrell, A., D.W. Keith, and **J.J. Corbett**, A Strategy for Introducing Hydrogen into Transportation, *Energy Policy*, **31**(13): 1357-1367, 2003.
35. Firestone, J., and **J.J. Corbett**, Maritime Transportation: A Third Way For Port And Environmental Security, *Widener Law Symposium Journal*, **9**(2): 419-437, 2003.
36. Farrell, A., **J.J. Corbett**, J.J. Winebrake, Controlling Air Pollution from Passenger Ferries: Cost Effectiveness of Seven Technological Options, *Journal of the Air & Waste Management Association*, **52**(Dec): 1399-1410, 2002.
37. **Corbett, J.J.**, and P.S. Fischbeck, Commercial Marine Emissions and Life-Cycle Analysis of Retrofit Controls in a Changing Science and Policy Environment, *Naval Engineers Journal*, **114**(1):93-106, 2002.
38. **Corbett, J.J.**, Emissions from Ships in the Northwestern United States, *Environmental Science & Technology*, **36**(6): 1299-1306, 2002.
39. **Corbett, J.J.**, and A. Farrell, Mitigating Air Pollution Emissions From Ferries, *Transportation Research D: Energy and Environment*, **7**(3), 197-211, 2002.
40. **Corbett, J.J.**, and A.L. Robinson, Measurements of NOx Emissions and In-Service Duty Cycle from a Towboat Operating on the Inland River System, *Environmental Science & Technology*, **35**(7), 1343-1349, 2001.
41. Kasibhatla, P., H. Levy, W.J. Moxim, S.N. Pandis, **J.J. Corbett**, M.C. Peterson, R.E. Honrath, G.J. Frost, K. Knapp, D.D. Parrish, and T.B. Ryerson, Do Emissions from Ships Have a Significant Impact on Concentrations of Nitrogen Oxides in the Marine Boundary Layer?, *Geophysical Research Letters*, **27**(15), 2229-2233, 2000.
42. **Corbett, J.J.**, and P.S. Fischbeck, Emissions from Waterborne Commerce in United States Continental & Inland Waters, *Environmental Science and Technology*, **34**(15), 3254-3260, 2000.
43. Capaldo, K.P., **J.J. Corbett**, P. Kasibhatla, P. Fischbeck, S.N. Pandis, Effects of Ship Emissions on Sulphur Cycling and Radiative Climate Forcing Over the Ocean, *Nature*, **400**, 743-746, 1999.

44. **Corbett, J.J.**, P.S. Fischbeck, S.N. Pandis, Global Nitrogen and Sulfur Emissions Inventories for Ongoing Ships, *Journal of Geophysical Research*, **104**(D3), 3457-3470, 1999.
45. **Corbett, J.J.**, P.S. Fischbeck, Emissions from Ships, *Science*, **278**(5339), 823-824, 1997.

BOOK CHAPTERS

1. **Corbett, J. J.**, and J. J. Winebrake, Freight Transportation and the Environment, in *Intermodal Transportation: Moving Freight in a Global Economy*, edited by Michael D. Meyer and Gen Giuliano, Eno Transportation Foundation, Washington, D.C., 2011.
2. **Corbett, J. J.**; Winebrake, J. J.; Endresen, Ø.; Eide, M.; Dalsøren, S.; Isaksen, I. S.; Sjørgård, E., *International Maritime Shipping: The Impact of Globalisation on Activity Levels*. In *Globalisation, Transport and the Environment*, Braathen, N.-A., Ed. Organization for Economic Cooperation and Development: Paris, 2010; pp 55-79.
3. Endresen, Ø.; Eide, M.; Dalsøren, S.; Isaksen, I. S.; Sjørgård, E.; **Corbett, J. J.**; Winebrake, J. J., *International Maritime Shipping: Environmental Impacts of Increased Activity Levels*. In *Globalisation, Transport and the Environment*, Braathen, N.-A., Ed. Organization for Economic Cooperation and Development: Paris, 2010; pp 161-184.
4. van Dender, K.; Crist, P.; **Corbett, J. J.**; Winebrake, J. J., *Policy Instruments to Limit Negative Environmental Impacts: An Economic Perspective*. In *Globalisation, Transport and the Environment*, Braathen, N.-A., Ed. Organization for Economic Cooperation and Development: Paris, 2010; pp 225-248.
5. Winebrake, J. J.; **Corbett, J. J.**, Chapter 13: Improving the Energy Efficiency and Environmental Performance of Goods Movement. In *Climate and Transportation Solutions: Findings from the 2009 Asilomar Conference on Transportation and Energy Policy*, Sperling, D.; Cannon, J., Eds. Institute of Transportation Studies, University of California, Davis: Sacramento, CA, 2010.
6. **Corbett, J.J.**, and J.J. Winebrake, International Trade and Global Shipping, in *Handbook on Trade and Environment*, edited by K.P. Gallagher, Edward Elgar Publishing, Northampton, MA, 2008.
7. Benkovitz, C.M., H. Akimoto, **J.J. Corbett**, J.D. Mobley, J. Olivier, J.V. Aardenne, and V. Vestreng, Compilation of Regional to Global Inventories of Anthropogenic Emissions, in *Emissions of Atmospheric Trace Compounds*, ed. C. Granier, P. Artaxo, and C. Reeves, pp. 545, Kluwer Academic Publishing, 2004.
8. **Corbett, J.J.**, Marine Transportation and Energy Use, in *Encyclopedia of Energy*, edited by C. J. Cleveland. San Diego, CA, Elsevier Science, 2004.
9. **Corbett, J.J.**, The Marine Transportation System, *Handbook of Transportation Engineering*, edited by M. Kutz, New York, NY, McGraw-Hill, 2003.
10. **Corbett, J.J.**, Marine Transportation and Global Climate Change, in *Global Climate Change and Transportation: Coming to Terms*, pp. 131-142, Eno Transportation Foundation, Washington, DC, 2002.
11. **Corbett, J.J.**, and P.S. Fischbeck, International Technology-Policy: Challenges in Regulating Ship Emissions, in *Improving Regulation: Cases in Environment, Health and Safety*, ed. S. Farrow, and P.S. Fischbeck, RFF Press, Washington, DC, 2001.

CONFERENCE PAPERS

1. Hawker, J. S.; Comer, B.; **Corbett, J. J.**; Ghosh, A.; Korfmacher, K.; Lee, E. E.; Li, B.; Prokop, C.; Winebrake, J. J. In *An Integrated Model to Study Environmental, Economic, and Energy Trade-offs in Intermodal Freight Transportation*, The International Environmental Modeling and Software Society (iEMSs) 2010, Ottawa, Canada, 5-8 July 2010, 2010; International Environmental Modeling and Software Society: Ottawa, Canada, 2010.
2. **Corbett, J. J.**, Wang, H., Winebrake, J. J., The Impacts of Speed Reductions on Vessel-Based Emissions for International Shipping, Paper Number: 09-3742, in *88th Annual Meeting of the Transportation Research Board*, Washington, DC, January 2009.
3. **Corbett, J.J.**, Corbett, J. J.; Winebrake, J. J.; Gold, M.; Harder, S., Emissions from International Shipping in the Arctic. In *2008 Fall Meeting of the American Geophysical Union (AGU)*, American Geophysical Union: San Francisco, CA, 2008; Vol. A11A-0079.
4. Lack, D. A.; **Corbett, J. J.**; Onasch, T.; Lerner, B. M.; Massoli, P.; Quinn, P. K.; Bates, T. S.; Covert, D. S.; Sierau, B.; Herndon, S.; Allan, J.; T., B.; Lovejoy, E.; Ravishankara, A. R.; Williams, E. J., Particulate Emissions from Commercial Shipping. Chemical, Physical and Optical Properties, In *2008 Fall Meeting of the American Geophysical Union (AGU)*, San Francisco, California, 2008; American Geophysical Union: San Francisco, California, 2008.
5. **Corbett, J. J.**, and J. J. Winebrake, The impact of globalisation on international maritime transport activity: Past trends and future perspectives, in *OECD/ITF Global Forum on Sustainable Development: Transport And Environment In a Globalising World*, Guadalajara, Mexico, November 2008.
6. Winebrake, J.J., **J.J. Corbett**, A. Falzarano, J.S. Hawker, K. Korfmacher, S. Ketha, and S. Zilora, Minimizing

