## Connie A. Mizak

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Education:

<b>University of South Flori</b>	<u>da - Tampa, FL</u>	
Master of Public Health	Environmental Health	2005
Doctor of Philosophy	Civil & Environmental Engineering	2004
New Jersey Institute of T	<u>echnology - Newark, NJ</u>	
Master of Science	Environmental Engineering	1996
Bachelor of Science	Industrial Engineering	1994

## Experience:

**University of South Florida - Department of Geography, Environmental Science and Policy** 

Instructor and Academic Advisor, 8/06 to present

Instructor for EVR 2001/2002 (Introduction to Environmental Science), EVR 4921 (Senior Seminar), EVR 4910/4940 (Senior Project/Internship), and EVR 4930 (Climate Change and Health, Environment and Health, and International Environmental Policy). Advise undergraduate students on course selection and program requirements.

## University of South Florida - Department of Environmental and Occupational Health

Post-Doctoral Fellow, 7/04 to 7/06

Perform air pollution and environmental health related research resulting in peer-reviewed publications in recognized journals. Conducted an air pollution risk assessment to evaluate the change in cancer and non-cancer health risks for Hillsborough County residents due to a local power plant conversion from coal to natural gas. Presented research at state and national meetings including the American Public Health Association and Air & Waste Management Association annual conferences. Teach graduate level Environmental and Occupational Health core course. Academic advisor to three MPH students on course registration, special project completion, and field experience. Department representative on COPH Educational Outcomes and Infrastructure committees. Guest lecturer and Clean Air Act instructor for Certified Hazardous Materials Manager (CHMM) review course.

Research Assistant, 1/00 to 6/04

Conducted research to determine the parameters affecting the transport and deposition of atmospheric ammonia to the Tampa Bay Estuary. Developed an ammonia emissions inventory for Pinellas, Hillsborough, and Polk counties. Evaluated the wet and dry removal processes that transport ammonia to Tampa Bay and investigated whether the bay is a source or sink for atmospheric ammonia. Developed scavenging coefficients for use in the ISC3 and CALPUFF dispersion models to be used for local wet deposition analysis. Calibrated an inferential model to accurately predict the air/water transfer rates of ammonia to Tampa Bay during the summer season.

# National Water Research Institute/NSF International

Science to Policy Doctoral Fellowship - Washington, DC - 8/98 to 8/99

### Environmental Protection Agency - Office of Ground Water and Drinking Water

Analyzed water quality data collected under the Florida Department of Environmental Protection's 'Drinking Water Standards, Monitoring, and Reporting Rule', Chapter 62-550. Data analysis was performed to determine the formation and occurrence of Total Trihalomethanes in the distribution systems of small and large groundwater facilities within the state of Florida. The results were used by the EPA's technical working group to determine the economic impacts of the Stage I Disinfectants/Disinfection By-Products Rule on Florida's small systems. In addition, a national survey of Total Trihalomethane data collected under the Information Collection Rule for large water treatment facilities was used for comparison with data analysis results of the Florida monitoring effort.

### U.S. Department of the Interior - Office of Water and Science

Researched and created a briefing report for the Assistant Secretary of Water and Science that described the status of drinking water facilities on Indian lands within the United States and provided policy recommendations to alleviate the numerous deficiencies discovered. Provided assistance with the implementation of the Clean Water Action Plan, including coordinating the development of regional federal teams to provide unified support to the Plan at the watershed level. Prepared briefing materials describing Interior's role in the Clean Water Action Plan for Secretary Babbitt's Senior Policy Council and constituency groups. Participated in weekly policy discussions of the Interagency Task Force comprised of representatives from the Army Corps of Engineers, Environmental Protection Agency, and Departments of Agriculture and Commerce.

## White House Council on Environmental Quality - American Heritage Rivers Initiative

Assisted the AHRI Interagency Task Force with implementation of the program, including coordinating the technical aspects of a White House conference that initiated communication of goals and processes between representatives of the federal government and community and private interests. Created a briefing document that summarized the technical and budgetary details of the economic, environmental, and historical/cultural projects undertaken by the 14 American Heritage Rivers.

#### Hillsborough County Environmental Protection Commission - Tampa, FL

Engineering Intern - Air Management Division, 3/98 to 7/98

Reviewed engineering reports of test results submitted by industrial air pollution sources to validate calculations and conclusions, and ensure that all local, state, and federal emissions standards have been satisfied. Performed emissions assessments of industrial air pollution sources to quantify the annual discharge of various air pollutants and verify compliance with permitted annual source limitations.

#### New Jersey Institute of Technology - Newark, NJ

Graduate Research Assistant, 8/95 to 8/96

Participated in a collaborative research project with Rutgers University and the New Jersey Department of Transportation. The objective was to assess impending regulations governing nonpoint source pollution control and their application to highway runoff. Current Best Management Practices and their pollutant removal effectiveness, cost, and maintenance requirements were evaluated to determine the most applicable method for each of the four physiographic regions of New Jersey. Based on the results of the study, the New Jersey Department of Transportation effectively modified existing control methods and formed a basis for the design of future methods.

