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EDUCATION

Post-Doctoral Fellow - Woods Hole Oceanographic Institution (1983 - 1985) Marine Policy Center

Ph.D. - University of California, Davis (1983)

Fields: Ecology & Environmental Policy Analysis

Dissertation Title: Economic and Energetic Evaluation of Alcohol Fuel
Production from Agriculture: Yolo County, California.

M.S. - Louisiana State University (1974)

Field: Marine Sciences

Thesis Title: Land Treatment of Menhaden Waste Water by Overland Flow.

B.A. - Northeastern University (1971)

Field: Biology

RESEARCH INTERESTS

Strategic policy innovation and social learning, Corporate environmental management, Use of scientific and technical information, Clean fuels and sustainable energy systems, Climate adaptation policy, Integrated river basin management.

CURRENT POSITION

Professor Emeritus, Department of Geography & Environmental Sustainability,

University of Oklahoma. Joint positions formerly held:

Research Affiliate, Oklahoma Climatological Survey

Faculty Affiliate, Ecology and Evolutionary Biology,

Adjunct Professor, Regional and City Planning, and

Adjunct Professor, College of Professional and Continuing Studies, University of Oklahoma.

Current research: Energy use efficiency policy, Criteria for sustainable and complex problem analysis, Knowledge and information use.

PROFESSIONAL AFFILIATIONS

American Association for the Advancement of Science Policy Studies Organization, Soil and Water Conservation Society of America Editorial Board, *Journal of Global Agriculture and Ecology* (2014-) Editorial Board, *Journal of Environmental Studies* (2015 -)

PREVIOUS POSITIONS

Administrative

1995 - 2000 Director, Science and Public Policy Program (S&PP)

Responsible for the overall performance of S&PP, an organized research unit with three budgeted tenure-track faculty positions and administrative support staff. Developed and led several interdisciplinary teams that conducted policy research with the support of the EPA, NOAA, NSF, and the State of Oklahoma (~ \$2 million in total). Responsible for the recruitment, mentoring, and evaluation of core faculty members, faculty associates, office staff, and graduate research assistants. As director, I was responsible for strategy development, securing extramural funding, building ties with college academic programs, office management, and recruiting graduate and undergraduate students for research positions.

2000 - <u>Co-Founder</u> of the Oklahoma Wind Power Initiative (OWPI) a joint research and public outreach program between the University of Oklahoma and Oklahoma State University.

Academic

- 2019 <u>Professor Emeritus</u>, Department of Geography & Environmental Sustainability, University of Oklahoma.
- 2009 2018, <u>Professor</u>; Department of Geography & Environmental Sustainability, University of Oklahoma and Research Affiliate, Oklahoma Climatological Survey.
- 1985 1995 & 2000 2009 <u>Research Fellow</u>, Science and Public Policy Program, University of Oklahoma. Directed and participated in team-oriented applied policy research on issues germane to energy, technology, and the environment.

PREVIOUS POSITIONS (Continued)

1999 – 2009 <u>Professor</u>; 1991 - 1999 <u>Associate Professor</u>, (with tenure); 1985 - 1991 <u>Assistant Professor</u>, School of Civil Engineering and Environmental Science, University of Oklahoma.

1983 - 1985 <u>Post-Doctoral Fellow</u>, Marine Policy Center, Woods Hole Oceanographic Institution, Woods Hole, MA.

Conducted an analysis of the use of scientific and technical information in Florida's coastal planning and management activities. Investigated institutional responses to predicted rise in global sea level.

1980 - 1983 <u>Post-Graduate Research Assistant</u>, Ecology Graduate Group, University of California, Davis.

Dissertation Chair: Seymour I. Schwartz, Ph.D.

Evaluated the economic and energetic feasibility of biomass-based fuel ethanol production for on-farm self-sufficiency and/or off-farm sale. Designed a set of linear parametric programming models that optimized crop and fuel production alternatives for a range of factor inputs, outputs, and operating efficiency scenarios. Technical activities and market information were based upon geographic, agronomic, and agricultural sector data for ten different conventional and experimental starch and sugar-rich feedstocks.

1975 - 1976 Research Associate, Office of Sea Grant Development, Center for Wetland Resources, Louisiana State University.

Supervised the acquisition of fishery catch data for the Gulf of Mexico, and initiated management studies for brown and white shrimp (*Penaeus*, sp.) and oyster (*Crassostrea virginica*).

1972 - 1974 Research Assistant, Department of Oceanography and Coastal Sciences, Louisiana State University.

Thesis Chair: John W. Day, Jr., Ph.D.

Independently designed, constructed, and operated a pilot-scale organic waste water recycling and overland flow (wet)land treatment system for a commercial Gulf menhaden (*Brevoortia patronus*) fish meal processing plant in coastal Louisiana (Dulac-Chauvin). Independently performed laboratory and field tests on a variety of environmental quality parameters over a full growing season. These included soil sampling, microbial assays, and chemical analyses of surface water, groundwater, and plant tissue (*Phragmites australis*).

1967 - 1971 <u>Laboratory Technician</u>, Lahey Clinic Foundation, Boston, MA. Conducted routine blood serum chemistry analyses and performed assignments as medical photographer/darkroom technician.

TEACHING EXPERIENCE

Designed and taught in the inaugural campus curriculum in Environmental Sustainability at both the bachelor's and master's levels.

1986 - Present Courses Taught

Air Quality Management.

Climate Adaptation,

Corporate Environmental Strategy.

Environmental Administration and Law.

Environmental Evaluation and Management.

Environmental Impact Assessment.

Life-Cycle Assessment,

Principles of Sustainability

Renewable Energy Resources.

Systems Thinking and Knowledge Integration

Urban Environmental Systems.

Water Innovation: Technology, Policy, and Organizational Issues

Water Policy and Institutions, Hydrology and Water Security Program

Undergraduate and graduate level; Civil Engineering and Environmental Science,

Geography and Environmental Sustainability, and Regional and City Planning,

University of Oklahoma.

- 1994 1995 Honors Colloquium, *Clean Fuels and Clean Technology: Technical, Environmental, and Policy Issues* (with R. Ellington), University of Oklahoma.
- 1992 Honors Colloquium, *Water Resources and Global Change* (with A. Covich), University of Oklahoma.
- 1984 <u>Visiting Professor</u>, Universidade Federal do Rio Grande do Sul, Centro de Estudos de Geologia Costeira e Oceanica (CECO). Porto Alegre, Brazil. Techniques of Coastal Plan Evaluation. Presented as part of the national course, *Administration and Planning for Marine Resources in Brazil*.
- 1979 1980 <u>Lecturer</u>, Zoology Department, University of California, Davis: *Biological Sciences I.* (S. Shapiro, S. Wolfe)
- 1976 1979 <u>Teaching Assistant</u>, Department of Environmental Science and Policy, University of California, Davis:

Environmental Decision Making. (P. Sabatier, G. Wandesforde-Smith)

Environmental Policy Analysis. (S. Schwartz, J. Wilen)

Principles of Environmental Studies. (P. Sabatier, T. Foin)

PUBLICATIONS

Book

Steven Ballard, Thomas James, Timothy Adams, Michael Devine, Lani Malysa, and Mark Meo, *Innovation Through Technical and Scientific Information: Government and Industry Cooperation*, Westport, CT: Quorum Books, 1989, 198 pp.

Book Chapters [7 total]

Mark Meo, "Wind Power in Oklahoma" In D. R. Gallagher, (Ed.), *Environmental Leadership: A Reference Handbook*, Vol. 2, Chap. 72, pp. 685-694, Thousand Oaks, CA: Sage, 2012.

Mark Meo, "Strategic Policy Innovation and Flash-Flood Hazard Mitigation: The Tulsa Story", in Will Focht (ed.), *Environmental Policy in Oklahoma: Issues, Innovations, Insights*, special issue of *Oklahoma Politics*, Vol. 10, pp. 93-102, December, 2001.

Chand Wije and Mark Meo, "Water: Oklahoma's Vital Resource," in *Oklahoma Resources for Economic Development*, Hans Spaeth, Gary Thompson, and Henry Eisenhart (eds.), OGS Special Publication 98-4, pp. 55-72, Norman, OK: Oklahoma Geological Survey, 1998.

Mark Meo, Kenneth Johnson, and Kenneth Luza, "Forest and Nonfuel Mineral Resources," in *Oklahoma Resources for Economic Development*, Hans Spaeth, Gary Thompson, and Henry Eisenhart (eds.), OGS Special Publication 98-4, pp. 157-176, Norman, OK: Oklahoma Geological Survey, 1998.

Robert Deyle, Mark Meo, and Thomas James, "State Policy Innovation and Climate Change: A Coastal Erosion Analog," in *Global Climate Change and Public Policy*, David Feldman (ed.), pp. 39-66, Chicago, IL: Nelson-Hall Publishers, Inc., 1994.

Rex Ellington and Mark Meo, "Sustainable Operation: Natural Gas Contribution," in *The Future of Energy Gases*, David G. Howell (ed.), U.S. Geological Survey Professional Paper 1570, pp. 843-848, Washington, DC: U.S. Government Printing Office, 1993.

Mark Meo, "Institutional Response to Sea-Level Rise: The Case of Louisiana," in *Societal Responses to Regional Climatic Change: Forecasting by Analogy*, Michael Glantz (ed.), pp. 215-242, Boulder, CO: Westview Press, 1988.

Articles, Monographs, Proceedings [65 total]

Temur Akhmedov and Mark Meo, "Behavior-Based Strategies and Organizational Change in Commercial and Public Buildings: The Human Component of Energy Efficiency," *BuildingEnergy Magazine*, Vol. 37, No. 1, pp. 31-34. Spring 2018.

Mark Meo, Kelsey Bowman, Kayla Brandt, Madeline Dillner, Dylan Finley, Justin Henry, Kaylie Sedlacek, and Aaron Winner, "Teaching life cycle assessment with Sustainable Minds: A discussion with examples and student projects," *Journal of Sustainability Education*, Vol. 7, December, 2014. http://www.jsedimensions.org/wordpress/wp-content/uploads/2014/12/Meo-et-al-JSE-Vol-7-Dec2014.pdf

Mark Meo, "Improving Urban Flood Defense Systems", pp. 16-19, "Research Roundtable: Carbon Debate", p. 75, *International Innovation*, January 2012.

Mark Meo, Robert Nairn, Joakim Laguros, and Musharraf Zaman, "Tar Creek, the Use of Mining Waste in Road Pavement, and the Southern Climate Impacts Planning Program," in T. D. Lekkas (ed.) *Proceedings of the 11th International Conference on Environmental Science and Technology*, Vol. A, pp. 923-929, Chania, Crete, Greece, September 3-5, 2009.

Mark Meo, Robert Nairn, Joakim Laguros, and Musharraf Zaman, "Innovation and Application of Environmental Technologies: Strategies, Progress, and Prospects in Oklahoma," in T. D. Lekkas (ed.) *Proceedings of the 10th International Conference on Environmental Science and Technology*, Vol. A, pp. 963-969, Cos Island, Greece, September 5-7, 2007.

Mark Meo, "The Illinois River Project and Oklahoma's Quest for Environmental Quality," *Journal of Contemporary Water Research & Education* Issue 136, pp. 56-67, June 2007. At: http://opensiuc.lib.siu.edu/jcwre/vol136/iss1/7/

Stadler, Steve, Scott Greene, Mark Meo, Stephanie Buway, and Jessica Li, "The Status of Wind Power in Oklahoma: Local Ownership?", in *39th Annual Frontiers of Power Conference Proceedings*, pp. II-1- II-4, Oklahoma State University Engineering Laboratory, Stillwater, OK, 2006.

Robert Nairn, Mark Meo, Musharraf Zaman, and Joakim Laguros, "Remediating and Recycling Lead Mining Waste in Oklahoma: The Use of Passive Treatment and Road Pavement Applications to Mitigate Environmental Hazards," in T. D. Lekkas (ed.) *Proceedings of the 9th International Conference on Environmental Science and Technology*, Vol. A, pp. 1050-1057, Rhodes Island, Greece, September 1-3, 2005.