- Energy And Environmental Impacts Of Intermodal Freight Transport: Development And Application Of A Geospatial Routing Tool, in *87th Annual Meeting of the Transportation Research Board*, Washington, DC, 2008.
7. Falzarano, A., S.S. Ketha, J.S. Hawker, K. Korfmacher, J.J. Winebrake, S. Zilora, and **J.J. Corbett**, Development of an Intermodal Network for Freight Transportation Analysis, Paper UC1488, in *2007 ESRI International User Conference*, ESRI, San Diego, CA, 2007.
 8. Wang, C., **J.J. Corbett**, and J. Callahan, Geospatial Modeling of Ship Traffic and Air Emissions, Paper UC1683, in *2007 ESRI International User Conference*, ESRI, San Diego, CA, 2007.
 9. Winebrake, J.J., J.S. Hawker, **J.J. Corbett**, A. Falzarano, S. Ketha, K. Korfmacher, and S. Zilora, A Geospatial Intermodal Freight Transport Model for Energy and Environmental Analyses, in *Transportation Research Board, Transportation Land Use, Planning, Air Quality Conference*, Orlando, FL, 2007.
 10. Weber, C.L., H.S. Matthews, **J.J. Corbett**, and E.D. Williams, Carbon Emissions Embodied in Importation, Transport and Retail of Electronics in the U.S.: A Growing Global Issue, in *2007 IEEE International Symposium on Electronics and the Environment and the Electronics Recycling Summit*, IEEE Computer Society Technical Committee On Electronics & The Environment And The International Association Of Electronics Recyclers, Orlando, FL, 2007.
 11. **Corbett, J.J.**, J.J. Winebrake, and E. Green, Evaluating Container Fee Impacts on Port Choice: A Case Study of the Ports of Los Angeles, Long Beach, and Oakland, Paper No. 07-2347, in *Transportation Research Board 86th Annual Meeting*, Transportation Research Board, Washington, DC, 2007.
 12. Winebrake, J.J., **J.J. Corbett**, and P.E. Meyer, A Total Fuel Life-Cycle Analysis Of Energy And Emissions From Marine Vessels, Paper No. 07-0817, in *Transportation Research Board 86th Annual Meeting*, Transportation Research Board, Washington, DC, 2007.
 13. Wang, C., and **J.J. Corbett**, A Preliminary Estimation of Costs and Benefits for Reducing Sulfur Emissions from Cargo Ships in the U.S. West Coastal Waters, Paper 07-3402, in *Transportation Research Board 86th Annual Meeting*, Transportation Research Board, Washington, DC, 2007.
 14. Wang, C., S.B. Lyons, **J.J. Corbett**, and J. Firestone, Using ship speed and mass to describe potential collision with whales: An application of the Ship Traffic, Energy and Environment Model (STEEM), Paper 07-2368 (accepted), in *Transportation Research Board 86th Annual Meeting*, Transportation Research Board, Washington, DC, 2007.
 15. Lindhjem, C.E., J. Russell, and **J.J. Corbett**, Development of Gridded Ocean-going Vessel Emission Inventories, in *15th Annual International Emission Inventory Conference*, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Emissions Inventory Group, New Orleans, 2006.
 16. Winebrake, J.J., **J.J. Corbett**, and P.E. Meyer, Total Fuel-Cycle Emissions for Marine Vessels: A Well-to-Hull Analysis with Case Study, in *13th CIRP International Conference on Life Cycle Engineering, LCE2006*, Leuven, Belgium, 2006.
 17. Wang, C., and **J.J. Corbett**, Demonstration of An Enhanced Activities Approach for Producing Spatially Resolved Ship Emission Inventories, in *Marine Environmental Engineering Technology Symposium 2006*, American Society of Naval Engineers & Society of Naval Architects and Marine Engineers, Washington, DC, 2006.
 18. Wang, C., and **J.J. Corbett**, Adapting Bottom-up Methods to Top-down Spatially Resolved Ship Emissions Inventories, in *Transportation Research Board 85th Annual Meeting*, Transportation Research Board of the National Academies, Washington, DC, Reviewed Paper No. 06-1253, 2006.
 19. **Corbett, J.J.**, and D.S. Chapman, Decision Framework for Emission Control Technology Selection, in *84th Annual Meeting of the Transportation Research Board*, Reviewed Paper No. 05-1804, Washington, DC, 2005.
 20. Wang, C., and **J.J. Corbett**, Geographical Characterization of Ship Traffic and Emissions, in *84th Annual Meeting of the Transportation Research Board*, Reviewed Paper No. 05-1654, Washington, DC, 2005.
 21. Schuster, T., J.B. Byrne, **J.J. Corbett**, and Y. Schreuder, TRB Paper: Assessing the Potential Extent of Carsharing in the United States: A New Method and Its Implications, in *84th Annual Meeting of the Transportation Research Board*, Reviewed Paper No. 05-2144, Washington, DC, 2005.
 22. Billings, R., R. Chang, H. Perez, **J.J. Corbett**, and S. Wells, Proposed Enhancements to the Mineral Management Service Commercial Marine Vessel Emission Inventory for the Gulf of Mexico, in *13th International Emission Inventory Conference*, pp. 12, U.S. EPA Emission Factors and Inventory Group; Emission Inventory Improvement Program; Emissions, Monitoring and Analysis Division; Office of Air Quality Planning & Standards, Clearwater, FL, 2004.
 23. Farrell, A.E., **J.J. Corbett**, D.H. Redman, and J.J. Winebrake, Air Quality Impacts of Passenger Ferry Service, in *83rd Annual Meeting of the Transportation Research Board*, Reviewed Paper No. 04-3134, Washington, DC, 2004.
 24. Gurian, P.L., and **J.J. Corbett**, Inland Sulfate Deposition in North America from Marine Emissions, in *83rd Annual Meeting of the Transportation Research Board*, Reviewed Paper No. 04-2588, Washington, DC, 2004.
 25. Theis, M., N.D. Cass, J.B. Byrne, and **J.J. Corbett**, The Role of Technology in Achieving Environmental Policy Goals in the MTS, in *83rd Annual Meeting of the Transportation Research Board*, Reviewed Paper No. 04-2901,

- Washington, DC, 2004.
26. Robert Behr, Daniel Gore, Jonathan DeHart, Gregory Thompson, Mridul Gautam, Nigel Clark, William Remley, **James Corbett**, Advocating the Development of Universal Onboard Marine Emission Measurement Protocols, *Marine Environmental Engineering Technical Symposium (MEETS) 2003*, SNAME/ASNE, Washington, DC, 20-21 2003.
 27. **Corbett, J.J.**, D.K. Nicks Jr., J.S. Holloway, T.B. Ryerson, J.A. Neuman, J.B. Nowak, C.A. Brock, M. Trainer, G. Hubler, D.D. Parrish, K.K. Perkins, E. Dunlea, D.T. Sueper, F.C. Fehsenfeld, Measurements of Marine Vessel Emissions and Resulting Plume Chemistry Off of the California Coast During ITCT, *Eos Transactions of AGU Fall Meeting*, **83**(47): Abstract A62B-0160, San Francisco, CA, 6-10 December, 2002.
 28. Farrell, A., **J.J. Corbett**, and J.J. Winebrake, Controlling Air Pollution from Passenger Ferries: Cost Effectiveness of Seven Technological Options, Reviewed Paper No. 02-2651 in *TRB 81st Annual Meeting*, Transportation Research Board, Washington, DC, 2002.
 29. Farrell, A., D.H. Redman, **J.J. Corbett**, and J.J. Winebrake, Air Pollution from Matching Water- and Land-Based Travel: Implications for Passenger Ferries in the San Francisco Bay, Reviewed Paper No. 02-2644 in *TRB 81st Annual Meeting*, TRB, Washington, DC, 2002.
 30. Farrell, A., D. Keith, and **J.J. Corbett**, Adaptive Management of Technological Change: Strategy for Introducing Hydrogen into Transportation, in *TRB 81st Annual Meeting*, Transportation Research Board, Washington, DC, 2002.
 31. Farrell, A., D. Keith, and **J.J. Corbett**, A Strategy for Introducing Hydrogen into Transportation, in *Transportation, in Transportation, Energy, and Environmental Policy: Managing Transitions*, edited by D. Sperling, and K. Kurani, pp. 142-160, Transportation Research Board of the National Academies, VIII Biennial Asilomar Conference, 2001.
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3. Mokashi, A. J.; **Corbett, J. J.** *Prioritized Actions for Issuance of MARAD's Environmental Award*; University of Delaware: Newark, DE, 19 November 2010, 2009; p 58.