#### Liz Claiborne Incorporated - North Bergen, NJ

Industrial Engineer, 8/94 to 8/95

Employed in the Corporate Engineering department as a safety engineer and as a member of the Safety and Health Management Team. Responsibilities included applying the latest OSHA and NJDEP regulations to train distribution personnel with the goal of reducing work related accidents and injuries. Analyzed safety and environmental regulations to develop a chemical safety and employee right to know training program and to remain in compliance with federal and state safety standards. Conducted inspections of warehouse operations to identify and reduce unsafe working conditions or practices and control health hazards.

### Publications and Research:

- Strayer, H., C. Mizak, R. Smith, and N. Poor (2007) Influence of Air Mass Origin on the Wet Deposition of Nitrogen to Tampa Bay, Florida - An Eight-Year Study. Atmospheric Environment, 41, 4310-4322.
- Mizak, C., S. Campbell, K. Sopkin, S. Gilbert, M. Luther, and N. Poor (2007) Effect of Shoreline Meteorological Measurements on NOAA Buoy Model Prediction of Coastal Air-Sea Gas Transfer. Atmospheric Environment, 41, 4304-4309.
- Sopkin, K., C. Mizak, S. Gilbert, V. Subramanian, M. Luther, and N. Poor (2007) *Modeling Air/Sea Flux Parameters in a Coastal Area: A Comparative Study of Results from the NOAA Buoy Model and the TOGA COARE Model.* Atmospheric Environment, 41, 4291-4303.
- Mizak, C.A. and N.D. Poor (2005) *Change in Local Cancer Risk Associated with a Power Plant Conversion from Coal to Natural Gas.* Poster Presentation at the American Public Health Association Annual Conference, Philadelphia, PA, December 10-14, 2005.
- Sopkin, K. L., C.A. Mizak, S.A. Gilbert, V. Subramanian, M.E. Luther, N.D. Poor (2005) Comparison of Estimates of Air-Water Fluxes for Tampa Bay, Florida. Poster Presentation at the 18th Biennial Conference of the Estuarine Research Federation, Norfolk, VA, October 16-20, 2005.
- Mizak, C.A., S.W. Campbell, M.E. Luther, R.J. Murphy, R.P. Carnahan, and N.D. Poor (2005) *Below-cloud Ammonia Scavenging in Convective Thunderstorms at a Coastal Research Site in Tampa, FL, USA*. Atmospheric Environment, 39, 1575-1584.
- Mizak, C., K. Sopkin, and S. Gilbert (2005) *Modeling atmospheric flux parameters: a comparative study of results from the NOAA Buoy Model and the COARE 3.0 model.* Bay Regional Atmospheric Chemistry Experiment Workshop, Tampa, FL. Workshop presentation.
- Sopkin, K., S. Gilbert, and C. Mizak (2004) *Influence of Extreme Meteorological Events on the Heat Budget of Tampa Bay.* Poster Presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, December, 2004.
- Mizak, C.A. (2004) *Ammonia Flux at the Air/Water Interface of Tampa Bay*. A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy,

Department of Civil and Environmental Engineering, College of Engineering, University of South Florida.

- Mizak, C.A. and N.D. Poor (2003) *Comparison of Measured and Modeled Sensible Heat Flux and Friction Velocity Over Tampa Bay.* Poster Presentation at the Florida Section of the AWMA Annual Conference, Orlando, FL, September 7-9, 2003.
- Mizak, C.A. and N.D. Poor (2002) Ammonia Measurements at the Gandy Bridge Monitoring Site. Platform Presentation at the Florida Section of the AWMA Annual Conference, Jupiter Beach, FL, September 15-17, 2002.
- Mizak, C.A. and N.D. Poor (2002) Ammonia Flux at the Air/Water Interface of Tampa Bay (#42197). Proceedings of the AWMA 95<sup>th</sup> Annual Meeting and Exhibition, Baltimore, MD, June 23-27, 2002.
- U.S. Department of the Interior Water Resources Research Center Grant (2002 2004) Co-Principal Investigator - \$16,900.

# Awards:

- Florida Section of the Air and Waste Management Association, 2003. Awarded 1<sup>st</sup> place at the Ph.D. level of the Student Poster Competition.
- USF Health Science Center Research Day on February 13, 2003. Awarded a prize for superior presentation:
  - http://www.hsc.usf.edu/PUBHEALTH/GRANTS/HSCResearchDay2003.html.
- The Science to Policy Fellowship, 1998-1999, National Water Research Institute/NSF International \$25,000.
- The Axel Hendrickson Scholarship, 1997, Florida Section of the Air and Waste Management Association \$1,000.

# Scholarly Activities:

- Reviewer for the journal *Florida Scientist*
- Member Florida Section of the Air & Waste Management Association
- Member Florida Section of the American Public Health Association
- Member American Public Health Association
- Co-chair of the Student Poster Competition, 2005, Florida Section of the Air and Waste Management Association Conference.
- Co-chair of the Student Poster Competition, 2004, Florida Section of the Air and Waste Management Association Conference.