Mark Meo, "Entrepreneurs and Innovation: Flood Control on Mingo Creek and its Legacy," in Glenn Brown and Jurgen Gabrecht (eds.) *Oklahoma Water 2004 Proceedings*, pp. 9.1-9.11, Environmental Institute, Oklahoma State University, Stillwater, OK, November 18-19, 2004.

Rezaul Mahmood, David Legates, and Mark Meo, The Role of Soil Water Availability in Potential Rainfed Rice Productivity in Bangladesh: Applications of the CERES-Rice Model, *Applied Geography*, Vol. 24, Issue 2, pp. 139-159, 2004.

Mark Meo, Becky Ziebro, and Ann Patton, Tulsa Turnaround: From Disaster to Sustainability, *Natural Hazards Review*, Vol. 5, Number 1, pp. 1-9, 2004.

Mark Meo, Timothy Hughes, and Joakim Laguros, "Hydrogen Production from the Wind: Prospects for Oklahoma," in T. D. Lekkas (ed.) *Proceedings of the 8th International Conference on Environmental Science and Technology*, Vol. B, pp. 574-579, Lemnos Island, Greece, September 8-10, 2003.

Rezaul Mahmood, Mark Meo, David Legates, and Mark Morrissey, The CERES-Rice Model Based Estimates of Potential Monsoon Season Rainfed Rice Productivity in Bangladesh, *The Professional Geographer*, Vol. 55, No. 2, pp. 259-273, May 2003.

Timothy Hughes, Mark Meo, Troy Simonsen, Steven Stadler, and Jeremy Traurig, Developing Oklahoma Wind-Resource Models and Products: Opportunities for Energy Diversification by the Oklahoma Oil and Gas Industries, *Oklahoma Geology Notes*, Vol. 62, No. 4, pp. 132-142, Winter 2002.

Mark Meo and Becky Ziebro, Natural Hazards Mitigation in Tulsa: The Role of Strategic Policy Innovation and Social Learning, *Australian Journal of Emergency Management*, Vol. 17, No. 1, pp. 42-49, Autumn 2002.

Mark Meo, Will Focht, Lowell Caneday, Robert Lynch, Fekadu Moreda, Blake Pettus, Ed Sankowski, Zev Trachtenberg, Baxter Vieux, and Keith Willett, Negotiating Science and Values with Stakeholders in the Illinois River Basin, *Journal of the American Water Resources Association*, Vol. 38, No. 2, pp. 541-554, April 2002.

Mark Meo, Mark Sharfman, and Rex Ellington, Fortress[©] Insecticide and the SmartBoxTM. Application System: Closing the Loop on Human and Environmental Exposure to Organophosphate Chemicals, *Pollution Prevention Review*, Vol. 11, No. 4, pp. 53-74, Autumn 2001.

Mark Sharfman, Rex Ellington, and Mark Meo, The Introduction of Post-Consumer Recycled Material into Tyvek[©]: Production, Marketing and Organizational Challenges, *Journal of Industrial Ecology*, Vol. 5, Issue 1, pp. 127-146, Winter 2001. Accessible at: http://www3.interscience.wiley.com/cgi-bin/fulltext/120135408/PDFSTART

Mark Meo and Joakim Laguros, Technological Innovation for Pollution Prevention: Development of an Environmentally-Benign Pesticide and the Reclamation of Degraded Land with Fly Ash, in Lekkas, T. D. (ed.), *Proceedings of the 7th International Conference on Environmental Science and Technology*, Vol. C, pp. 332-338, Ermoupolis, Syros Island, Greece, September 3-6, 2001.

Mark Meo and Blake Pettus, Computer Visualization for Integrated Watershed Management: The Illinois River Basin, in Hayes, D. F. and M. McKee (eds.) 2001. *AWRA Summer Specialty Conference and UCOWR Annual Conference Proceedings*, Decision Support Systems for Water Resources Management, pp. 1-6, AWRA, Middleburg, VA., June 27-30, 2001.

Mark Meo, Baxter Vieux, Blake Pettus, Edward Sankowski, Robert Lynch, Will Focht, Keith Willett, and Lowell Caneday, Ecological Risks, Stakeholder Values, and River Basins: Testing Management Alternatives for the Illinois River, in *2001 Water and Watersheds Progress Review Proceedings*, pp. 57-58, Sponsored by the EPA/NSF/USDA Partnership for Environmental Research, San Francisco, CA, April 17-19, 2001.

Mark Meo, Lowell Caneday, Will Focht, Robert Lynch, Fekadu Moreda, Blake Pettus, Ed Sankowski, Zev Trachtenberg, Baxter Vieux, and Keith Willett, Negotiating Science and Values with Stakeholders in the Illinois River Basin, pp. 511-528 in *Proceedings: Integrated Decision-Making for Watershed Management Symposium: Processes and Tools*, Virginia Tech, Blacksburg, VA. January 7-9, 2001.

Mark Meo and Mark Sharfman, Editors Introduction, *Green Technology and Public Policy* symposium, *American Behavioral Scientist*, Vol. 44, No. 2, pp. 166-167, October, 2000.

Mark Sharfman, Mark Meo, and Rex Ellington, Regulation, Business, and Sustainable Development: The Antecedents of Environmentally Conscious Technological Innovation, *Green Technology and Public Policy* symposium, *American Behavioral Scientist*, Vol. 44, No. 2, pp. 278-303, October, 2000.

Mark Meo and Becky Ziebro, Ozone Alert! and Urban Air Quality: The Significance of Strategic Policy Innovation in Tulsa, OK, in *Preprints*, 3rd Symposium on the Urban Environment, pp. 106-107, American Meteorological Society, Davis, CA, August 14-18, 2000.

Rex Ellington, Mark Sharfman, and Mark Meo, DuPont, Conoco, and the Biodegradable Grease Project: Using Innovation to Turn Chemical By-Products into a New Product, *Corporate Environmental Strategy*, Vol. 7, No. 1, pp. 62-71, 2000.

Mark Sharfman, Rex Ellington, and Mark Meo, Conoco and the Vapor Recovery Project: Using Innovation to Preserve Autonomy, *Journal of Industrial Ecology*, Vol. 3, No. 1, pp. 93-110, 1999.

Mark Meo, Joakim Laguros, and James Robertson, Current Research on the Greening of Technology and Public Policy in Oklahoma, in *Proceedings of the 6th International Conference on Environmental Science and Technology*, pp. 283-290, Samos, Greece, August 30-September 2, 1999.

Mark Meo, Baxter Vieux, James Sipes, Ed Sankowski, Robert Lynch, Will Focht, Keith Willett, and Lowell Caneday, Ecological Risks, Stakeholder Values, and River Basins: Testing Management Alternatives for the Illinois River, in *1999 Water and Watersheds Program Review* proceedings, pp. 41-42, Sponsored by the EPA/NSF/USDA Partnership for Environmental Research, Silver Spring, MD, April 19-21, 1999.

Mark Meo and Rezaul Mahmood, The Effect of the 1995-96 Southwestern Drought on Oklahoma's Fire Suppression Activities, in *Preprints*, 11th Conference on Applied Climatology, pp. 161-166, 79th AMS Annual Meeting, Dallas, TX, Jan. 10-14, 1999.

Robert Anex, Sasidhar Velnati, Mark Meo, Rex Ellington, and Mark Sharfman, Innovation and the Transformation of Clean Technologies: Life-Cycle Management of Gas Turbine Systems, in *1999 NSF Design & Manufacturing Grantees Conference Proceedings*, Long Beach, CA, January 5-8, 1999.

Mark Meo, Baxter Vieux, James Sipes, Ed Sankowski, Robert Lynch, Will Focht, Keith Willett, and Lowell Caneday, Ecological Risks, Stakeholder Values, and River Basins: Testing Management Alternatives for the Illinois River, in *1998 Water and Watersheds Program Review* proceedings, pp. 17-18, Sponsored by the EPA/NSF Partnership for Environmental Research, Corvallis, OR, January 28-29, 1998.

Teresa Shaft, Rex Ellington, Mark Meo, and Mark Sharfman, "A Framework for Information Systems in Life-Cycle Environmental Management," *Journal of Industrial Ecology*, Vol. 1, No. 2, pp. 135-148, 1997.

Mark Sharfman, Rex Ellington, and Mark Meo, "The Next Step in Becoming *Green*: Life-Cycle Oriented Environmental Management," *Business Horizons*, Vol. 40, No. 3, pp. 13-22, 1997.

Rex Ellington, Mark Meo, Mark Sharfman, and Teresa Shaft, "A Management Method Based on Total Technical Systems and Total Life-Cycle Analyses," short version in *Environmentally Conscious Design and Manufacturing - Recent Advances*, Vol. 4, pp. 239-246, M. Shahinpoor and J. Weinrach (eds.) Proceedings of the fourth international conference, Cleveland, OH, July 23-25, 1996, ECDM Press, Albuquerque, NM. Long version in *International Journal of Environmentally Conscious Design & Manufacturing*, Vol. 6, No. 2, pp. 11-28, 1997.

Mark Sharfman, Rex Ellington, and Mark Meo, A Model of Interfirm Cooperation in Life-Cycle Oriented Environmental Management, in *Proceedings of the International Association for Business and Society* annual meeting, Santa Fe, NM, March, 1996

Mark Meo and Rex Ellington, "Life Cycle Assessment and Environmental Quality Management: Issues for Improving Corporate Performance," in *Proceedings of the Fourth World Conference on Engineering Education*, Vol. 4., pp. 97-101, E. R. Krueger and F. A. Kulacki (eds.), William C. Norris Institute, University of Minnesota, October 15-20, 1995, St. Paul, MN.

Mark Meo, Robert Deyle, and Thomas James, "Shoreline Management and Policy: The Influence of Science and Scientists on Coastal Erosion Policy Innovation," in *Studies in Eastern Energy and the Environment*, American Association of Petroleum Geologists, Eastern Section Special Volume, Arthur P. Schultz and Eugene K. Rader (eds.), September 19-21, 1993, Williamsburg, VA, Virginia Division of Mineral Resources Publication 132, pp. 79-90, 1994.

Rex Ellington, Mark Meo, and Dawlat El-Sayed, "The Net Greenhouse Warming Forcing of Methanol Produced From Biomass," *Biomass and Bioenergy*, Vol. 4, No. 6, pp. 405-418, 1993.

Mark Meo, Thomas James, and Robert Deyle, "Societal Response to Chronic Environmental Change: The Role of Evolving Scientific and Technical Information in State Coastal Erosion Management," in *The World at Risk: Natural Hazards and Climate Change*, Rafael L. Bras (ed.), New York, NY, American Institute of Physics, 1993.

Rex Ellington and Mark Meo, "Calculating the Net Greenhouse Warming Effect of Renewable Energy Resources: Methanol from Biomass," *Journal of Environmental Systems*, Vol. 20, No. 4, pp. 287-301, 1990-91. Also, in *Climate Change and Energy Policy*, Louis Rosen and Robert Glasser (eds.) New York, NY, American Institute of Physics, 1992.

Rex Ellington, Mark Meo, and David Baugh, "The Total Greenhouse Warming Potential of Technical Systems: Analysis for Decision Making," *Journal of the Air & Waste Management Association*, Vol. 42, No. 4, pp. 422-428, 1992.

Rex Ellington and Mark Meo, "Rational Guidelines for National and International Decision Making About Global Warming," in *Earth Observations and Global Change Decision Making, 1990: A National Partnership*, Vol. 2, Irving Ginsberg and Joseph Angelo (eds.), NASA, NOAA, ERIM Conference Proceedings, Malabar, FL, Krieger Publishing Co., pp. 285-292, 1991.

Mark Meo, "Sea-Level Rise and Policy Change: Land Use Management in the Sacramento-San Joaquin and Mississippi River Deltas," *Policy Studies Journal*, Vol. 19, No. 2, pp. 83-92, 1991.

Rex Ellington and Mark Meo, "Greenhouse Gases, Utilities, and Climate Policy: Performance Measures for Assessing Tradeoffs." AWMA Technical Paper 91-122.1, Air & Waste Management Association 84th Annual Meeting, Vancouver, B.C., June 16-21, 1991.