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5. **Corbett, J. J.**; Ghosh, A.; Hawker, J. S.; Korfmacher, K.; Lee, E. E.; Silberman, J.; Winebrake, J. J. *Infrastructure Performance Improvement to Reduce Corridor Delays for Freight Flows: Application of Geospatial Intermodal Freight Transportation Model, Study Design Memorandum: Milestone for Task I – Assess System Performance Measures*; University of Delaware and Rochester Institute of Technology: Newark, DE, 3 November 2010, 2010.
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39. Comments of J. Firestone, **J.J. Corbett**, and Shannon Lyons, College of Marine and Earth Studies, University of Delaware on: (1) Docket Number 040506143-6016-02: Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales, 71 Fed. Reg. 36299 (June 26, 2006). (2) EIS No. 20060278, Draft DIS, NOA, 00, North Atlantic Ship Strike Reduction Strategy, 71 Fed. Reg. 38641, NOAA,

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2. **Corbett, J.J.**, and J.D. McCown, Cleaner Ship Fuel Could Go Far to Reducing Globe's Pollution, in *Pollution Online*, 2000.
3. Farrell, A., and **J.J. Corbett**, Meeting Environmental Challenges for Ferries, in *TR News*, No. 209, pp. 19-28, July-August 2000.
4. **Corbett, J.J.**, and A. Farrell, Environmental Challenges for Ferry Expansion, in *Marine News*, pp. 30-33, 26 June 2000.
5. Farrell, A., **J.J. Corbett**, "Needed: A Clear Vision of Ferries' Future," *Journal of Commerce*, Vol. 421, No. 29,534, 17 August 1999.
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INVITED TALKS, WORKSHOPS AND CONFERENCE PRESENTATIONS

1. **Corbett, J.J.**, Invited Speaker: Developing Shipping Emissions Assessments, Inventories and Scenarios, ID# A41I-06, A36: Quantification of Emissions: Addressing Current and Future Challenges, *American Geophysical Union 2010 Fall Meeting*, San Francisco, CA, 16 December 2010.
2. **Corbett, J.J.**, Invited Public Lecture: Delaware's Connection to America's Spill, Torch Club of Delaware, Newark, DE, 8 December 2010.
3. **Corbett, J.J.**, Invited Speaker: Approaching from Over-the-Horizon: Science and Policy Connections of Shipping Technology Trends, *NOAA Earth Systems Research Laboratory*, Boulder, CO, 10 November 2010.
4. **Corbett, J.J.**, Invited Speaker: The Challenge of the Here and Now: Navigating opportunity, Sustainable Shipping Conference 2010, Miami, FL, 20-22 October 2010.
5. **Corbett, J.J.**, Invited Speaker: Diesel Black Carbon PM: Changing climate for/and PM control, in session Future Trends: Climate Change and Black Carbon Activities, *Clean Diesel 10 Conference*, Walter E. Washington Convention Center, Washington, DC, 19-20 October 2010.
6. **Corbett, J.J.**, Invited Presentation: Moving Freight to the High Road: Co-benefits of Energy, Economics, and Environment, Chalmers University, Gothenburg, Sweden, 6 September 2010.
7. **Corbett, J.J.**, Invited Presentation: Low-Carbon Shipping: A step toward three dimensions of sustainability, at *Low-Carbon Shipping: A systems approach*, *Project Meeting*, Naval Architecture and marine engineering, University of Strathclyde, Glasgow, Scotland 24 June 2010.
8. **Corbett, J.J.**, Winebrake, J.J., Invited presentation: Climate Change: Implications for Shipping, *World Ocean Council Sustainable Ocean Summit*, Belfast, Ireland, 14-18 June 2010.

9. Winebrake, J.J., **Corbett, J.J.**, Economic Impacts of C3 Rule on Great Lakes Shipping: Modeling fuel price impacts on potential modal diversion, *EPA Stakeholders Meeting*, Ann Arbor, MI, 10 June 2010.
10. **Corbett, J.J.**, Invited Speaker: Transportation, Distribution, and Infrastructure Roles in Bioenergy Pathways, *Northeast Sun Grant 2010 Regional Conference*, 24-26 May 2010.
11. **Corbett, J.J.**, Invited Speaker: Improving the Energy Efficiency and Environmental Performance of Goods Movement: A Multi-Modal Perspective, Freight Efficiency panel at the Alliance to Save Energy's *Workshop on Transportation Energy Efficiency Improvement Potential*, 10 May 2010.
12. **Corbett, J.J.**, Invited Speaker: Session 1— Mission (IM)Possible? Options and Scenarios, *International Bunker Conference 2010 (IBC 2010)*, Stockholm, Sweden, 28-30 April 2010.
13. **Corbett, J.J.**, Invited Speaker: in Roundtable 3—Shipping Green: How Shippers Can Benefit from a Sustainable Intermodal Supply Chain, *7th Annual North American Marine Highways & Logistics Conference*, Linthicum Heights, MD, April 6-7, 2010
14. **Corbett, J.J.**, Invited Speaker: Impacts of Shipping Emissions, at *Second HTAP 2010 Report Content Workshop*, Chapel Hill, NC: 1-2 March, 2010.
15. **Corbett, J.J.**, Winebrake, J.J., Invited presentation: International Arctic Transportation Assessment, In session by *International Aspects of Transportation Energy Subcommittee ADC70(1)*, 89th Transportation Research Board Annual Meeting, January 2010.
16. **Corbett, J.J.**, Invited Speaker: *World Shipping Council Dinner*, New York, NY, 14-15 October, 2009.
17. **Corbett, J.J.**, Invited Speaker: Intermodal Freight Modeling including Carbon Footprint, *Ship Operators Cooperative Program*, Baltimore, MD, 10-11 November, 2009.
18. **Corbett, J.J.**, Invited Speaker and Panel Moderator: *World Maritime Day*, New York, NY, 14-15 October, 2009.
19. **Corbett, J.J.**, Coordinator: *GIFT Workshop*, Rochester, NY, 17 August, 2009.
20. **Corbett, J.J.**, Invited Participant: *Asilomar Conference on Transportation and Energy Policy*, Monterey, CA, 28-31 July 2009.
21. **Corbett, J.J.**, Presentation to Diplomatic Session: *Second IMO GHG Study 2009*, London, UK, 13-14 July 2009.
22. **Corbett, J.J.**, Invited Speaker: *ClimateWorks Black Carbon Summit*, Copenhagen, Denmark, 15-16 June 2009.
23. **Corbett, J.J.**, Conference co-coordinator and Invited Speaker: *Data and Tools for Understanding Goods Movement-Air Quality*, Irvine, CA, 1-4 June 2009.
24. **Corbett, J.J.**, Invited Speaker: Emissions from International Shipping in the Arctic, Task Force on Hemispheric Transport of Air Pollution (HTAP), sponsored by the U.S. EPA and the European Commission, St. Petersburg, Russia, 30 March – 3 April, 2009.
25. **Corbett, J.J.**, GHG Study Group Member, Japan International Transportation Institute, hosted by American President Lines, Oakland, CA, 28-30 January 2009.
26. Winebrake, J.J., **Corbett, J.J.**, Visualizing a Future Supply Chain with Lower-Carbon Goods Movement (P09-0034) at the 88th *Annual Meeting of the Transportation Research Board*, Washington, DC, 11-15 January 2009.
27. **Corbett, J.J.**, Invited Speaker: *ICCT Black Carbon Workshop*, Nobel House, London, UK, 5-6 January 2009.
28. **Corbett, J.J.**, Invited Speaker: Session: Navigating the oceans: Transport security, transport technology, and maritime infrastructures at the *OECD/ITF Global Forum on Sustainable Development: Transport And Environment In a Globalising World*, Guadalajara, Mexico, 10-12 November 2008.
29. **Corbett, J.J.**, Invited Speaker: Shipping's Crucial Role in Reducing Risks of Global Warming, Session One: Climate Change: Shipping's Next Challenge, *Sustainable Shipping: Political Will, Practical Solutions*, Washington, DC 2008.
30. **Corbett, J.J.**, Invited Speaker: Part IV: Impacts of globalisation on transport activity levels at the *XVII Malente Symposium, Theme: More than Water – Oceans and Global Responsibility*, Dräger Foundation, ZEIT Foundation Ebelin and Gerd Bucorius, and the Cluster of Excellence 'The Future Ocean', Kiel Marine Sciences, Lübeck, October 12-14, 2008.
31. **Corbett, J.J.**, Invited Public Address: Achieving a Sustainable Course for Goods Movement on the Delaware, *Port of Wilmington Maritime Society*, University and Whist Club in Wilmington, 3 October, 2008.
32. **Corbett, J.J.**, UD UTC Seminar: Regional Freight Data for Delaware, Newark, DE, September 2008.
33. **Corbett, J.J.**, Invited Seminar: Modeling Multimodal Dimensions of Sustainability in Freight Transportation, *Environment Canada*, Hull, Quebec, August 2008.
34. **Corbett, J.J.**, Invited Seminar: Greenhouse Gas Emissions from International Maritime Transportation, *Environment Canada*, Hull, Quebec, August 2008.
35. **Corbett, J.J.**, J.J. Winebrake, Keynote Address: The Future of Freight: Improving Environmental, Economic, and Energy Dimensions of Goods Movement, *Faster Freight-Cleaner Air (FFCA) East Coast*, NY, NY, June 2008.
36. **Corbett, J.J.**, Invited Presentation: Impacts of Shipping Emissions, *UNECE/CLRTAP Task Force on Hemispheric Transport of Air Pollution*, National Academy of Sciences, Washington, DC, June 2008.