Mark Meo, "Policy-Oriented Climate Impact Assessment: The Tennessee Valley Authority and Apalachicola Bay," *Global Environmental Change: Human and Policy Dimensions*, Vol. 1, No. 2, pp. 124-138, 1991.

Rex Ellington, Mark Meo, and Mahboobul Mannan, "Energy Efficiency of a Natural Gas-Fired Combined-Cycle Power Plant," in *Energy and Environmental Progress I*, T. Nejat Veziroglu (ed.), Vol. D, *Hydrogen Energy and Power Generation*, Commack, NY, Nova Science Publishers, pp. 349-371, 1991.

Rex Ellington and Mark Meo, "Global Climate Protection from Greenhouse Gases: A Systems Perspective," *World Resource Review*, Vol. 2, No. 3, pp. 308-337, 1990.

Rex Ellington and Mark Meo, "Development of a Greenhouse Gas Emissions Index," *Chemical Engineering Progress*, Vol. 86, No. 7, pp. 58-63, July 1990.

Mark Meo, "Climate Change Impacts on Coastal Environments: Implications for Strategic Planning," *Coastal Zone 89*, Proceedings of the Sixth Symposium on Coastal and Ocean Management, Vol. 2, pp. 1384-1394, American Society of Civil Engineers, New York, NY, July 11-14, 1989.

Mark Meo, Steven Ballard, Robert Deyle, Thomas James, Lani Malysa, and Laura Wilson, "Policy Implications of Global Climate Change Impacts Upon the Tennessee Valley Authority Reservoir System, Apalachicola River, Estuary, and Bay, and South Florida," in *The Potential Effects of Global Climate Change on the United States*, Appendix J: *Policy*, Joel Smith and Dennis Tirpak (eds.), U.S. Environmental Protection Agency, Washington, D.C. EPA-230-05-89-060. June 1989.

Mark Meo, Robert Deyle, Lani Malysa, and Laura Wilson, "Climate Change and Water Management Institutions: Assessing Capacity for Adaptation," *Coping With Climate Change, Proceedings of the Second North American Conference on Preparing for Climate Change: A Cooperative Approach*, Climate Institute, Washington, D.C., December 6-8, 1988, pp. 484-492, June 1989.

Mark Meo and Thomas Maze, "Economic Revitalization and Infrastructure R&D: A Strategy for Linking Public Sector Needs with University Resources in Oklahoma," *Proceedings: 23rd Annual Midwest Section Meeting*, American Society for Engineering Education. Norman, OK, March 30-April 1, 1988.

Maynard Silva and Mark Meo, "The Louisiana Response to Land Subsidence and Coastal Erosion," *Oceans 85: Ocean Engineering and the Environment*, Conference Record, San Diego, CA, Vol. 2, pp. 594-599, Sponsored by Marine Technological Society and IEEE Ocean Engineering Society, Institute of Electrical and Electronics Engineers, Inc., New York, NY, November 12-14, 1985.

Mark Meo, "Selection of Feedstocks for Small and Intermediate Scale Fuel Ethanol Distilleries," *Journal of Soil and Water Conservation*, Vol. 40, No. 4, pp. 364-366, 1985.

Mark Meo, "Economic Evaluation of Ethanol Fuel Production From Agricultural Crops and Residues in California," *Resources and Conservation*, Vol. 11, No. 1, pp. 1-25, 1984.

Mark Meo, *Small Scale On-Farm Alcohol Fuel Production from California Agriculture: An Economic and Energetic Evaluation*, Institute of Ecology, University of California at Davis, IOE Publication No. 27, 1983.

Mark Meo, Scott Sachs, Peter Hunter, and Ernest Bullock, "Biofuel Resources Mapping for Energy Planning," *California Agriculture*, Vol. 37, Nos. 1 & 2, pp. 19-21, 1983. http://ucanr.org/repository/CAO/landingpage.cfm?article=ca.v037n01p19&abstract=yes

Mark Meo and Scott Sachs, "On-Farm Alcohol Fuel Production," *California Agriculture*, Vol. 36, No. 7, pp. 9-11, 1982. http://ucanr.org/repository/CAO/landingpage.cfm?article=ca.v036n07p9&abstract=yes

Mark Meo, "Estimation of Crop Acreage Flexibility Restraints for Evaluation of On-Farm Alcohol Fuel Production in California," *Journal of Environmental Systems*, Vol. 12, No. 1, pp. 37-44, 1982.

Mark Meo, John Day, and Theodore Ford, "Land Treatment of Fish Processing Wastes on Dredge Spoil Disposal Sites: Comparative Cost Evaluations," *Coastal Zone Management Journal*, Vol. 3, No. 3, pp. 307-318, 1977.

R. Eugene Turner, John Day, Mark Meo, Philip Payonk, James Stone, Theodore Ford, and William Smith, "Aspects of Land-Treated Waste Applications in Louisiana Wetlands," in *Proceedings of the National Symposium on Freshwater Wetlands and Sewage Effluent Disposal*. D.L. Tilton, R.H. Kadlec, and C.J. Richardson (eds.), Ann Arbor, MI. 1976.

Mark Meo, John Day, and Theodore Ford, *Overland Flow Wastewater Treatment in the Louisiana Coastal Zone*, LSU-75-T-04, 53 pp, Center for Wetland Resources, Louisiana State University, Baton Rouge, LA. 1975. http://nsgl.gso.uri.edu/lsut75002.pdf

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Review

Confronting Climate Change: Strategies for Energy Research and Development, by the National Research Council (Washington, D.C., National Academy Press, 1990), Reviewed in Forum for Applied Research and Public Policy, Vol. 6, No. 3, p. 113, Fall, 1991.

Letters and News Articles

Mark Meo, "Stakeholder-Based Flood Modeling for Urban Adaptation to Climate Change," *Southern Climate Monitor*, Vol. 5, Issue 1, January 2015.

Mark Meo, "Urban Flooding and the Changing Climate: Communicating Forecasts to City Planners in Texas and Oklahoma," *Southern Climate Monitor*, Vol. 2, Issue 10, October 2012.

Mark Sharfman and Mark Meo, "Faculty development at the University of Oklahoma," *EnviroLink*, Vol. 4, No. 4, p. 4, Management Institute for Environment and Business, 1995.

Rex Ellington and Mark Meo, *Issues in Science and Technology*, Vol. 7, No. 2, pp. 19-20, 1991.

Reports [28 total]

Mark Meo, **Benefit-Cost Analysis and Flood Hazard Mitigation - Literature Review** Research Report to the Polis Center, Indiana University, Indianapolis in support of Natural Hazard Mitigation Saves – Version 2.0, NIBS, June 6, 2017.

Scott Greene, Yang Hong, Mark Meo, Baxter Vieux, Jonathan Looper and Zhanming Wan, *Urban Flooding and Climate Change – Visualizing the Impacts*, Web-based report, June 2015. Accessible at: http://eos.ou.edu/hazards/urbanflooding/

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Carlie Lawson, Lucas Baze, and Mark Meo, *Emerging Energy Technology Survey: Oklahoma State Agency Interests*, Environmental Verification and Analysis Center, University of Oklahoma, July, 2007. Accessible at: http://www.seic.okstate.edu/owpi/OKWindInfo/OtherDoc/EET_Survey.pdf.

Mark Meo, "An Education Agenda," pp. 7.2-7.8 in *Oklahoma's Environment: Pursuing a Responsible Balance*, 2004 Oklahoma Academy Town Hall, October 10-13, 2004.

J. Scott Greene, Mark Meo, Kylah McNabb, and Stephen Stadler, *Oklahoma Wind Power Initiative Work: Assessment, Research, Policy Study and Outreach*. Final Report for the Period FY 2004. Oklahoma Department of Commerce, September 2004.

Mark Meo and Steven J. Stadler, "Looking to Oklahoma's Energy Future," pp. 65-72; Mark Meo et al., "Water Planning in the Illinois River Basin," pp. 94-98 in *Oklahoma Resources: Energy & Water*, 2003 Oklahoma Academy Town Hall, November 12-15, 2003.

Carlie Lawson, Mark Meo, Scott Greene, and Mark Morrissey, *Oklahoma Drought Survey Analysis*, Science and Public Policy Program, February, 2002.

Mark Meo, Contributor, *Managing Interdisciplinary Research: Lessons Learned*, Workshop Summary, STAR Report 11, Water and Watersheds Research Program, US Environmental Protection Agency, Washington, DC, March 19, 2001.

Tim Hughes, Mark Shafer, and Mark Meo, *Review of States=Policy Incentives for the Development of Wind Energy Facilities*, Report to the Oklahoma Department of Commerce, November 10, 2000.

Reports (Continued)

Mark Sharfman, Rex Ellington, and Mark Meo, Final Project Report, *Regulation and Sustainable Development: The Management of Environmentally-Conscious Technological Innovation under Alternative Market Conditions*, EPA Grant No. R-824748-01-0, March 3, 2000.

Mark Meo, Mark Sharfman, and Rex Ellington, *DuPont's Fortress* © *Insecticide and the SmartBox* **Mark Application System: Closing the Loop on Human and Environmental Exposure to Organophosphate Chemicals, Case Analysis prepared for the U.S. Environmental Protection Agency, May, 1999.

Mark Sharfman, Rex Ellington, and Mark Meo, *The Introduction of Post-Consumer Recycled Material into Tyvek*©: *Production, Marketing, and Organizational Challenges*, Case Analysis prepared for the U.S. Environmental Protection Agency, April, 1999.

Rex Ellington, Mark Sharfman, and Mark Meo, *DuPont/Conoco and the Biodegradable Grease Project: Using Innovation to Turn a Waste Stream into an Improved Product in Another Business Unit*, Case Analysis prepared for the U.S. Environmental Protection Agency, December, 1998.

Mark Sharfman, Rex Ellington, and Mark Meo, *DuPont/Conoco and the Vapor Recovery Project: Using Innovation to Respond to Regulation*, Case Analysis prepared for the U.S. Environmental Protection Agency, February 1998.

Mark Meo, Mark Sharfman, and Rex Ellington, *Teaching Management for Total Environmental Quality*, Report prepared for the U.S. Environmental Protection Agency, January 1995.

Mark Meo, Michael Smolen, and Patricia Norris, with Rick Farmer, Patrice Mareschal, John Roll, Julie Smith, and Charles Jacques, *Policy Options for Animal Waste Management in Oklahoma*, Report to the Governor's Animal Waste Task Force, prepared jointly by the University of Oklahoma and Oklahoma State University for the Secretary of the Environment, December 1994.

Rex Ellington, Mark Meo, and Dawlat El-Sayed, *Methanol as an Alternative Transportation Fuel - Systemwide Examination of Energy, Greenhouse Gas Emissions, and Costs*, Report prepared for the Sarkeys Energy Center, University of Oklahoma, March 1992.

Reports (Continued)

Chand Wije and Mark Meo, "Water: Oklahoma's Vital Resource," in *Oklahoma Resources: An Information System for Economic Development in the Second Century*, Hans Spaeth, Gary Thompson, and Henry Eisenhart (eds.), Kerr Foundation Report to the Governor, September 1990.

Mark Meo, "Forest and Mineral Resources," in *Oklahoma Resources: An Information System for Economic Development in the Second Century*, Hans Spaeth, Gary Thompson, and Henry Eisenhart (eds.), Kerr Foundation Report to the Governor, September 1990.

Mark Meo, Gerald Doeksen, Claude Allen, and Grant Wilson, *Integrated Infrastructure Planning for Economic Development in Oklahoma - Phase I*. Report prepared jointly by the University of Oklahoma and Oklahoma State University for the Oklahoma Department of Commerce, November 1989.

Michael Devine, Rex Ellington, and Mark Meo, *Integrated Energy Systems: Technical and Economic Potential for Oklahoma*. Report prepared for the Electric Power Research Institute, Palo Alto, CA, Research Project 2221-10, August 1989.

Mark Meo, Rex Ellington, Steven Ballard, Masud Salimian, and Hasan Haideri, *Integrated Energy Systems for Utilizing Oklahoma Coal*. Report prepared for the U.S. Department of Energy, Bartlesville Project Office, Bartlesville, OK. March 1989.