37. Wang H., J. Firestone, **J.J. Corbett**, China Offshore Wind Resource Assessment Using Ship-Based Measurements, *University of Maryland at COAA Spring Workshop*, May, 2008.
38. **Corbett, J.J.**, Invited Seminar: Measuring and Mitigating Goods Movement Health Impacts, *University of Southern California (USC) Keck School of Medicine*, Southern California Environmental Health Sciences Center, May 2008.
39. **Corbett, J.J.**, Invited Seminar: Visualizing Science and Environmental Policy: GIS and Sustainable Freight Transport, *Department of Geography*, University of Delaware, May 2008.
40. **Corbett, J.J.**, Delaware Center For Transportation Spring 2008 Research Showcase, *Delaware Department of Transportation*, Dover, Delaware, May 2008.
41. **Corbett, J.J.**, Moving Goods Well, *Land Use and Environmental Planning Course Lecture*, University of Delaware, D.C., April 2008.
42. **Corbett, J.J.**, J.J. Winebrake, Advancing Commercial Marine Vessel Inventories and Forecasts, presentation to *Project Team for International Maritime Organization Updated Study of Greenhouse Gas Emissions from Ships (Phase I)*, March 2008.
43. **Corbett, J.J.**, J.J. Winebrake, The Benefits, Costs, and Environmental Tradeoffs of Emissions Reductions from Global Shipping, *Deutsches Zentrum fuer Luft- und Raumfahrt (DLR) Institut für Physik der Atmosphäre (IPA)*, Germany, 04 March, 2008.
44. **Corbett, J.J.**, Visualizing Science and Environmental Policy, Invited Seminar, *California State University, Monterey Bay*, February 2008.
45. **Corbett, J.J.**, Science, Environment, and Politics, Invited Lecture, *California State University, Monterey Bay*, February 2008.
46. **Corbett, J.J.**, Understanding CO₂ from Ships, *Future IMO Regulation On Greenhouse Gas Emissions From International Shipping, International Workshop On Expectations And Possibilities*, Danish Maritime Authority, Copenhagen, February 2008.
47. **Corbett, J.J.**, Moving Freight to a Higher Road, in Session: Moving Forward On Reducing Transportation GHG Emissions, *National Council for Science and Environment*, Washington, D.C., January 2008.
48. **Corbett J.J.**, J.A. Callahan, C.L. Callahan, J. Firestone, Comparative Quantitative Estimates of Decreased Encounter Probabilities in the Right Whale Habitat through Shifting of Vessel Traffic, *North Atlantic Right Whale Consortium Meeting*, New Bedford, MA, November 2007.
49. **Corbett J.J.**, Understanding CO₂ from Ships, *Bunkerworld Marine Fuel Sustainability Forum: the Tide of Change*, Long Beach, CA, October 2007.
50. **Corbett, J.J.**, Regional Commercial Marine Vessel Inventories and Forecasts, in *Air Resources Board Chair's Seminar*, California Environmental Protection Agency, Sacramento, CA, August, 2007.
51. **Corbett, J.J.**, and J.J. Winebrake, Greenhouse Gas Impacts from Fuel Switching, in *California Maritime Technical Working Group*, California Environmental Protection Agency, Sacramento, CA, August, 2007.
52. **Corbett, J.J.**, Emissions from Ships in Session: The Contribution of Transportation Sources to Ambient OC Concentrations, *MANE-VU and Midwest RPO Science Meeting*, Timonium, MD, July, 2007.
53. **Corbett, J.J.**, Environmental Impacts of Maritime Shipping in a Freight Context, Invited presentation to the *Joint Transportation Research Center*, Organization for Economic Cooperation and Development and European Commission Ministries of Transport, OECD Headquarters Paris, France, 21-22 May 2007.
54. **Corbett, J.J.**, Engineering Sustainable Freight Transport, *University of California, Merced*, February, 2007.
55. **Corbett, J.J.**, Policy Analyses for Sustainable Shipping: Concepts, Application, Discussion, in *Policy Analysis Seminar Series at Office of Policy NOAA Fisheries Service*, Washington, DC, January, 2007.
56. **Corbett, J.J.**, Environmental Impacts of Ocean Shipping in a Freight Context, Invited presentation to the *Organisation For Economic Co-Operation And Development (OECD) Working Group On Transport*, Environmental Policy Committee, OECD Headquarters Paris, France, 30 November 2006.
57. Firestone, J., **J.J. Corbett**, C. Wang, and S. Lyons, Modeling in Areas with Sparse Data: Statistical Modeling of Spring Mid-Atlantic Migration, in *The Annual Meeting of the North Atlantic Right Whale Consortium*, North Atlantic Right Whale Consortium, New Bedford, Massachusetts, November, 2006.
58. Lyons, S.B., A.S.M. Vanderlaan, C. Wang, **J.J. Corbett**, J. Firestone, and C.T. Taggart, Using vessel-whale strike and encounter probabilities to advance vessel traffic management, in *The Annual Meeting of the North Atlantic Right Whale Consortium at the.*, North Atlantic Right Whale Consortium, New Bedford, Massachusetts, Nov., 2006.
59. Wang, C., S. Lyons, **J.J. Corbett**, and J. Firestone, Using ship speed and mass to describe potential collision severity with whales, in *The Annual Meeting of the North Atlantic Right Whale Consortium*, New Bedford, Massachusetts, November, 2006.
60. **Corbett, J.J.**, Forecasting Freight Emissions, Invited Speaker at *Emissions Inventory and Future Projections Workshop*, Task Force on Hemispheric Transport of Air Pollutants (HTAP), under the UNECE Convention on Long-range Transboundary Air Pollution (LRTAP), <http://www.htap.org/>, Beijing, China, 19 October 2006.

61. **Corbett, J.J.**, LNG Tankers and Air Emissions, Invited presentation to *LNG Interagency Working Group Meeting*, State Lands Commission, Marine Facilities Division, Hercules, CA, 5 October 2006.
62. **Corbett, J.J.**, Moving Freight Transport Onto the High Road, Invited presentations at *UC Davis Hydrogen Pathways Seminar*, 14 November 2006; at *Cooperative Institute for Research in the Atmosphere (CIRA)*, Colorado State University, 11 September 2006; at *UMTRI Research Colloquium*, University of Michigan, 30 August 2006; at *Green Design Institute*, Carnegie Mellon University, 28 August 2006.
63. **Corbett, J.J.**, Environmental Performance and Short Sea Shipping (presentation), Invited talk at the *North American Marine Conference, Towards A Shortsea Shipping Strategy For The North American Continent*, Chamber of Shipping, Vancouver, British Columbia, April, 2006.
64. Kunkel, R., The Role of Short Sea Shipping for Disaster Response and Recovery, presentation prepared by **J.J. Corbett**, and J.J. Winebrake, in *North American Marine Conference, Towards A Shortsea Shipping Strategy For The North American Continent*, Chamber of Shipping, Vancouver, British Columbia, April, 2006.
65. **Corbett, J.J.**, J. Firestone, C.T. Taggart, C.F. Wang, A.S.M. Vanderlaan, and S.B. Lyons, Application of Ship Speed and Mass Characteristics to Describe Potential Severity of Risk-Based Ship Collisions with Whales, in *20th Conference of the European Cetacean Society*, Gdynia, Poland, April, 2006.
66. Firestone, J., **J.J. Corbett**, C.T. Taggart, C.F. Wang, S.B. Lyons, and A.S.M. Vanderlaan, Ship Collisions with North Atlantic Right Whales: Modeling Encounter Probabilities for Conservation Management, in *20th Conference of the European Cetacean Society*, Gdynia, Poland, April, 2006.
67. **Corbett, J.J.**, Moving Freight Transport Onto the High Road, Invited presentation at *Sonoma Technology Incorporated*, February, 2006.
68. Meyer, P.E., J. Winebrake, and **J.J. Corbett**, What the Hull is Really Happening? Total Fuel Cycle Energy and Emissions from Marine Vessels, in *21st Annual Meeting and Conference of the International Association for Science, Technology, & Society*, International Association for Science, Technology, & Society, Baltimore, MD, February, 2006.
69. **Corbett, J.J.**, Technology Policy to Reduce Air Pollution from Ports and Vessels: Current Efforts and Initiatives, Invited presentation at *Workshop 136, Multimodal Approach to Address Freight Air Quality Issues, TRB 85th Annual Meeting*, Washington, D.C., January, 2006.
70. Lyons, S.B., A.S.M. Vanderlaan, C. Wang, **J.J. Corbett**, J. Firestone, and C.T. Taggart, Spatial and Temporal Modeling of North Atlantic Right Whale - Ship Encounter Probabilities to Advance Vessel Traffic Management (Presentation by S.B. Lyons), *16th Biennial Conference on the Biology of Marine Mammals*, San Diego, 2005.
71. Wang, C.F., S.B. Lyons, **J.J. Corbett**, and J. Firestone, Characterizing commercial ship traffic through a GIS model and its potential implications for mitigating ship strikes of large whales (Poster Presentation), in *Pre-conference workshop on the Application of GIS and Spatial-Temporal Modeling for Marine Mammal Science and Management, 16th Biennial Conference on the Biology of Marine Mammals*, San Diego, CA, 2005.
72. Wang, C., S. Lyons, A.S.M. Vanderlaan, J. Firestone, **J.J. Corbett**, and C.T. Taggart, Modeling ship traffic & predicting interactions between ships & whales, in *North Atlantic Right Whale Consortium, 2005 Annual Meeting*, New Bedford, MA, 2005.
73. **Corbett, J.J.**, Environmental and Regulatory Issues: Changing the Dynamics of the Market? Policy signals and long-term marine fuel trends, Invited Presentation at *Platts 2nd Annual Bunker and Residual Fuel Oil Conference – An Assessment of the Global Market for the “Bottom of the Barrel”*, New Orleans, LA, July, 2005.
74. **Corbett, J.J.**, and C. Wang, Discussion of various growth rates to estimate future emissions (and goods movement), Teleconference presentation to the *California Air Resources Board*, June, 2005.
75. **Corbett, J.J.**, Modeling Marine Traffic and Environmental Impacts, Invited seminar in *Oceanography at Dalhousie University*, Halifax, Nova Scotia, Canada, June, 2005.
76. Winebrake, J.J., P.E. Meyer, and **J.J. Corbett**, A Total Fuel Cycle Analysis of Alternative and Conventional Fuels in Marine Transportation, Teleconference presentation to project advisory panel for *DOT Climate Change contract*, June, 2005.
77. **Corbett, J.J.**, and C. Wang, The Global Scene of Ship Emissions, in *Air Pollution from Ships, Swedish Maritime Administration Symposium*, Invited Presentation, Stockholm, Sweden, May, 2005.
78. **Corbett, J.J.**, and C. Wang, Emissions in Transit: CMV Inventory Development, Validation, and Application to Emerging Policy Analysis, Invited presentation at the *West Coast SECA Working Meeting*, Aptos, CA, April, 2005.
79. **Corbett, J.J.**, Regional Ship Activity and Location, *The Haagen-Smit Symposium: Ships, Trains, and the Future of Goods Transport*, Invited presentation and chair of session: Overview of International Goods Transport, Aptos, CA, April, 2005.
80. **Corbett, J.J.**, and C. Wang, Development of Port-specific Emission Inventories, poster presentation at *The Haagen-Smit Symposium: Ships, Trains, and the Future of Goods Transport*, Aptos, CA, April, 2005. **Corbett, J.J.**, and C. Wang, Regional Scale Inventories of Commercial Marine Emissions, poster presentation at *The Haagen-Smit*

- Symposium: Ships, Trains, and the Future of Goods Transport*, Aptos, CA, April, 2005.
81. **Corbett, J.J.**, and C. Wang, CMV Inventory Development, Validation, and Application to Emerging Policy Analysis, Invited presentation, *Chairman's Air Pollution Seminar Series, California Air Resources Board*, Sacramento, CA, April, 2005.
 82. **Corbett, J.J.**, Environmental Management of Delaware's River of Commerce: Charting a Course for Marine Transportation, seminar in *Department of Civil, Architectural, and Environmental Engineering at Drexel University*, Invited Presentation, Philadelphia, PA, February, 2005.
 83. Winebrake, J.J. and **J.J. Corbett**, Flexible Technology and Policy Approaches to Reducing Emissions in the Marine Transportation Sector, in *20th Annual International Association for Science, Technology, & Society (IASTS) Conference: STS for All: Interdisciplinary Challenges for Stewardship of Planet Earth*, Baltimore, MD, February 2005.
 84. **Corbett, J.J.**, and C. Wang, Modeling Marine Traffic and Environmental Impacts, in *7th MTS Research and Technology Coordination Conference*, Interagency Committee for the Marine Transportation System (ICMTS), Washington, DC, November 2004.
 85. Firestone, J., and **J.J. Corbett**, Evaluating Risk of Species Introduction to Facilitate Implementation of the New Global Ballast Water Convention and Conserve Marine Biodiversity, in *8th International Wildlife Law Conference*, New Orleans, LA, November 2004.
 86. **Corbett, J.J.**, Marine Transportation Issues Related to Climate Change, in *IPIECA Workshop on Transportation and Climate Change*, Invited Presentation, International Petroleum Industry Environmental Conservation Association, Baltimore, MD, October 2004.
 87. Firestone, J., and **J.J. Corbett**, Transporting to the Port Environment: International Legal and Policy Responses to Reduce Ballast Water Species Introductions, in *Second IUCN Academy of Environmental Law Colloquium*, University of Nairobi, Nairobi, Kenya, October 2004.
 88. Firestone, J., N.D. Cass, **J.J. Corbett**, and J.J. Winebrake, Risk-based Decision-making and Optimization in Ballast Water Policy Development, in *13th International Conference on Aquatic Invasive Species*, Ennis, Ireland, September 2004.
 89. **Corbett, J.J.**, Delaware's River of Commerce, *CMS Hotel du Pont Lunch & Lecture Series*, Wilmington, DE, March 2004.
 90. **Corbett, J.J.**, Toward Environmental Stewardship: Charting a Course for Marine Transportation, in Session VI, Clearing the Air: Passenger Vessel Emissions, *Passenger Vessel Association Annual Meeting and Ferry Conference at MariTrends 2004*, New Orleans, LA, February 2004.
 91. **Corbett, J.J.**, Toward Environmental Stewardship: Charting a Course for Marine Transportation, in "Green Ports – Green Ships" Panel, Sponsored by the Marine Environmental Task Force, *83rd Annual Meeting of the Transportation Research Board*, January 2004.
 92. **Corbett, J.J.**, Air Emissions From Ships: Environment and Policy Research Scope, Status, and Outlook, *TRB Marine Board*, Invited Presentation, New York, NY, October 2003.
 93. **Corbett, J.J.**, Addressing Air Pollution from Ships, in session titled Environmental Issues in Marine Transportation Policy, *Symposium on National and International Policy Issues in Marine Transportation*, University of Delaware, Newark, DE, October 2003.
 94. Cass, N.D., **J.J. Corbett** and J. Firestone, "Risk Assessment for Ballast Water Introduced Species Policy Issues," *US EPA, NOAA, USCG* in advance of IMO Ballast Water Convention Negotiations, Washington, D.C., June 2003.
 95. Cass, N., **J.J. Corbett**, J. Firestone, Technology Policy Implications for Ballast Water Introductions of Non-indigenous Species, *12th International Conference on Aquatic Invasive Species*, Windsor, Ontario, Canada, 9-12 June 2003.
 96. Cass, N.D., **J.J. Corbett** and J. Firestone, "Technology Policy Implications for Ballast Water Introductions of Non-indigenous Species," *Michigan Department of Environmental Quality*, Lansing, Michigan, June 2003.
 97. **Corbett, J.J.**, N.D. Cass, J. Firestone, Conceptual Model of Ballast Water Risk, *Third International Conference on Marine Bio-Invasions*, San Diego, CA, 16-19 March 2003.
 98. **Corbett, J.J.**, J. Boesel, Passenger Ferries, Air Quality, and Greenhouse Gases: Can System Expansion Result in Fewer Emissions in the San Francisco Bay Area?, *Transportation Research Board 82nd Annual Meeting*, Washington, DC, Transportation Research Board, January 2003.
 99. **Corbett, J.J.**, and Fischbeck, P.S., One-Day Workshop, *Sea Carrier Outreach Meeting*, hosted by the University of Delaware Graduate College of Marine Studies and Business for Social Responsibility – Clean Cargo Working Group, Goodstay Center, 2600 Pennsylvania Avenue, 2 October 2002.
 100. **Corbett, J.J.**, Highway Ferry Integration Research: Analyzing Emissions & Emission Reduction Strategies for Passenger Ferries, *National Association of Environmental Professionals*, Dearborn, MI, June 2002.
 101. **Corbett, J.J.** Heavy-Duty Engine Technology (Vehicle, Marine and Rail), *Northeast Advanced Vehicle*