Mark Meo, Robert Deyle, Steven Ballard, Thomas James, Lani Malysa, and Laura Wilson, *Policy Implications of Global Climate Change Impacts Upon the Tennessee Valley Authority Reservoir System, Apalachicola River, Estuary, and Bay, and South Florida*. Report prepared for the U.S. Environmental Protection Agency, Office of Policy, Planning and Evaluation. January 1989.

Mark Meo, "Institutional Response to Sea-Level Rise: The Case of Louisiana," in Michael Glantz, Barbara Brown, and Maria Krenz (eds.) *Societal Response to Regional Climate Change: Forecasting by Analogy*. Report prepared for the U.S. Environmental Protection

Agency, Office of Policy, Planning, and Evaluation by the Environmental and Societal Impacts Group, National Center for Atmospheric Research, Boulder, CO. March 1988.

Mark Meo (editor), *Proceedings of the Symposium on Climate Change in the Southern United States: Future Impacts and Present Policy Issues*, Prepared for the U.S. Environmental Protection Agency, Office of Policy, Planning, and Evaluation. November 1987.

Reports (Continued)

Steven Ballard, Charles McClure, Timothy Adams, Michael Devine, Thomas James, Lani Malysa, and Mark Meo, *Improving the Transfer of Scientific and Technical Information: The Federal Role*, Final report to the National Science Foundation, Office of Policy Research and Analysis, 3 vols. September 1986.

<u>Professional Papers and Panels</u> (excluding Proceedings) [62 total]

Mark Meo, "Coastal Adaptation Research and Innovation Center," Invited participant, NSF Coastlines and People Scoping Workshop, San Diego, CA, September 26-28, 2018. https://coastlinesandpeople.org/

Kam-biu Liu, Mark Meo and Matei Geogescu, "CSP: Connecting Science and People," Invited participant, NSF Coastlines and People Scoping Workshop, San Diego, CA, September 26-28, 2018. https://coastlinesandpeople.org

Mark Meo, Scott Greene, Yang Hong, Jonathan Looper, Baxter Vieux and Amy Gooding, "Urban Flooding and Future Climate: Case Studies in Oklahoma and Texas," Poster presented at the 95th annual meeting of the American Meteorological Society, January 4-8, 2015. https://ams.confex.com/ams/95Annual/webprogram/Paper260897.html

Mark Meo, "Teaching Life-Cycle Analysis with Sustainable Minds: A Discussion with Examples of Student Projects," Presented at *Building Communities of Learning for Student Success*, Teaching Scholars Initiative, University of Oklahoma, October 31, 2014. Posted at: http://www.ou.edu/content/dam/cte/tsi/ppts_2014/TeachingLifeCycleAssessment.pdf

Mark Meo, "Urban Flooding and Future Climate: Case Studies in Oklahoma and Texas," Presented at 35th Annual Oklahoma Governor's Water Conference and Research Symposium, Oklahoma City, OK, October 23, 2014. Posted at: http://water.okstate.edu/programs/symposium/2014-symposium/2014-presentations/2-3-1_Meo.pdf

Mark Meo, "Teaching life cycle assessment with Sustainable Minds: A discussion with examples and student projects," *Sustainable Minds* Industry Blog, August 27, 2014. Posted at: http://www.sustainableminds.com/industry-blog/teaching-life-cycle-assessment-with-sustainable-minds

Mark Meo, "Oklahoma's Green Energy Future – What We Should (or Could) Do About Science, Technology, Policy & Innovation," Invited speaker, Alternative Energy in the New Legacy Revolution, Public Policy Forum VIII, Cameron University, Lawton, OK, April 1, 2014. Accessible at: http://www.cameron.edu/history_government/cu-public-policy-forum-viii

Mark Meo, "Creating Knowledge Workers for the Greener Products Marketplace. Part 3 – Integrating Ecodesign and LCA," Invited participant, *Sustainable Minds* webinar, September 24, 2012. Accessible at: http://www.sustainableminds.com/node/52554

Baxter Vieux, Mark Meo, Preston Carter, Scott Greene, and Yang Hong, "Watershed Modeling and Visualization for Climate Planning and Adaptation: An Analysis of Five Cities," Presented at the 37th Annual Natural Hazards Research and Applications Workshop, Broomfield, CO, July 14-17, 2012.

Mark Meo, Discussant, *Workshop on Paths to Sustainable Energy Futures in Europe*, European Union Center, University of Oklahoma, April 5-6, 2012.

Liu, Lu, Yang Hong, James E. Hocker, Mark A. Shafer, Mark Meo, and Lynne M. Carter. "Climatological and Hydrological Drought Analyses and Projection with Comprehensive

Drought Indicators: A Case Study for Blue River Basin," Poster presented at the 2011 University of Oklahoma WaTER conference, Norman, OK, Oct. 25-27, 2011.

Mark Meo, "Entrepreneurial Opportunities in Alternative Energy," Invited speaker, Price College of Business, University of Oklahoma, February 23, 2009.

Mark Meo, "The Southern Climate Impacts Planning Program – Structure, Strategy and Future Opportunities," talk presented to the Geography Colloquium, University of Oklahoma, September 18, 2009.

Mark Meo, "Team-Building for Policy Research – What Difference it Makes for Oklahoma (and Elsewhere)," talk presented to the College of Atmospheric and Geographic Sciences, National Weather Center, Norman, OK, February 3, 2009.

Carlie Lawson and Mark Meo, "The Fire Danger Model and the Mesonet: The Underutilized Benefit of IT Software in Oklahoma's Drought Planning and Management," paper presented at the annual meeting of the Southwestern Division of the Association of American Geographers, Norman, OK, October 26-28, 2006.

Mark Meo, "The Oklahoma Wind Rush: A Collaborative Approach to Sustainable Energy Development," invited paper presented at the workshop on *Energy, Environmental Impacts, and Sustainability*, Kansas State University, Manhattan, KS, January 4-6, 2006. Accessible at: http://www.engg.ksu.edu/CHSR/events/che650/200601/docs/09Meopaper.pdf.

Mark Meo, "Future of Energy," invited talk presented at *Leadership Oklahoma* – Economic Development/Energy, Stillwater, OK, December 3, 2005.

Mark Meo, "Oklahoma Wind Power Development: Motivations and Incentives," invited talk presented at the National Wind Coordinating Committee Southwest Power Pool Workshop II: Transmission and Wind, Topeka, KS, September 19, 2005.

Mark Meo, "The City of Tulsa and Ozone Alert!: A Case of "Integrated" Assessment and Decision Making," invited talk presented at the Southern Plains Regional Integrated Science Assessment (RISA) Meeting, NOAA Office of Global Programs, Dallas, TX, December 10-12, 2003.

Mark Meo, "Sustainable Watersheds: The OU-OSU Collaboration in the Illinois River Basin," invited talk presented at the History of Science Colloquium, University of Oklahoma, April 25, 2003.

Mark Meo, Scott Greene, Carlie Lawson, Matt Biddle, and Rezaul Mahmood, Climate Prediction, Information, and Policy Response: A Retrospective Assessment of Drought Management in Oklahoma, poster presented at the NOAA Office of Global Change PI Meeting, Seabrook Island, SC, October 23-25, 2002.

Mark Sharfman, Teresa Shaft, Robert Anex, Rex Ellington, and Mark Meo, Environmental Information, Uncertainty, and Interfirm Cooperation in Environmental Management, paper presented at the Academy of Management annual meeting, Washington, DC, August 3-7, 2001.

Tim Hughes, Mark Meo, Mark Shafer, May Yuan, Jayne Salisbury, and Steve Stadler, A Detailed Oklahoma Wind Power Assessment Using Two Methods, poster presented at Windpower 2001, Washington, DC, June 3-7, 2001.

Mark Meo, Lessons Learned in Managing Multidisciplinary Research Projects, Invited speaker, 2001 Water and Watersheds Progress Review, U.S. Environmental Protection Agency, San Francisco, CA, April 17-19, 2001.

Mark Meo, Lowell Caneday, Will Focht, Robert Lynch, Fekadu Moreda, Blake Pettus, Ed Sankowski, Zev Trachtenberg, Baxter Vieux, and Keith Willett, ANegotiating Science and Values with Stakeholders in the Illinois River Basin, paper presented at the Oklahoma Clean Lakes Association Tenth Annual Symposium, Shangri-La, Oklahoma, March 28-30, 2001.

Blake Pettus and Mark Meo, Computer Visualization for Integrated Watershed Management: The Illinois River Basin, paper presented at the Oklahoma Clean Lakes Association Tenth Annual Symposium, Shangri-La, Oklahoma, March 28-30, 2001.

Mark Meo, Lowell Caneday, Will Focht, Robert Lynch, Fekadu Moreda, Blake Pettus, Ed Sankowski, Zev Trachtenberg, Baxter Vieux, and Keith Willett, Negotiating Science and Values with Stakeholders in the Illinois River Basin, poster presented at Integrated Decision-Making for Watershed Management Symposium: Processes and Tools, Chevy Chase, Maryland, January 7-9, 2001.

Mark Sharfman, Tom Sigerstad, Rex Ellington, and Mark Meo, The Strategic Role of Legitimacy in the Introduction of Post-Consumer Recycled Materials: Building Theory from Case Study, paper presented at the Academy of Management annual meeting, Toronto, Canada, August 4-9, 2000.

Mark Meo, Natural Hazards Mitigation in Tulsa: The Role of Strategic Policy Innovation and Social Learning, presented at the 25th Annual Workshop on Hazards Research and Applications, Boulder, CO, July 9-12, 2000.

Rob Anex, Mark Meo, and Mark Sharfman, An Analysis of Current Practice in the Use of Life-Cycle Assessment, poster presented at the NSF Design & Manufacturing Research Conference, Vancouver, British Columbia, January 3-6, 2000.

Mark Sharfman, Rex Ellington, Mark Meo, and Tom Sigerstad, The Role of Legitimacy in the Introduction of Post-Consumer Recycled Materials: A Theory Driven Case Study, poster presented at the Eighth International Greening of Industry Network Conference, University of North Carolina, Chapel Hill, November 14-17, 1999.

Mark Meo, Strategic Policy Innovation and Flash Flood Hazard Mitigation: The Tulsa Story, presented at the Annual Meeting of the Oklahoma Political Science Association, Redlands Community College, El Reno, OK, November 12, 1999.

Mark Sharfman, Mark Meo, and Rex Ellington, Regulation, Business, and Sustainable Development: The Antecedents of Environmentally-Conscious Technological Innovation, presented at the Academy of Management annual meeting, Chicago, August 6-11, 1999.

Mark Sharfman, Teresa Shaft, Robert Anex, Rex Ellington, and Mark Meo, Interfirm Cooperation in Life-Cycle Oriented Environmental Management: Examples and a Conceptual Framework, presented at the Academy of Management annual meeting, San Diego, August 7-12, 1998.

Mark Meo and Karl Pepple, Societal Response to Hydrologic Variability: Flood Hazard Mitigation in Tulsa, Oklahoma, presented at the GCIP Mississippi River Climate Conference, St. Louis, MO, June 8-12, 1998.

Mark Meo, Sustainability, Research, and Environmental Decision Making: The Science and Public Policy Program Agenda, presented at the National Conference on Environmental Decision-Making, Knoxville, TN, May 3-6, 1998.

Mark Meo, The OU-OSU Water and Watersheds Study of the Illinois River Basin, presented at the Oklahoma Section meeting of the American Water Resources Association, Oklahoma City, OK, March 2-4, 1998.

Mark Sharfman, Mark Meo, and Rex Ellington, Regulation, Business, and Sustainable Development, paper presented at the American Association for the Advancement of Science 150th annual meeting, Philadelphia, PA, February 12-17, 1998.

Mark Sharfman, Rex Ellington, and Mark Meo, Institutional Pressures and the Development/Diffusion of Green Technological Innovations, paper presented at the Academy of Management 56th Annual Meeting, Cincinnati, OH, August 13, 1996.

Mark Meo, "Environmental Ethics and Why We Need To Keep Them as Part of Our Programs," Invited presentation at EPA Region 6 Nonpoint Source Conference, *From Point to Nonpoint and Points Beyond*, Tulsa, OK, October 17-19, 1995.

Mark Meo, "Shoreline Management and Policy," Invited paper presented at the Eastern Section American Association of Petroleum Geologists annual meeting, Williamsburg, VA, September 19-21, 1993.