- Consortium*, Invited Presentation, Cambridge, MA, May 2002.
102. **Corbett, J.J.**, Establishing the Baseline for Measurements and Technology Evaluation, invited presentation, *U.S. Maritime Administration Workshop on Maritime Energy and Clean Emissions*, 30 January 2002.
 103. Farrell, A., D. Keith, and **J.J. Corbett**, Adaptive Management of Technological Change: Strategy for Introducing Hydrogen into Transportation, in *TRB 81st Annual Meeting*, Transportation Research Board, Washington, DC, 2002.
 104. **Corbett, J.J.**, Research Needs: Calculating the Public Air Quality Benefits of Private Container on Barge Movements, Session: Container on Barge: Problems, Practical and Political, *MTS Research & Technology Coordination Conference*, Washington, DC, 16 November, 2001.
 105. **Corbett, J.J.**, Ship Emissions Study, *NOAA ITCT 2k2 Planning Meeting*, Boulder, CO, 28 Nov., 2001.
 106. **Corbett, J.J.**, Current Research Questions Related to Ship Emissions, Science, and Policy, *POSE Seminar*, College of Marine Studies, University of Delaware, 7 November 2001.
 107. **Corbett, J.J.**, and P.S. Fischbeck, Environmental Impacts of Sea Transportation: Current Understanding, Implications, and Opportunities, *Workshop presentations to International Maritime Carriers for IKEA*, Singapore (August), Amsterdam (October), 2001.
 108. **Corbett, J.J.**, SEACalc[®] Model Discussion, *BSR Clean Cargo Meeting*, September 2001.
 109. **Corbett, J.J.**, Ship Emissions Assessment (SEA) Project Status Update, *11th GEIA Meeting*, Paris, France, 18-22 June 2001.
 110. **Corbett, J.J.**, Marine Transportation in the 21st Century: Navigating the Way Ahead, public lecture in *Ocean Currents Lecture Series*, Graduate College of Marine Studies, Lewes, DE, May 2001.
 111. **Corbett, J.J.**, and P.S. Fischbeck, Sources and Transport of Air Pollution from Ships: Current Understanding, Implications, and Trends, in *Conference on Marine Vessels and Air Quality*, U.S. EPA, CARB, PMSA, San Francisco, CA, February 2001.
 112. **Corbett, J.J.** Marine Transportation and Global Climate Change. Global Climate Change Seminar, *Eno Transportation Foundation*, Invited Seminar, 23 January 2001.
 113. **Corbett, J.J.**, and A. Farrell, Trends in International, Federal, and Local Marine Emission Regulations (Invited Presentation), in *MARAD Workshop on Alternative Fuels for Ferries and Other Vessels*, Maritime Administration (MARAD), Alameda, CA, 2000.
 114. **Corbett, J.J.**, Reducing Greenhouse Gases in Maritime Transportation System, *Seminario Sobre Eficiencia Energetica Y Energias Renovables*, invited presentation, Universidad Politecnica de Puerto Rico, San Juan, Puerto Rico, 19 October 2000.
 115. **Corbett, J.J.**, Diesel Fuel Emissions: Influence of Antifouling Performance: Identifying the Issues, *Washington Paint Technical Group*, invited presentation, Washington, D.C., 12 April 2000.
 116. **Corbett, J.J.**, and P.S. Fischbeck, Air Emissions and Alternative Propulsion Technologies for Ships, Ferries, Towboats, *Marine Board, Transportation Research Board*, invited presentation, National Academy of Sciences, Washington, D.C., 3 April 2000.
 117. **Corbett, J.J.**, and B. Remley, Marine Ferries and Emissions, *Society of Naval Architects and Marine Engineers, Ship Machinery Committee*, invited presentation, Arlington, VA, 30 March 2000.
 118. Skjølvsvik, K.O., A.B. Andersen, **J.J. Corbett**, and J.M. Skjelvik, Study of Greenhouse Gas Emissions From Ships, *International Maritime Organization, Marine Environment Protection Committee 44*, London, UK, 6 March 2000.
 119. **Corbett, J.J.**, Issues in Greenhouse Gas Emissions Control, *Transportation Research Board, 79th Annual Meeting*, GHG Study for International Shipping: Modal Comparisons, Session 230, Washington, DC, 11 January 2000.
 120. **Corbett, J.J.**, presentation: Emissions Monitoring Protocols for Commercial Ships, poster: A Ferry to the 21st Century: The Future of Waterborne Passenger Transportation in the United States, poster: A Greenhouse Gas Study for International Ships, *Marine Transportation System R&D Coordination Conference*, National Academy of Sciences, 2-4 November 1999.
 121. **Corbett, J.J.**, Emissions from Commercial Shipping: Engineering Assessments in Dialogue with Science and Policy Questions, *University of Michigan, Department of Naval Architecture and Marine Engineering*, invited seminar, 25 October 1999.
 122. **Corbett, J.J.**, Emissions From Ships: Current and Emerging Engineering, Science and Policy Issues, *American Society of Mechanical Engineers Internal Combustion Engine Division Fall Technical Conference*, invited panel presentation, Ann Arbor, Michigan, 19 October 1999.
 123. **Corbett, J.J.**, Ship Aerosol Emissions and Their Control, *American Association for Aerosol Research*, Tacoma, Washington, 11-15 October 1999.
 124. **Corbett, J.J.**, Emissions from Ships: A Dialogue Between Engineering, Science and Policy Research,

University of Delaware, College of Marine Studies, invited seminar, 9 September 1999.

125. **Corbett, J.J.**, Emissions from Commercial Shipping: Scientific and Policy Issues, *Naval Postgraduate School, Monterey, CA*, invited presentation, 12 August 1999.
126. **Corbett, J.J.**, Ship Propulsion Emissions: Technology and Policy Issues, *Transportation Research Board, Summer Waterways and International Trade Meeting, Duluth, MN*, 26 July 1999.
127. **Corbett, J.J.**, Ship Propulsion Emissions: Technology and Policy Issues, *Maritime Administration, U.S. Department of Transportation*, invited presentation, 20 July 1999.
128. **Corbett, J.J.**, Emissions from Commercial Shipping: Scientific and Technology-Policy Issues, *National Oceanic and Atmospheric Administration (NOAA)*, invited seminar, Boulder, CO, 7 April 1999.
129. **Corbett, J.J.**, A Global Sulfur Emissions Inventory For Oceangoing Ships And Its Impact In Global Chemical Transport Models, *International Aerosol Conference, Edinburgh, Scotland*, Sept. 1998.
130. **Corbett, J.J.**, Nitrogen and Sulfur Emissions from Oceangoing Ships, *U.S. Environmental Protection Agency*, invited presentation, Washington, DC, 11 June 1998.
131. **Corbett, J.J.**, Marine Air Pollution: The Next Compliance Problem, *U.S. Merchant Marine Academy Continuing Education Seminar*, April 1998.
132. **Corbett, J.J.**, presentation at *NSF Center for Human Dimensions in Global Change Annual Workshop*, Carnegie Mellon University, Pittsburgh, PA, May 1998.
133. **Corbett, J.J.**, Session Chair for Technology vs. the Teacher, Panel Discussant for Reflections on Research Ethics Education, *Association for Practical and Professional Ethics, Annual Meeting*, Dallas, TX, Feb 1998.
134. **Corbett, J.J.**, Nitrogen and Sulfur Emissions from Oceangoing Ships, *American Geophysical Union, Fall Meeting*, San Francisco, December 1997.
135. **Corbett, J.J.**, Presentation at *NSF Workshop for Graduate Research Ethics Education*, Indiana University, July 1997.
136. **Corbett, J.J.**, Ship Air Emissions: Estimation and Regulation, *Department of Energy Diesel Engine Emission Reduction (DEER) Workshop*, UC San Diego, June 1997.
137. **Corbett, J.J.**, presentation at *NSF Center for Human Dimensions in Global Change Annual Workshop*, Carnegie Mellon University, Pittsburgh, PA, May 1997.
138. **Corbett, J.J.**, Career Transition Issues and BRAC Closures, *UCSC Extension Seminar on Environmental Careers*, July 1995.
139. Koerner, C, and **J.J. Corbett**, Discrete Interval Groundwater Sampler, *HAZMACON '92, Hazardous Materials Mgmt Conference*, San Francisco, April 1992. Also presented at *Naval Engineering West Coast Multi-Redcom Technical Training Symposium*, San Francisco, March 1992.

RESEARCH CONTRACTS, FELLOWSHIPS

1. Principal Investigator, Further Development and Delivery of the Geospatial Intermodal Freight Transportation (GIFT) Model, Request under Cooperative Agreement between University of Delaware and the U.S. Maritime Administration, \$146,057, 2010-2012; cooperative agreement term 2010-2015.
2. Co-Principal Investigator, Infrastructure Performance Improvement to Reduce Corridor Delays for Freight Flows: Application of Geospatial Intermodal Freight Transportation Mode, Request under Cooperative Agreement between University of Delaware and the U.S. Maritime Administration, \$300,000, 2008-2009.
3. Co-Principal Investigator, Energy, Economic, and Environmental Tradeoffs Associated With Freight Transportation In the Great Lakes Region, for the Great Lakes Maritime Research Institute, \$16,352 of \$80,000 with Rochester Institute of Technology, 2008-2009.
4. Principal Investigator, Environmental Benchmarks Project, Request under Cooperative Agreement between University of Delaware and the U.S. Maritime Administration, \$98,362, 2008-2009.
5. Co-Principal Investigator, Development of Geospatial Intermodal Freight Transport Model for East Coast Freight Movement, Request under Cooperative Agreement between University of Delaware and the U.S. Maritime Administration, \$141,171, 2008-2009.
6. Co-Principal Investigator, Development of a California Geospatial Intermodal Freight Transport Model with Cargo Flow Analysis, State of California Air Resources Board, Research Division, \$199,937, 2008-2009.
7. Co-Principal Investigator, Application of freight transportation and decision models to scope and compare freight infrastructure investment, US Department of Transportation University Transportation Center, \$36,360, 2008-2009.
8. Principal Investigator Improved Geospatial Forecasting of Commercial Marine Vessels, Research Division, State of California Air Resources Board, \$47,959, 2007-2009.
9. Principal Investigator, Delaware regional freight data for Geographic Intermodal Freight Transportation (GIFT) Model, US Department of Transportation University Transportation Center, \$30,560, 2007-2008.
10. Principal Investigator, MARAD Emissions Incentive Program, second task under 5-year (2005-2010) Cooperative Agreement with the United States Department of Transportation, Maritime Administration, Office of Environmental

- Activities, \$15,000, 2005-2007.
11. Co-Principal Investigator, Emissions Analysis of Freight Transport Comparing Land-Side and Water-Side Short-Sea Routes: Development and Demonstration of a Decision Modeling Tool, Center for Climate Change and Environmental Forecasting, U.S. Department of Transportation, funded by Research and Special Programs Administration (RSPA), \$155,441, 2005-2007.
 12. Principal Investigator, MARAD Emissions Incentive Program, first task under 5-year (2005-2010) Cooperative Agreement with the United States Department of Transportation, Maritime Administration, Office of Environmental Activities, \$50,000, 2005-2006.
 13. Principal Investigator, Estimation, Validation, and Forecasts of Regional Commercial Marine Vessel Inventories, Research Division, State of California Air Resources Board, \$48,169, 2005-2006.
 14. Co-Principal Investigator, Application of Decision Support Model to Reduce the Risk of Introduction of Aquatic Organisms by Maritime Commerce, Delaware Sea Grant, \$218,447, 2004-2007.
 15. Co-Principal Investigator, Evaluating Commercial Vessel Traffic Characteristics and Whale Strike Probabilities Along the North Atlantic, National Oceanic and Atmospheric Administration (NOAA), \$375,778, 2004-2007.
 16. Principal Investigator, Contract for Consultant Services related to North American Ship Inventory, Commission on Environmental Cooperation, \$25,000 augmenting ARB contract and scope, 2005.
 17. Co-Principal Investigator, DOT Center for Climate Change and Environmental Forecasting - Climate Change and Transportation Research: Total Fuel Cycle Emissions for Marine Transportation: Development of a "Well-To-Hull" Modeling Tool, U.S. Department of Transportation, with Rochester Institute of Technology, funded by Research and Special Programs Administration (RSPA), \$99,940, 2004-2005.
 18. Principal Investigator, An Evaluation of Public-Private Incentives to Reduce Emissions from Regional Ferries, with Rutgers State University of New Jersey, funded by Federal Transit Administration, \$121,158, 2003-2004.
 19. Principal Investigator, Verification of Ship Emissions Estimates with Monitoring Measurements to Improve Inventory and Modeling, Research Division, State of California Air Resources Board, \$49,901, 2002-2004.
 20. Principal Investigator, National Ferry Database Program for MARAD, Maritime Administration funds through Prime, Inc., \$6,824, 2002-2003.
 21. Principal Investigator, Vessel Emissions Measurement Protocols and Decision Framework, Maritime Administration funds through Marine Chemist & Environmental Consultants, Inc., \$53,000, 2002-2003.
 22. Principal Investigator, Sea Carrier Outreach Meeting, hosted by the University of Delaware, partially funded by Business for Social Responsibility, \$1,470, 2002.
 23. Principal Investigator, Developing Environmentally & Socially Responsible Private Sector Policies for International Waterborne Cargo, Business for Social Responsibility Education Fund, \$60,325 (03 May 2001 – 30 April 2002).
 24. Principal Investigator from Carnegie Mellon in research collaboration with Norwegian Marine Technology Research Institute, Det Norske Veritas, and Center for Economic Analysis, funded by the International Maritime Organization.
 25. Principal Investigator, Nationwide Inventory of Emissions from CI Marine Engines, Review of EPA NONROAD Marine Module, U.S. EPA Contract Order Number 8A-0516-NATX.
 26. U.S. EPA STAR (Science To Achieve Results) Fellowship (No. U-915180-01-0), 1997).

ACADEMIC AND COMMUNITY SERVICE

1. School of Marine Science and Policy (SMSP) Promotion and Tenure Committee, 2009-2011.
2. University of Delaware Search Committee for Director of Disaster Research Center, 2009-2010.
3. College of Earth, Ocean, and Environment Search Committee for Geography Faculty, 2009-2010.
4. Moderator/Facilitator, Freight Breakout Group, Creating Climate Wealth Summit, Georgetown University McDonough School of Business, Washington, DC, 20-22 April 2010.
5. Member, Transportation experts group for the U.S. Chamber of Commerce's Infrastructure Index Project, Chicago, IL, March 2010.
6. Member, Study Group Panel on Reduction of Greenhouse Gas Emissions in Ocean-Going Shipping, Japan International Transport Institute, sponsored by Nippon Foundation, 2008-2009.
7. Member, Committee on Transportation Energy, ADC70, Transportation Research Board, 2008-2013.
8. Member, Committee on Marine Environment, AW030, Transportation Research Board, 2006-present.
9. Technical Advisor, Model Evaluation, Multi-Phase Study On Firefighter Safety and the Deployment Of Resources, Assistance to Firefighters Grant - Fire Prevention and Safety, National Institute of Standards and Technology (NIST), Worcester Polytechnic Institute, International Association of Fire Fighters, 2006-2009.
10. Comments to U.S. EPA Oil Program regarding Proposed Amendments to the SPCC Rule, submitted by James J. Corbett, Jr., P.E., Ph.D., Assistant Professor, University of Delaware, Newark, DE, 2006. United States Senate, Committee on Environment and Public Works, EPA's Spill Prevention Control and Countermeasure Program Hearing, http://epw.senate.gov/hearing_statements.cfm?id=249640, testimony by J. J. Corbett, 14 December 2005.
11. Faculty Senate Rules Committee, University of Delaware, 2004-2006; second appointment, 2006-2008.

12. College of Marine Studies, Futures Committee, 2003 and 2005-2006.
13. Member, Transit Cooperative Research Program (TCRP) Project J-10H, *Security Measures for Ferry Systems*, National Academy of Sciences, Washington, DC, March 2004 – 2006.
14. Member, Marine Environmental Task Force, Transportation Research Board, 2003-2006.
15. Member, Surface Transportation Environmental Cooperative Research Program Advisory Board, *Environmental Research Needs in Transportation: Report of a Conference*, Transportation Research Board, National Academies, Washington, DC, 2002.
16. Co-chair M-17 Environmental Panel, Ship Machinery Committee, Society of Naval Architects and Marine Engineers (SNAME), 2000 – 2007.
17. Wrote Pollution Prevention examination item for National Principles and Practices Engineering Examination in Naval Architecture and Marine Engineering, 2003.
18. College of Marine Studies, Academic and Professional Staff Search Committees, 2000-2002.
19. Department of Transportation, Global Climate Change Research Roundtable, Washington, DC, 2000.
20. Member, Committee on Military Transportation (A1B11), Transportation Research Board, National Research Council, February 1999 – January 2002.
21. Carnegie Mellon Leadership Initiative, “Ethics, Leadership, and Technical Decision Making,” 1999.
22. University Education Taskforce, Carnegie Mellon University, 1998-1999.
23. Rotary Ethics Conferences, Pittsburgh, PA, 1997 and 1999.
24. Research Experience for Undergraduates (REU), Seminars in Research Ethics, 1998-1999.
25. Center for Neurological & Biological Cognition (CNBC) Summer Research Ethics Seminars, 1998-1999.