Rex Ellington and Mark Meo, "Total Environmental Quality: Integrating Engineering and Management for Sustainable Development," Paper presented at the AIChE summer national meeting, Seattle, WA, August 15-18, 1993.

Mark Meo and Rex Ellington, "Global Environmental Change: What Role for Engineering Education?" Paper presented at the Gulf-Southwest Section American Society for Engineering Education annual meeting, Austin, TX, April 1-2, 1993.

Mark Meo, "Reserve Design: Conservation and Public Policy." Paper presented at the 1992 Heritage Program and Conservation Data Center Conference, Joint Meeting of the Southeastern and Western Regions, Oklahoma Natural Heritage Inventory, Norman, OK, October 6-9, 1992.

Mark Meo, Robert Deyle, and Thomas James, "Science, Scientists, and the Evolution of Coastal Erosion Policy." Paper presented at the 47th annual meetin of the Soil and Water Conservation Society, Baltimore, MD, August 9-12, 1992.

Mark Meo, "Institutional Response to Global Climate Change: The Coastal Barrier Analog." Paper presented at the American Society for Public Administration 52nd national conference, Washington, D.C., March 23-27, 1991.

Rex Ellington and Mark Meo, "Global Climate Protection from Radiatively Active Trace Gases: A Systems Approach." Paper presented at Global Warming - A Call for International Coordination, International Conference on the Scientific and Policy Issues Facing All Governments, Chicago, IL, April 9-12, 1990.

Mark Meo, "Strategies for Coping with Global Change: Linking Climatic Uncertainty to Capital Improvement Planning." Paper presented at the American Society for Public Administration 51st national conference, Los Angeles, CA, April 7-11, 1990.

Mark Meo, "Greenhouse Gases and Global Warming: Establishing Coherence in Climate Protection Policy." Paper presented at the annual meeting of the Midwest Political Science Association, Chicago, IL, April 5-7, 1990.

Mark Meo, "Climate Change and Policy Change: The Role of Analogs in Preparing for Global Warming." Paper presented to the School of Meteorology, University of Oklahoma, December 12, 1989.

Robert Deyle, Mark Meo, and Laura Wilson, "Coping with Non-incremental Change: Water Management Institutions and Climate Change." Paper presented at the 25th annual meeting of the American Water Resources Association, Tampa, FL, September 17-22, 1989.

Rex Ellington and Mark Meo, "Avoiding the RAT Gas Trap: The Development and Use of a Greenhouse Gas Emissions Index." Paper presented at American Institute of Chemical Engineering summer national meeting, Philadelphia, PA, August 20-23, 1989.

Mark Meo, Robert Deyle, Lani Malysa, and Laura Wilson, "Institutional Implications of Climate Change Impacts." Paper presented at American Association for the Advancement of Science annual meeting, San Francisco, CA, January 14-19, 1989.

Mark Meo, Michael Devine, Rex Ellington, Masud Salimian, and Hasan Haideri, "Improving Air Quality Through Methanol Production From Integrated Combined Cycle Technologies." Paper presented at Operations Research Society of America/The Institute of Management Sciences, (ORSA/TIMS) Joint National Meeting, Denver, CO, October 23-26, 1988.

Mark Meo, "Policy Aspects of Climate Impact Assessment." Paper presented at the American Society for Public Administration 49th national conference, Portland, OR, April 16-20, 1988.

Mark Meo, "Implications of Global Climate Change for Natural Resource Management." Paper presented at the Oklahoma Political Science Association Annual Meeting, Oklahoma City, OK, Dec. 4-5, 1987.

Mark Meo, "Policy Metaphor and its Role in Climate Impact Assessment." Paper presented at the International Association for Impact Assessment annual meeting, Philadelphia, PA, May 28-30, 1986.

Mark Meo, "Wastewater Recycling on Diked Dredged Spoil Disposal Sites in Coastal Louisiana." Invited speaker, Massachusetts Coastal Resources Advisory Board Meeting, Woods Hole Oceanographic Institution, May 10, 1984.

Mark Meo, "Biomass Energy Planning: A Study of Agricultural Residue Availability in California." Paper presented at the 22nd Annual Meeting, Western Regional Science Association, Honolulu, HI. 1983.

Mark Meo, "Economics of Energy Production From Biomass." Invited speaker at the symposium: What Should the University of California Be Doing About Energy Production From Biomass?, University of California, Davis, May 24, 1982.

Unpublished Papers

Proposal for an OU Interdisciplinary Center for Global Environmental Studies, (with L. Weider and G. Cohen), Proposal submitted to the Vice President for Research and Dean of the Graduate College by the Global and Regional Environmental Studies Committee, OU, November, 2000.

National Convocation on Science and Engineering Doctoral Education: Report and Recommendations to the Vice President for Research and Dean of the Graduate College," (with R. Gropp, K. Kanak, and M. Santos), Science and Public Policy Program, OU, August 6, 1996. 15 pp.

"Discussion Brief for Oklahoma Infrastructure Institute: Proposed Jointly by University of Oklahoma and Oklahoma State University" (with T. Maze and G. Doeksen), School of Civil Engineering and Environmental Science, OU and Department of Agricultural Economics, OSU. February 1987. 18 pp.

"A Framework for Assessing the Impacts of Global Climate Change on the Southern U.S.," Science and Public Policy Program, OU. April, 1986. 30 pp.

"Marine Policy Education Program: A Prospectus," Marine Policy Center, Woods Hole Oceanographic Institution, Woods Hole, MA, March 7, 1985. 7 pp.

Other Reports [9 total]

Urban Flooding and Climate Change – Visualizing the Impacts, website and brochure on NOAA research results, June, 2015. Accessible at: http://eos.ou.edu/hazards/urbanflooding/

Trip Report: American Electric Power Asia-Pacific Partnership Site Visit, October 30-November 4, 2006. Report to the University of Oklahoma International Programs Center.

Oklahoma's Energy Future: A Strategy for the Next Quarter Century, Report to Gov. Frank Keating, December 12, 2002. Contributor.

Rebuilding the Foundations: State and Local Public Works Financing & Management, U.S. Congress, Office of Technology Assessment, OTA-SET-477, U.S. Government Printing Office: Washington, DC, March 1990. Contributor.

Forecasting by Analogy: Societal Responses to Regional Climatic Change, Michael H. Glantz (Ed.), National Center for Atmospheric Research, Boulder, CO, August 1989. Contributor.

Infrastructure for the 21st Century: Framework for a Research Agenda, Committee on Infrastructure Innovation, National Research Council, National Academy Press: Washington, D.C. 1987. Contributor.

Agricultural Chemicals and Ground Water Pollution Control. Proceedings of the Fifth National Conference on Ground Water Pollution Control. Prepared for the U.S. Environmental Protection Agency, Office of Ground Water Protection. June 1987. (Science & Public Policy/Environmental and Ground Water Institute, Civil Engineering and Environmental Science).

Liability Issues and Ground Water Pollution Control. Proceedings of the Fourth National Conference on Ground Water Pollution Control. Prepared for the U.S. Environmental Protection Agency, Office of Ground Water Protection. September 1986. (Science & Public Policy/Environmental and Ground Water Institute, Civil Engineering and Environmental Science).

Local Government Options for Ground Water Pollution Control. Proceedings of the Third National Conference on Ground Water Pollution Control. Prepared for the U.S. Environmental Protection Agency, Office of Ground Water Protection. June 1986. (Science & Public Policy/Environmental and Ground Water Institute, Civil Engineering and Environmental Science).

FUNDED RESEARCH

<u>Total Funding</u>: **\$8.53 million** (\$8,533,824), 40 projects; <u>Principal Investigator</u>: **\$2.15 million** (\$2,149,561), 18 projects.

Principal Investigator (Consultant), "Mitigation Saves Version 2.0", Subcontract with the Polis Center, Indiana University Purdue University at Indianapolis, December 30, 2016 – August 31, 2017. (\$9,600).

Principal Investigator, "Climate Futures, Urban Floods, and Forecasting: Linking Severe Weather Impacts with Climate Variability", National Oceanic and Atmospheric Administration, Urban Water Resources Planning, September 1, 2011- August 31, 2014. (\$300,000).

Co-Principal Investigator, "Policy and Market Research Analysis for Wind Powering America", Oklahoma Department of Commerce, July 1, 2009 – June 30, 2010. (\$43,000).

Co-Principal Investigator, "Assessment and Outreach from the Oklahoma Wind Power Initiative to Support Wind Powering America", Oklahoma Department of Commerce, July 1, 2008 – June 30, 2009. (\$15,000).

Co-Principal Investigator, "Southern Climate Impacts Planning Program", National Oceanic and Atmospheric Administration, Regional Integrated Sciences and Assessments (RISA) program, August 1, 2008 – July 31, 2013 (\$3,849,882).

Co-Principal Investigator, "Oklahoma Wind Power Initiative: Assessment, Research, Policy Study, and Outreach", Oklahoma Department of Commerce, July 1, 2008 – June 30, 2009 (\$80,000).

Co-Principal Investigator, "Wind Powering America Oklahoma Outreach", Oklahoma Department of Commerce, July 1, 2007 –June 30, 2008 (\$25,000).

Co-Principal Investigator, "Renewable Energy Outreach and Education through the Oklahoma Wind Power Initiative", Oklahoma Department of Commerce, July 1, 2007 –June 30, 2008 (\$100,000).

Co-Principal Investigator, "Oklahoma Wind Power Initiative: Education, Outreach, Assessment, and Research", Oklahoma Department of Commerce, July 1, 2006– June 30, 2007 (\$100,000).

Co-Principal Investigator, "Oklahoma Wind Power Initiative: Assessment, Research, Policy Study and Outreach", Oklahoma Department of Commerce, July 1, 2005 – June 30, 2006 (\$100,000).

FUNDED RESEARCH (Continued)

Co-Principal Investigator, "Oklahoma Wind Power Initiative: FY 2005", Oklahoma Department of Commerce, July 1, 2004 – June 30, 2005 (\$100,000).

Co-Principal Investigator, "Oklahoma Wind Power Initiative: Assessment, Research, Policy Study, and Outreach," Oklahoma Department of Commerce, July 1, 2003 – June 30, 2004 (\$100,000).

Co-Principal Investigator, "Oklahoma Wind Power Initiative - FY03 Continued Research and Outreach," Oklahoma Department of Commerce, July 1, 2002 - June 30, 2003 (\$90,000).

Co-Principal Investigator, The Oklahoma Wind Power Assessment Initiative, Oklahoma Department of Commerce, July 1, 2000 - June 30, 2001 (\$199,711).

Principal Investigator, REU Supplement: MOTI: Innovation and the Transformation of Clean Technologies: A Life-Cycle Approach to the Management of Gas Turbine Systems, National Science Foundation, August 10, 1998 - June 30, 1999 (\$5,000). Supplement to DMI-9700218.

Co-Principal Investigator, Chemicals in the Environment: Doctoral Fellowships in Environmental Engineering, U.S. Dept. of Education, Graduate Assistance in Areas of National Need (GAANN) Program, (with the School of Civil Engineering and Environmental Science) August 15, 1998 - August 14, 2001 (\$250,510).

Principal Investigator, REU Supplement: Strategic Policy Innovation and Social Learning: Flood Hazard Mitigation, Recycling, and Air Quality in Tulsa, OK, National Science Foundation, April 16, 1998 - February 28, 1999, (\$12,065). Supplement to SBR-9618003.

Principal Investigator, Ecological Risks, Stakeholder Values, and River Basins: Testing Management Alternatives for the Illinois River, EPA-NSF Partnership for Environmental Research, October 1, 1997 - September 30, 2000, (\$873,496).

Principal Investigator, Innovation and the Transformation of Clean Technologies: A Life-Cycle Approach to the Management of Gas Turbine Systems, National Science Foundation, July 1, 1997 - June 30, 2000, Grant DMI-9700218 (\$427,886).

Principal Investigator, Climate Prediction, Information, and Policy Response: A Retrospective Assessment of Drought Management in Oklahoma, NOAA Office of Global Programs, June 1, 1997 - May 31, 1999, (\$192,845).

FUNDED RESEARCH (Continued)

Principal Investigator, Strategic Policy Innovation and Social Learning: Flood Hazard Mitigation, Recycling, and Air Quality in Tulsa, OK, National Science Foundation, May 16, 1997 - May 15, 1999, Grant SBR-9618003 (\$147,395).

Principal Investigator, "Revision of EPA/NSF Water and Watersheds Proposal for Resubmission," Research Council, University of Oklahoma, November 18, 1996 - January 31, 1997 (\$3,300).

Co-Principal Investigator, "Regulation, Business, and Sustainable Development: The Management of Environmentally Conscious Technological Innovation Under Alternative Market Conditions," U.S. Environmental Protection Agency, October 1, 1995 - September 30, 1997 (\$244,955).

Principal Investigator, "Status of Animal Waste Management in Oklahoma," Office of the Secretary of Environment/U.S. Environmental Protection Agency, October 1, 1994 - December 31, 1994 (\$20,990).

Principal Investigator, "Teaching Management for Total Environmental Quality: A Joint Initiative for Environmental Education in the Colleges of Engineering and Business at the University of Oklahoma," U.S. Environmental Protection Agency, August 1, 1993 - January 15, 1995 (\$5,000).

Co-Principal Investigator, "Building the Future: The Role of Engineering and Environmental Science in Sustaining Society," Oklahoma State Regents for Higher Education, Summer Academies for Mathematics, Science, and Multidisciplinary Studies, June 13, 1993 - July 2, 1993 (\$59,145).

Principal Investigator, "Global Warming Potential of Methanol Fuel Produced From Biomass," Sarkeys Energy Center, University of Oklahoma, November 1990 - April 1991 (\$12,000).

Principal Investigator, "Institutional Response to Global Climate Change: The Coastal Barrier Analog," National Science Foundation, September 1990 - June 1992, Grant SES-9012445 (\$55,984).

Co-Principal Investigator, "An Assessment of Alternative Transportation Fuels for Fleet Vehicles in Oklahoma," Oklahoma Governor's Office, October 1989 - June 1990 (\$148, 806).

Principal Investigator, "Integrated Infrastructure Planning for Economic Development in Oklahoma - Phase I," Oklahoma Department of Commerce, May 1989 - October 1989 (\$15,000).

FUNDED RESEARCH (Continued)

Principal Investigator, "Implications of Global Climate Change for the Southern United States - Phase III," U.S. Environmental Protection Agency, November 1987 - October 1988 (\$50,000).

Co-Principal Investigator, "Integrated Energy Systems for Utilizing Oklahoma Coal," U.S. Department of Energy, September 1987 - December 1988 (\$137,000).

Co-Principal Investigator, "An Assessment of Integrated Energy Systems for Oklahoma," Electric Power Research Institute, September 1987 - December 1988 (\$150,000).

Co-Principal Investigator, "Implications of Global Climate Change for the Southern United States - Phases I & II," U.S. Environmental Protection Agency, September 1985 - October 1987 (\$98,600).

Project Investigator, "The Federal Role in Improving the Dissemination and Use of Scientific and Technical Information," National Science Foundation, September 1985 - August 1986 (\$149,000).

Project Investigator, "Ground Water Symposia Series on Public Policy Issues of Ground Water Pollution Control," U.S. Environmental Protection Agency, 1984 - 1986 (\$286,164).

Co-Principal Investigator, "Institutional Response to Sea Level Rise: The Adequacy of Coastal Wetlands Loss and Subsidence in Louisiana as a Metaphor for Policy Analysis," Sea Grant Program, Woods Hole Oceanographic Institution, January 1985 - August 1985 (\$7,000).

Principal Investigator, "Alcohol Fuel Production From Biomass in California: An Integrated Analysis," Public Service Research and Dissemination Program, University of California-Davis, March 1982 - December 1982 (\$11,000).

Principal Investigator, "Economic Analysis of Crop Residue Collection for Alcohol Fuel Production in California," Center for Environmental and Energy Policy Research, University of California-Davis, April 1981 - September 1981 (\$3,000).

Principal Investigator, "Economic and Energetic Evaluation of Alternative Energy Production From Agriculture," University of California Appropriate Technology Program, September 1980 - April 1981 (\$5,000).

FELLOWSHIPS, AWARDS, HONORS

Adjunct Scientist, Environmental and Societal Impacts Group, National Center for Atmospheric Research, Boulder, CO, 1989 - 1990.

University of Oklahoma, College of Engineering, Associates Distinguished Lectureship Award, 1988 - 1989.

Invited by the Brazilian government to participate as visiting professor in the first national course, Administration and Planning for Marine Resources sponsored by the Interministerial Commission for Resources of the Sea (CIRM) and the Federal University of Rio Grande do Sul, Porto Alegre. October 1984.

Post-Doctoral Research Fellowship, Marine Policy Center, Woods Hole Oceanographic Institution, 1983 - 1985.

Finalist Award, University of California Policy Seminar, 1980.

PROFESSIONAL SERVICE ACTIVITIES

Invited discussant, U.S. Global Change Research Program, National Assessment Workshop: Scenarios, Arlington, VA, Dec. 6-8, 2010.

Invited speaker, Visualization for Decision Making: The OU/OSU Computer Visualization Platform for Stakeholder-Based Planning in the Illinois River Basin, U.S. EPA Region 6 Headquarters, Dallas, TX, September 20, 2000.

Invited speaker, Pollution Prevention Conference, U.S. EPA Region 6 Pollution Prevention Roundtable, Panel on Sustainable Development, Norman, OK, June 14-16, 1999.

Green Technology and Public Policy. Panel organizer, American Association for the Advancement of Science 150th annual meeting, Philadelphia, PA, February 12-17, 1998.

Environmental Innovation and Innovative Techniques. Panel discussant, Regulatory Effects. Panel chair, Association for Public Policy Analysis and Management 19th annual research conference, Washington, DC, November 6-8, 1997.

"Global Change: Environmental Planning and Management Challenges for the 21st Century." Panel organizer, American Society for Public Administration 51st national conference, Los Angeles, CA, April 7-11, 1990.

"Policy Implications of Climate Change." Panel organizer, American Association for the Advancement of Science annual meeting, San Francisco, CA, January 14-19, 1989.

"Near Term Policy Implications of Long Term Global Climate Change." Roundtable organizer, Association for Public Policy Analysis and Management annual research conference, Seattle, WA, October 27-29, 1988.

"Global Climate Change: Implications for Environmental Policy and Administration." Panel organizer, American Society for Public Administration 49th national conference, Portland OR, April 16-20, 1988.

"Project Scoping and Issues Identification." Panel chair; "Assessing the Impacts of Global Climate Change." Panel chair, International Association for Impact Assessment annual meeting, Philadelphia, PA, May 28-30, 1986.

Manuscript Reviewer:

Agricultural Water Management, Applied Geography, Environmental Management, Environmental Science & Technology, Estuaries, Global Environmental Change, Journal of the American Water Resources Association, Journal of Contaminant Hydrology, Journal of Environmental Studies, Journal of Global Agriculture and Ecology, Journal of Industrial Ecology, Journal of Meteorology and Applied Climatology, Journal of Soil Contamination, Land, Ocean & Shoreline Management, Resources and Conservation, Risk, Hazards & Crisis in Public Policy, Sustainability, Water International, Water Resources Research, Intergovernmental Panel on Climate Change, Oxford University Press, Routledge Press, Sage Publications, U.S. Environmental Protection Agency, U.S. Congress Office of Technology Assessment, University of Nebraska Press, University of Oklahoma Press, WCB/McGraw-Hill.

Proposal Reviewer:

U.S. Environmental Protection Agency (Economics and Ecological Risk Assessment)

U.S. Geological Survey Water Resources Research (Western Regional Competitive Grants Program)

National Institute for Global Environmental Change

National Science Foundation (Biological Oceanography Program; Cross-Disciplinary Activities; Decision, Risk & Management Science; Ecosystem Studies; Geography and Spatial Sciences; Knowledge and Distributed Intelligence; Management of Technological Innovation; Science and Technology Centers)

National Oceanic and Atmospheric Administration (Climate & Global Change Program; Economic & Human Dimensions Program; Sea Grant College Program; Sector Applications Research Program; Southeast Regional Climate Center)

Panel Reviews:

National Science Foundation, Review Panel for Biocomplexity in the Environment: Dynamics of Coupled Natural and Human Systems, Arlington, VA, March, 2004.

National Science Foundation, Review Panel for Biocomplexity in the Environment: Dynamics of Coupled Natural and Human Systems, Arlington, VA, May, 2001.

National Science Foundation, Preproposal Review Panel for Integrative Graduate Education and Research Traineeship (IGERT) program, Arlington, VA, September, 2000.

National Oceanic and Atmospheric Administration, Office of Global Programs, Sectoral Applications Research Program panel reviews, Silver Spring, MD, February, 2014.

National Oceanic and Atmospheric Administration, Office of Global Programs, Economics and Human Dimensions panel reviews, Silver Spring, MD, January, 1998.

U.S. Environmental Protection Agency, Review Panel for Consequences of Global Change for Air Quality: Spatial Patterns in Air Pollution Emissions, Washington, DC, July, 2003.

Faculty Reviews:

Department of Geography and Geology, Western Kentucky University, Faculty tenure and promotion, Fall, 2005 & 2010.

Department of Political Science, Oklahoma State University, Faculty third-year evaluation, Fall, 1999.

Site Visits/Program Reviews:

National Science Foundation Site Visit, Joint Center for Climate Change Decision Making Under Uncertainty, University of Georgia/Resources for the Future, Athens, GA, February 8-10, 2004.

Institute for Applied Environmental Research, Tarleton State University, Stephenville, TX, Review Panel Chair, April 27, 2000.

Seminar Series and Symposia Development:

Member, Program Planning Committee, 2005 Oklahoma Emerging Energy Technology Conference, Norman, OK, September 27, 2005.

Helped raise over \$8,500 in matching support for Oklahoma's second wind power conference, *Wind Power and Bioenergy: Oklahoma Crops for the 21st Century*, Oklahoma City, OK, April 11, 2002.

Helped raise over \$10,000 in matching support for Oklahoma's first wind power conference, *Oklahoma Wind Power: Emerging Opportunities*, Oklahoma City, OK, May 3, 2001.

"Symposium on Climate Change in the Southern United States: Future Impacts and Present Policy Issues," International Hotel, New Orleans, Louisiana, May 28-29, 1987. Sponsored by the U.S. Environmental Protection Agency. Organizer.

"Agricultural Chemicals and Ground Water Pollution Control," The Fifth National Symposium on Ground Water Pollution Control, Kansas City, Missouri, March 26-27, 1987. Sponsored by the U.S. Environmental Protection Agency. Organizer.

"Liability Issues and Ground Water Pollution Control," The Fourth National Symposium on Ground Water Pollution Control, Cambridge, Massachusetts, May 22-23, 1986. Sponsored by the U.S. Environmental Protection Agency. Organizer.

"Local Government Options for Ground Water Pollution Control," The Third National Symposium on Ground Water Pollution Control, Atlanta, Georgia, January 16-17, 1986. Sponsored by the U.S. Environmental Protection Agency. Organizer.

"Planning on Cape Cod - A Six Week Series of Discussions Presented by Area Practitioners," Woods Hole Oceanographic Institution, March 26 - April 30, 1985. Organizer.

"Alternative Fuels in California's Energy Future," University of California at Davis, Spring 1982. Organizer and speaker.

Workshops:

Transdisciplinary Program for Petroleum Engineering (TPPE), Indian Institute of Technology Kharagpur, Norman, OK, July 22-23, 2015. Invited participant.

Asia-Pacific Partnership on Clean Development and Climate, American Electric Power Site Visit, Columbus, OH, October 29-November 4, 2006. Invited participant.

"Building a Disaster-Resistant Community: Bridging Research and Practice," Tulsa Partners, Inc., Tulsa, OK, May 24-25, 2006. Invited participant.

Southern Plains Regional Integrated Science Assessment (RISA) Meeting, Office of Global Programs, NOAA, Dallas, TX, December 10-12, 2003. Regional Committee Organizer and Invited participant.