ACADEMIC, PROFESSIONAL, AND MILITARY AWARDS

1. Paul Harris Fellow, “in appreciation of tangible and significant assistance given for the furtherance of better understanding and friendship between peoples of the World,” Rotary International, December 2008.
2. American Chemical Society (ACS) Publications recognition as one of the top 20 Most-Accessed Articles for “Mortality from Ship Emissions: A Global Assessment”, published in *Environmental Science & Technology* for the full year of 2007, for the fourth Quarter of 2007, and for the first Quarter of 2008.
3. American Chemical Society (ACS) Publications recognition as one of the top 20 Most-Accessed Articles for “Cost-Effectiveness of Reducing Sulfur Emissions from Ships”, published in *Environmental Science & Technology* for the fourth Quarter of 2007.
4. Elsevier publications recognition as one of the “Top 25 Hottest Articles” for “Costs and Benefits of Reducing SO₂ Emissions from Ships in the US West Coastal Waters”, published in *Transportation Research Part D: Environment*, for October-December 2007, and January-March 2008.
5. Fall 2004 Institute Fellow, Institute for Transforming Undergraduate Education, Problem-Based Learning: From Ideas to Solutions through Communication.
6. Letter of Appreciation for Review of Draft Report: Quantification Of Emissions From Ships Associated With Ship Movements Between Port In The European Community, from Nicola Robinson representing Directorate General for Environment, May 2002.
7. Certificate of Appreciation, for contributions to the workshop on Maritime Energy and Clean Emissions, from Maritime Administrator Captain William Shubert, January 2002.
8. Certificate of Appreciation for contributions to Marine Environmental Engineering Technology Symposium (MEETS) 2001, American Society of Naval Engineers and Society of Naval Architects and Marine Engineers, June 2001.
9. Letter of Appreciation for Review of Section 9, Air Quality Social Damages, Environmental Costing Model for Outer Continental Slope leasing program, from William King, Economist for Minerals Management Service, October 2000.
10. Outstanding Student Paper Award for “Nitrogen and Sulfur Emissions from Oceangoing Ships,” Atmospheric Sciences Section, American Geophysical Union, 1997 AGU Fall Meeting, Dec. 1997.
11. Herb Toor Award for Outstanding Qualifier Paper: “Ship Air Emissions: Estimation and Regulation,” Dept. of Engineering and Public Policy, Carnegie Mellon University, 1997.
12. Letter of Commendation, Rear Admiral R.G. Gilbertson, Department of the Navy, for Naval Reserve Engineering Duty course development and instruction of the Supervisor of Shipbuilding (SUPSHIP) Operations Manual Course, 1997.
13. Armed Forces Reserve Medal, for service in the USNR, 1997.
14. Navy Achievement Medal for professional achievement and engineering support to Naval Communications Station Stockton, Environmental Management Division, 1995.
15. Navy Achievement Medal for professional achievement as event coordinator during Fleet Week 1990.

16. Navy Achievement Medal for professional service as a member of the Naval Base Emergency Operations Center Crisis Response Team during the 1989 Loma Prieta Earthquake.
17. Humanitarian Service Medal for voluntary mobilization to the Emergency Operations Center, Naval Base San Francisco, 1989.
18. Certificate of Commendation from Naval Reserve Readiness Command Region Twenty, 1989.
19. Founders Award for Professional Contribution to the Engineering Duty Officer School, Reserve Course 92R-1, March 1992.
20. Individual Achievement Award for conceptual model for environmental retraining of workers displaced from closing military bases, Radian Corp., September 1994.
21. Individual Achievement Award for project contributions, Radian Corp., October 1992.
22. Individual Achievement Award for Groundwater Sampling Vehicle, Radian Corp., June 1991.

PROFESSIONAL AFFILIATIONS

National Society of Professional Engineers, American Society of Mechanical Engineers, American Society of Naval Engineers, Society of Naval Architects & Marine Engineers, American Geophysical Union, Transportation Research Board

STUDENTS ADVISED (completion dates shown if applicable)

Advisor:

1. **Ph.D. Students, graduated:** Chengfeng Wang, College of Marine Studies, *A Study Of Geographical Characterization Of Ship Traffic And Emissions And Cost-Effectiveness Of Reducing Sulfur Emissions From Foreign Waterborne Commerce For The U.S. West Coast*, January 2006; Mark Baylor, Ph.D. student, Marine Policy CMES, *port capacity, port selection criteria, port efficiency, and investment, all involving container ports*, ; Haifeng Wang, Ph.D. student, Marine Policy CMES, *shipping economics, global trade, and economic response to environmental policy*;
2. **M.S. Students, graduated:** Christine Miller, *An Institutional Analysis of the Organizations Responsible for Aspects of Coastal Management on Two Eastern Caribbean Islands*, M.S. Marine Policy, December 2003; Kinam Jeong, *Pilotage as a Measure for Preventing Accidental Oil Pollution in the Korean Straits*, M.S. Marine Policy, May 2004; Joana Tavares, M.S. student, Marine Policy Program, *Assessing the Importance Of Biological Uncertainties to the Control of Species Introductions Via Ballast Water*, co-advisor, May 2007; Nicole Cass, Ph.D. candidate, *Role Of Risk Based Decision Making In Achieving Ballast Water Policy Goals In Maritime Transportation*, Marine Policy Program, December 2010.
3. **Ph.D. Students, in progress:** Amit Mokashi, Ph.D. Candidate, Marine Policy SMSP, *change management as applied to maritime transportation and policy*, in progress; Eric Deans, student, Marine Policy SMSP, *A Normative Assessment Of Container Terminal Developments On The U.S. East Coast Influenced By The Expansion Of The Panama Canal*, in progress; Gerald Kauffman, student, Marine Policy SMSP, *water resources policy*.
4. **M.S. Students, in progress:** Melissa Theis, M.S. candidate, *Innovative Solutions for Environmental Challenges in the Marine Industry – Reducing Air Emissions From Container Vessels Through Industry-based Policy Methods*, Marine Policy Program, in progress.

Committee Member:

1. **Ph.D. Students, graduated:** Cynthia Stahl, Urban Affairs CEEP, *Environmental Decision Analysis with Multi-criteria Integrated Resource Assessment (MIRA)*, May 2003; Dohoon Kim, Marine Policy, *Bioeconomic Analysis of Alternative Management Policies for the United States Gulf of Mexico Reef Fish Fishery*, May 2003; Steve Thur, Marine Policy, *Valuing Recreational Benefits in Coral Reefs Marine Protected Areas: An Application to the Bonaire National Marine Park*, January 2004; Chunling Chen, Marine Policy, *Game-theoretic Approaches to the Joint Management of Chub Mackerel in Northeast Asian Seas*, February 2004; Tom Street, Ph.D., Marine Policy, *Submerged Historical and Archaeological Resources: A Study of the Conflict and Interface between United States Cultural Resource Law and Policy and International Governance Measures*, April 2007; Yukun Dong, Ph.D., Civil and Environmental Engineering, *Assessing Financial Analysis Strategies for Infrastructure Renewal in Regional Transportation Planning*, Winter 2008. Catherine Barton, Ph.D. student, Civil and Environmental Engineering, *Quantitative Analysis of Uncertainty in Equipment Leak Emissions and the Effect on Risk-Based Decision Making*, August 2008.
2. **M.S. Students, graduated:** Jae-Hyung Ryoo, M.M.P. Marine Policy, *An Analysis of Port Development Strategy in Korea*, May 2002; Danielle Tesch, M.M.P. Marine Policy, *National Level Adaptation Policies of Small Island States in the Pacific and Caribbean*, May 2003; Seong-Yong Choi, M.M.P. Marine Policy, *An Analysis of Port-State Control Activities in the Tokyo MOU Region*, May 2003; Jennifer Harris, M.M.P. Marine Policy, *An Assessment of Compensatory Wetlands Mitigation Policy in the United States Focusing on State Regulation*, August 2003; Haikwang Kim, M.M.P. Marine Policy, *Determination of Minimum Safe Manning For Korean Vessels*, May 2004; Tom Schuster, M.S. Urban Affairs CEEP, *Transportation And Sustainability: The Potential Contribution Of Shared-Use Automobile Systems*, May 2004; Meredith Blaydes, M.M.P. Marine Policy, *Analysis of the Frequency and the Severity of Recreational Boating Accidents Occurring Around Jettied and Non-Jettied Inlets Along the East Coast*, December 2005; Andrea Geiger, M.M.P. Marine Policy, *To Investigate The Differences In Flood Insurance Premiums Between Private Flood Insurance Companies And The National Flood Insurance Program For Areas With Similar Flood Risk.*, May 2006.