Managing Interdisciplinary Research Projects: Lessons Learned Workshop,@ Washington, DC, U.S. Environmental Protection Agency, Water and Watersheds program, October 11-12, 2000. Invited participant.

NIGEC South Central Regional Center Workshop for Prospective PIs,@ New Orleans, LA, August 2, 1999. Invited participant.

NOAA Human Dimensions Meeting, Boulder, CO, July 8-9, 1999. Invited participant.

NOAA Economics and Human Dimensions Investigators Meeting, Tuscon, AZ, April 26-28, 1999

Workshops: (Continued)

Smart Growth: The Tulsa Conference on City Design, Tulsa Foundation for Architecture, Tulsa, OK, February 16, 1999.

Life Cycle Tools and Applications, Short course taught by G. Keoleian and J. Bulkley, Center for Sustainable Systems, College of Engineering, Center for Professional Development, University of Michigan, June 24-26, 1998.

Workshop on the User Requirements of a Regional Reanalysis, Cooperative Institute for Mesoscale Meteorological Studies, February 26-27, 1998, Norman, OK, Invited speaker. Sponsored by the National Oceanic and Atmospheric Administration.

National Convocation on Science and Engineering Doctoral Education, National Academy of Sciences, June 15, 1996, Washington, DC. Participant.

"Environmental Issues in Business and Business Education: A Faculty Development Workshop," Sponsored by the College of Business, Science and Public Policy Program, and the Management Institute for Environment and Business, University of Oklahoma, November 10, 1995, Norman, OK. Co-Organizer.

"Sharing Our Vision for Environmental Education," A Five-State Environmental Education Conference, Hosted by the Texas Natural Resources Commission, September 22-23, 1995, Dallas, TX. Invited participant.

Business - Environment Learning and Leadership Conference, The Management Institute for Environment and Business, University of Texas, Austin, July 19-21, 1995. Invited Participant.

Business - Environment Learning and Leadership Conference, The Management Institute for Environment and Business, J. L. Kellogg Graduate School of Management, Northwestern University, August 27-29, 1994. Invited participant.

"The 1988 Woodlands Conference, New State Roles, Environment, Resources, and the Economy," Natural Resources Management and Planning Working Group Session on Drought Management, Houston Area Research Center, Texas, November 13-16, 1988. Invited participant.

"EPA Meeting on Global Warming Effects," Alexandria, VA, October 7-8, 1987. Invited participant.

"EPA Global Climate Change Program Research Planning Workshop," Raleigh, NC, September 21-24, 1987. Invited participant.

Workshops: (Continued)

National Research Council, Committee on Infrastructure Innovation Workshop, Barriers to Innovation Panel. Woods Hole, MA, June 29-July 2, 1987. Invited participant.

"EPA/ESIG Regional Scenarios Working Group: From the Bottom Up," National Center for Atmospheric Research, Boulder, CO, June 29-30, 1987. Invited participant.

"EPA Workshop on Ecological Effects of Global Climate Change," University of Colorado, Boulder, CO, April 20-22, 1987. Invited participant.

Program Development:

Undergraduate and graduate curriculum in Environmental Sustainability, University of Oklahoma, Norman.

Co-Organizer of the Oklahoma Infrastructure Institute, a joint university research initiative between the University of Oklahoma and Oklahoma State University, September, 1987 - December, 1988.

Public Service Activities:

President, Oklahoma Renewable Energy Council, 2010.

Member, American Meteorological Society Policy Program, Curricular Advisory Committee, 2008-2010.

Invited speaker, "Science and Technology Policy: What is It and What Difference Could It Make for OU Students?", EEB Seminar, University of Oklahoma, Norman, OK, October 24, 2006.

Moderator, Carbon Dioxide Sequestration panel, 2005 Oklahoma Emerging Energy Technology Conference, Norman, OK, September 27, 2005.

Invited participant, Energy and the Future of Oklahoma, Oklahoma Energy Strategy Development Session, Office of the Secretary of Energy, Oklahoma City, OK, November 12, 2002.

Member, Workshop Planning Committee, Oklahoma Wind Power: Emerging Opportunities, Oklahoma City, OK, May 3, 2001.

Public Service Activities: (Continued)

Invited panelist, Session IV, Intervention for change: Incentives, Legislation, Regulations, Innovations and Education, National Symposium on Mitigating Severe Weather Impacts: Design for Disaster Reduction, Tulsa Convention Center, Tulsa, OK, March 31-April 4, 2001.

Invited testimony, Oklahoma Scenic Rivers Commission, Tahlequah, OK, January 18, 2000. Copy sent to Governor Frank Keating.

Member, Tulsa Partners/Project Impact: Building a Disaster-Resistant Community, City of Tulsa, 1998 - present.

Invited speaker, The Greening of Technology and its Implications for Women, presented at Women's Bold Journeys: From Weaving to Websites, St. Luke's United Methodist Church, Oklahoma City, OK, October 17, 1998.

Invited speaker, The OU-OSU Water and Watersheds Study of the Illinois River Basin, presented at the Third Annual Conference on Sustainable Living, Unitarian Universalist Congregation of Tahlequah, Tahlequah, OK, May 16, 1998.

Member, Ad Hoc Committee regarding Hall Park wastewater issues, City of Norman, OK, July 28-August 11, 1997.

Co-Sponsor Panelist, 1996 Renew America National Teleconference. Sponsored by Tinker Air Force Base, February 26, 1996.

Invited Testimony, Senate Agricultural and Rural Development Committee Hearing on Hog Waste Management, Ambassador Motel, Guymon, OK, October 4, 1995.

Member, Oklahoma Academy for State Goals, Infrastructure Task Force, May - November, 1991.

Invited speaker, "Expanded Use of CNG Vehicles in Oklahoma: An Economic and Environmental Assessment," Midwest Transportation Center, Iowa State University, Ames, IA, May 7, 1991.

Invited speaker, "Global Warming - The Policy Issues," Energy 2001, Oklahoma City, March 18-22, 1991.

Invited speaker, Infrastructure Panel, Oklahoma Academy for State Goals Sixth Annual Conference, "Oklahoma's Future: Choice or Chance?," Oklahoma City, OK, November 8-9, 1990.

Invited speaker, "The Hole in the Sky and The Greenhouse Effect," The Academy of Retired Professionals, University of Oklahoma, September 26, 1989.

Invited speaker, "Models of Future Climate," Norman Arts and Humanities Council Readers and Writers Series, Norman, OK, December 10, 1988.

Invited speaker, "Climate Change and Stratospheric Ozone Depletion," SUNDAY AM, KOKH TV, Channel 25, Oklahoma City, OK. May 24, 1987.

University Service:

Invited Speaker, University of Oklahoma Sustainability Symposium, "Oklahoma's Green Energy Future – What We Should (or Could) Do About Science, Technology, Policy & Innovation," April 20, 2016, Norman, OK.

Invited Speaker, University of Oklahoma Green Week 2010, "Renewable Energy – Innovation Opportunities and Challenges," April 21, Norman, OK.

Panel Speaker, "Entrepreneurial Opportunities in Alternative Energy," Price College of Business, February 23, 2010, Norman, OK.

Panel discussant, Water, Agriculture, and Sustainability, International Programs Center, Center for Peace Studies conference on Water in the Jordan Valley: Technical Solutions & Regional Cooperation, University of Oklahoma, November 13 & 14, 2001.

Faculty Committee on National Energy Policy, University of Oklahoma, 2001.

Steering Committee Member, National Symposium on Mitigating Severe Weather Impacts: Design for Disaster Reduction, International Center for Natural Hazards and Disaster Research, 2000 - 2001.

Graduate Faculty Committee, College of Liberal Studies, 2000 to 2014.

Invited speaker, From Conflict to Consensus: Using Science to Guide Public Policy in the Illinois River Basin, *Conversations on the Environment*, Interdisciplinary Perspectives on the Environment, OU campus, January 25, 2000.

Panel discussant, Rhodes Trussell, Kappe Invited Lecture, Civil Engineering and Environmental Science, October 26, 1999.

Program consultant, *The Power of Ideas* television program, interview with Jack Vitek, broadcast on September 20, 1999.

<u>University Service</u>: (Continued)

Search Committee Member, Natural hazards faculty, Geography Department, 1999 - 2000.

Steering Committee Member, Symposium on the May 3rd Tornado Outbreak, Center for the Analysis and Prediction of Storms, 1999 - 2000.

Committee Member, Global and Regional Environmental Studies Committee, International Programs Center, 1999.

Search Committee Member, Brock Chair in Energy Economics and Policy, Sarkeys Energy Center, 1997.

Judge, Undergraduate Research Day, Honors College, Norman campus, April 5, 1997.

Steering Committee Member, Environmental Verification and Analysis Center, 1996-present.

Academic Appeals Board, College of Engineering, 1996-2009.

Chair, Search Committee, Science and Public Policy Research Fellow, 1995-1996.

Graduate Council, College of Engineering Representative, 1994-1996.

Judge, Graduate Student Research Poster Session, Physical Sciences and Engineering, April 15, 1996.

Panelist, "The Future of Nations: Anarchy or Civil Order." Seminar presented by Robert Kaplan, Oklahoma Scholar-Leadership Enrichment Program, University of Oklahoma, May 20, 1995

Invited speaker, "Strategic Responses to Sea Level Rise: The Role of Science & Scientists in Public Policy," Zoology Seminar, University of Oklahoma, February 15, 1995.

Faculty Resource Person, "America's Future in Space." Seminar presented by John Logsdon, Oklahoma Scholar-Leadership Enrichment Program, University of Oklahoma, January 4-8, 1995.

Moderator, "Critical Issues in Global Change Research," National conference on Directions for the Geosciences in the 21st Century, College of Geosciences, University of Oklahoma, November 27-29, 1990.

Moderator, Oklahoma Centennial Energy Design Competition, College of Engineering, Sarkeys Energy Center, University of Oklahoma, November 17, 1990.

<u>University Service</u>: (Continued)

Invited speaker, Geography colloquium, "The Hot Issue of Global Warming," University of Oklahoma, November 12, 1990.

Faculty Resource Person, "Ozone, the Greenhouse Effect, and Human Activity: Scientific and Political Issues." Seminar presented by Ralph Cicerone, Oklahoma Scholar-Leadership Enrichment Program, University of Oklahoma, November 10-14, 1989.

Member, University of Oklahoma campus advisory committee, Oklahoma Resources Integrated General Information Network System (ORIGINS), 1988.

Graduate Student MS Thesis and PhD Committees: [48 total, Directed 12: 3 PhD, 9 MS]

- Virginia Silvis, 2020, (Geography), *Uncertainty, Policy Implementation, and the 2012 Louisiana Coastal Master Plan*, Dissertation committee co-chair.
- Nicholas Hardersen, 2018, (Environmental Sustainability), Consumer Perceptions and Behaviors Toward Food Waste Reduction: A Two Case Study Analysis in Oklahoma. Thesis committee member.
- Logan Gerber-Chavez, 2018, (Geography), *Effective Disasters: Disasters as a Driver of International Climate Policy*. Thesis committee member.
- Becca Castleberry, 2017 (Environmental Sustainability), *Community-Level Impacts of Wind Power in Oklahoma*, Thesis committee member.
- Madeline Hinchliffe, 2017 (Environmental Sustainability), Water Use Trends and Patterns in the Rio Grande River Basin: Case Studies in Texas, New Mexico and Colorado, Thesis committee member.
- Jesus Zubillaga Rumbos, 2016 (Environmental Sustainability) *Importance of Weather Monitoring Information for Decision Making in Agricultural Production A Case Study for Oklahoma*, Thesis committee member.
- Preston Hartman, 2015 (Environmental Sustainability), Oklahoma's Municipal Water Systems: Assessments of Innovation for Climate Change Mitigation & The Role of Dynamic Capabilities in the Process of Water System Innovation, Thesis committee member.
- Aleksandr Lyakhov, 2015 (Environmental Sustainability), Scaling Sustainability Value in Sustainability Purpose Organizations: A Nonprofit and Business Comparison & Collaborative Value Creation Through Environmental Nonprofits and Renewable Energy Business Partnerships, Thesis committee member.
- Caroline Pavlowsky, 2014 (Geography), Water Management Strategies in the High Plains of Texas: An Institutional Analysis of Water Governance. Thesis chair.
- Haya Nasser Alhusainan, 2012 (Geography), *An Analysis of Wind and Solar Resources for the State of Kuwait*. Dissertation committee member.
- Rana Al-Jawarneh, 2012, (Geography), Environmental Influences on Past and Future Urban Development in Selected Cities in the Arkansas-Red River Basin, USA, 1957-2100, Dissertation committee member.

Graduate Student MS Thesis and PhD Committees: (Continued)

- Mathew Chatelain, 2011 (Geography), Analysis of Past and Future Trends of Wind Velocities and Impacts on Wind Resources across U.S. High Plains, Thesis committee member.
- David Grantham, 2011 (Interdisciplinary Master's in Energy Policy), *Recalibrating Anthropogenic Carbon and Capital Flows Through Optimized Indigenous Energy Resources*, Committee chair.
- Jennifer McAllister, 2011 (Environmental Science), *Metal Uptake and Accumulation of Emergent Macrophytes in Communities of Varied Biodiversity*, Thesis committee member.
- David Sherman, 2011 (MS in Professional Meteorology), A WRF Simulation of the Effect of a Large Wind Farm on 62 Years of Precipitation in the Eastern United States, Thesis committee member.
- Haya Nasser Alhusainan, 2010 (Geography), Wind Resource Analysis for the State of Kuwait. Thesis committee member.
- Muhammad Rahman, 2010 (Geography), Integration of Geospatial Techniques in the Measurement of Vulnerability and Tree Damage from Ice Storms in Norman, Oklahoma, Dissertation committee member.
- Jesse Bell, 2009 (Botany), Climate Change Influence on Ecohydrological Processes, Dissertation committee member.
- Cody Whittenburg, 2009 (Environmental Science), *Impacts on Surface Water Quality by Waterfowl in Urban Storm Water Retention/Detention Systems*, Thesis committee member.
- Matthew Biddle, 2007, PhD (Geography), Warning Reception, Response, and Risk Behavior in the 3 May 1999 Oklahoma City Long-Track Violent Tornado. Dissertation committee member.
- Mark Giesken, 2007, MS (Geography), *Economic Impact of Wind Farm Development in Oklahoma*. Thesis committee member.

Graduate Student MS Thesis and PhD Committees: (Continued)

- Joseph Zume, 2007, PhD (Geography), Modeling the Response of a Shallow Alluvial Aquifer to Impacts of Climate Variability and Anthropogenic Water Withdrawal in Northwestern Oklahoma. Dissertation committee member.
- Jack Ripple, 2004, MS (Liberal Studies), An Assessment of the Forecast and Projection Accuracy of the First Generation of Integrated Global Models, Thesis chair.
- Ben Winter, 2003, MS (Environmental Science), *Tire Mattress Effectiveness on Oklahoma Stream Bank Restoration and Stabilization*, Thesis committee member.
- Bryan Stolte, 2002, PhD (Occupational and Environmental Health), *An Evaluation of Zero Valent Iron Reactive Barrier Technology to Reduce High Concentrations of Chlorinated Solvents in Contaminated Groundwater*, Dissertation committee member.
- Vickie Wolfe, 2002, PhD (Environmental Science), *Studies of the Content and Process of Environmental Education*, Dissertation committee member.
- Freddie Hall, 2001, PhD (Civil Engineering), Coupled Modeling of the Air Quality Impacts of Chemical Depainting Agents Released from an Industrial Wastewater Treatment Facility, Dissertation committee member.
- Harvey McLaughlin, 2001, MS (Environmental Science), An Overview of Cumulative Effects Assessment Practice in the United States, Thesis chair.
- Patricia Rickey, 2001, MS (Liberal Studies), A Content Analysis of Scientific Framing in Mass Media Accounts of Global Warming, Thesis committee member.
- Erin Breetzke, 2000, MS (Environmental Science), *Development and Implementation of a Pilot Wetland Volunteer Monitoring Program for Oklahoma*, Thesis committee member.
- Madan Gopal, 2000, MS (Civil Engineering), *Physics-Based Distributed Parameter Water Quality and Quantity Modeling Using GIS*, Thesis committee member.
- Carlie Lawson, 2000, MS (Regional and City Planning), *High and Dry: Institutional Impediments to Effective Drought Management and Relief in the 1995-96 and 1998 Oklahoma Droughts*, Thesis chair.
- Becky Ziebro, 2000, PhD (Environmental Science), *Social Learning for Sustainability: A Local Government Approach*, Dissertation chair.
- Alicia Edwards, 1999, PhD (Environmental Science), A Qualitative Model for Designing and Implementing Effluent Trading Programs, Dissertation committee member.

Graduate Student MS Thesis and PhD Committees: (Continued)

- Holly Edwards, 1999, PhD (Zoology), *Status and Ecology of Sotalia Fluviatilis in the Cayos Miskito Reserve, Nicaragua*, Dissertation committee member.
- Rezaul Mahmood, 1999, PhD (Geography), Monsoonal Rainfall Variability, Water Stress, and Rainfed Rice Productivity in Bangladesh, Dissertation co-chair.
- Karl Pepple, 1999, MS (Environmental Science), Flood Mitigation in Tulsa, OK: The Role of Public Entrepreneurs and Focusing Events in Strategic Policy Innovation, Thesis chair.
- Sasidhar Velnati, 1999, MS (Aerospace and Mechanical Engineering), *Life Cycle Assessment and Analysis of Gas Turbine Power Systems*, Thesis committee member.
- Jeffrey Rumrill, 1998, PhD (Environmental Science), Air Quality Cumulative Effects Assessment for U.S. Air Force Bases, Dissertation committee member.
- Carolyn Vanarsdel, 1998, MS (Environmental Science), *Integration of Scientific and Legal Perspectives in Toxic Tort Litigation*, Thesis chair.
- William Nellen, 1997, MS (Environmental Science), Risk-Based Corrective Action (RBCA) Applied at Contaminant Release Sites, Thesis committee member.
- Tariq Rasheed, 1997, MS (Aerospace and Mechanical Engineering), *Net Energy and Life Cycle Analysis of a Natural Gas Combined-Cycle Power Ensemble*, Thesis committee member.
- Janice Sims, 1996, MS (Environmental Science), A Study of Drop-Off Recycling in Norman, Oklahoma: Behavior of Recyclers and Nonrecyclers, Thesis chair.
- Nadim Farajalla, 1995, PhD (Environmental Science), *Error Propagation in Distributed Hydrologic Modeling*, Dissertation committee member.
- Stephen Kukoy, 1993, MS (Environmental Science), *Implementation of Mitigation Banking to Improve Wetland Preservation by Section 404 of the Clean Water Act*, Thesis committee member.
- Stephen Levengood, 1993, MS (Engineering Physics), A Preliminary Wind Energy Assessment for Oklahoma, Thesis chair.
- Lani Malysa, 1993, PhD (Political Science), A Comparative Assessment of State Planning and Management Capacity: Tidal Wetlands Protection in Virginia and Maryland, Dissertation committee member.

- Vasudev Subbiah, 1988, MS (Industrial Engineering), *Economic Impacts of Integrated Energy Systems in Oklahoma*, Thesis committee member.
- Graduate Student Special Topics (MS) Committees: (since 1995) [30 total]
 - Deane Carlberg, Jr., 2009, MS (Environmental Science), Carbon Tax, Carbon Credits, and Carbon Cap and Trade: An Overview, Chair.
 - Sheetal Varma, 2004, MS (Civil Engineering), Prediction of Unsaturated Permeability of Minco Silt using Soil Water Characteristic Curve.
 - Kristy Laird, 2004, MS (Environmental Science), Regional Burden of Occupational Trachea/Bronchus/Lung Cancer in Region VI.
 - Jennifer Coffey, 2004, MS (Environmental Science), Natural Resources Damage Assessments The Case of the Tar Creek Superfund Site.
 - Jeff McGuffin, 2001, MS (Environmental Science), Environmental Management System Implementation and Registration by Delta Faucet of Oklahoma, Chair.
 - Leo Merida, 2001, MS (Civil Engineering), Comparative Review of the U.S. Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA and the Guidelines for Environmental Impact Assessment Studies in Guatemala, Chair
 - Oral Saulters, 2001, MS (Environmental Science), Comprehensive Groundwater Monitoring System Evaluation for the SUNOCO, Inc. Tulsa Refinery. Chair
 - Lois Swanson, 2001, MS (Environmental Science), The Potential Influence of Environmental Stressors on Amphibian Development and Decline. Chair
 - Larry Mullins, 2000, MS (Environmental Science), A Comparative Study of Alternative Fuels.
 - Kim Park, 2000, MS (Environmental Science), Development of a Scaling Model for an International Health Index.
 - Debra Smith, 2000, MS (Environmental Science), City of Norman's Household Hazardous Waste Collection Event.
 - Kenny Wofford, 2000, MS (Environmental Science), *The Economic and Environmental Value of Brownfield Redevelopment*.
 - Jeffrey Carlson, 1999, MS (Environmental Science), Orimulsion as an Alternative Fuel: Environmental, Health & Safety Product Review of Issues Associated with this Fuel.

<u>Graduate Student Special Topics (MS) Committees:</u> (since 1995) (Continued)

- Steve Freemyer, 1999, MS (Civil Engineering), *Particulate Matter 2.5 (PM*_{2.5}): *Importance and Issues*.
- Shawn Hussong, 1999, MS (Environmental Science), Integrated Information Management System for State Level Air Quality Management Agencies: A Case Study From Oklahoma.
- Rex Ishmael, 1999, MS (Civil Engineering), *Fine Particulate Matter (PM*_{2.5}) and the *Energy Service Industry*.
- Amy Unsell, 1999, MS (Environmental Science), Review of Proposed Power Sources for Electric Vehicles.
- Sandra Cole, 1998, MS (Environmental Science), A One-Step Chemical Spot Test for Lead in Lead-Based Paint Using Sodium Rhodizonate and Hydrochloric Acid.
- David Griffin, 1998, MS (Environmental Science), Continuous Emission Monitoring Systems for Air Quality Management.
- Tammy Rose, 1998, MS (Environmental Science), Feasibility of a Brine Lake for Chloride Control in the Red River Basin, High Plains of Northern Texas.
- Terry Downey, 1997, MS (Environmental Science), Saltwater Release Remediation Project.
- Mark Kinsley, 1997, MS (Environmental Science), Social Learning and Innovative Policy: A Retrospective Look at the Development of Tulsa's Floodplain Management Policy Through the Analysis of Current Theories and Models. Chair
- Dean Walker, 1997, MS (Environmental Science), Health, Environmental & Safety Auditing: A Comparative Analysis of Industry Practices to Current Standards and Literature.
- Afsaneh Afkam, 1996, MS (Civil Engineering), Costs and Benefits of Using Hydrogen as an Alternative Fuel for Transportation.
- Kevin Barnard, 1996, MS (Environmental Science), Success, Implementation and Implications of the Montreal Protocol of 1987.
- Nathan Kuhnert, 1996, MS (Environmental Science), Development of a Management Plan for the Endangered Interior Least Tern.
- Stephen Lefebvre, 1996, MS (Environmental Science), *Stratospheric Ozone Protection: Alternatives to Chlorofluorocarbons*.

Graduate Student Special Topics (MS) Committees: (since 1995) (Continued)

Lance Lodes, 1996, MS (Environmental Science), A Survey of Copper, Lead, and Zinc Concentrations in Marina Sediments of Lake Texoma.

Joe Long, 1996, MS (Environmental Science), Water Quality Monitoring of Brine-Contaminated Surface Waters for the Clearview Creek Demonstration Project.

William Bluethmann, 1995, MS (Environmental Science), Acid Mine Drainage: Control Technologies and the Impacts on Oak Ridge Creek.

<u>Undergraduate Student Research:</u>

Terri Stubblefield, 1999, Undergraduate Research Opportunity Program, OU Honors College, *Air Quality Forecasting in Tulsa: How Accurate is the Ozone Model?*

PERSONAL

Born: Marblehead, Massachusetts Marital Status: Married, one child

Citizenship: U.S.A.

December 2023