

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel in the order listed on Form Page 2.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Owens, Patrick M.		POSITION TITLE Professor of Chemistry and Chair	
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
USMA, West Point, NY	BS	1975	Chemistry
UNC, Chapel Hill, NC	MS	1982	Physical/Analytical Chemistry
UNC, Chapel Hill, NC	Ph.D.	1984	Physical/Analytical Chemistry
Long Island University, Brookville, NY	MBA	1985	Finance

A. Positions and Honors.**Positions and Employment**

1982-1985 Assistant Professor of Chemistry, USMA, West Point, NY
 1985-1989 Monitoring Systems Manager, Program Manager Chemical Demilitarization, APG, MD
 1989-1995 Associate Professor of Chemistry, USMA, West Point, NY
 1995-Present Professor of Chemistry and Chair; Department of Chemistry, Physics, and Geology;
 Winthrop University, Rock Hill, SC

Other Experience and Professional Memberships

2001-present DHHS Federal Occupational Health Program Environmental Chemistry Consultant for CDC
 National Center for Environmental Health
 2001 Charlotte Air Quality BREATHE Stakeholders Committee
 1997-2002 Vice Chair, Mecklenburg County Environmental Protection Commission
 1999-2000 Central Carolinas Choices Air Quality Action Team Leader
 1980-present Member, American Chemical Society
 2001-2003 Member, Air and Waste Management Association
 2003-2004 Member, National Environmental Health Association
 2000-2001 Member, Council for Undergraduate Research
 2006-present Associate Member, National Organization for the Professional Advancement of Black Chemists
 and Chemical Engineers

B. Selected Peer-Reviewed Publications.

- "Factor Analysis for Real-Time GC/FT-IR Chromatogram Reconstructions," P.M. Owens, R.B. Lam, and T.L. Isenhour, *Analytical Chemistry*, November, 1982.
- "Infrared Spectral Compression Procedure for Resolution Independent Search Systems," P. M. Owens and T.L. Isenhour, *Analytical Chemistry*, August, 1983.
- "Effects of Concentration Gradients on Spectra in GC/FT-IR," J.G. White, P.M. Owens, and T.L. Isenhour, *Analytical Chemistry*, 1985.

4. "Instrumental Dependence of Optimal Interferogram Sampling for Gram-Schmidt Reconstructions of GC/FT-IR Data," D.T. Sparks, P.M. Owens, S.S. Williams, C.P. Wang, and T.L. Isenhour, *Applied Spectroscopy*, March, 1985.
 5. *The Chemical Stockpile Disposal Program Monitoring Concept Plan*, B.A. Kuryk, R.G. Roux, W.R. Brankowitz, K.J. Flamm, P.M. Owens, L.C. Rowe, W.F. Spurgeon, T.W. Thomas, and C.F. Whyne, Office of the PM for Chemical Demilitarization, September, 1987.
 6. *The Laboratory Quality Assurance Program Plan for the Chemical Stockpile Disposal Program*, William K. Fowler, P.M. Owens, and M. Gooden, Office of the Program Manager for Chemical Demilitarization, November, 1988.
 7. *Chemical Analysis Program for Chemical Disarmament Verification*, P.M. Owens, Technical Report for CRDEC, July, 1991.
 8. *Sampling and Analysis Requirements for Verification Inspections*, P.M. Owens, Technical Report for the U.S. On-Site Inspection Agency, March 1992.
 9. *Modern Applications of Chemistry*, Edited by P. M. Owens, R. G. Costella, W. F. Harris, S. G. Harrison, J. R. Eshelman, Eds. Kendall/Hunt Publishing Co.: Dubuque, IA, 1994.
 10. "A General Chemistry Course that Focuses on the Emerging Chemical Sciences," P. M. Owens, *Journal of Chemical Education* 72 (6) (June 1995), 528-530.
 11. "Parallel Column Gas Chromatography," P.M. Owens, D.W. Loehle, B.S. Scott**, and R.S. Gonzalez**, *J. Microcolumn Separations*, 7(6) 551-566 (Nov-Dec 1995).
 12. "Spending Less Time on Traditional Topics in General Chemistry," P.M. Owens and D.S. Springer, *ACS Division of Chemical Education Newsletter*, November, 1996.
 13. "Weekday/Weekend Variability and Long-Term Trends in Traffic, CO, NO_y, and Ozone for the Charlotte Metropolitan Area during the 1990's, J.L. Perry** and P.M. Owens, *Proceedings of the Air and Waste Management Association's 94th Annual Conference and Exhibition*, Orlando, FL, June 2001.
 14. *Report on the Tooele Chemical Agent Disposal Facility (TOCDF) VX Rocket Preoperational Survey Visit, June 3-7, 2002*, Technical Evaluation Report, National Center for Environmental Health, June 2002.
 15. *Review of the Chemical Agent Air Monitoring Program at the Umatilla Chemical Agent Disposal Facility*, Technical Evaluation Report, National Center for Environmental Health, September, 2002.
 16. *Review of the Chemical Agent Air Monitoring Program at the Anniston Chemical Agent Disposal Facility*, Technical Evaluation Report, National Center for Environmental Health, January, 2003.
 17. *Review of the Chemical Warfare Agent Air Monitoring Program at the Aberdeen Chemical Agent Disposal Facility*, Technical Evaluation Report, National Center for Environmental Health, December 2004.
 18. *Review of the Chemical Agent Air Monitoring Program at the Tooele Chemical Agent Disposal Facility (ANCDF)*, Technical Evaluation Report, National Center for Environmental Health, October 2005.
 19. *Review of the Chemical Warfare Agent Air Monitoring Program at the Pine Bluff Chemical Agent Disposal Facility*, Technical Evaluation Report, National Center for Environmental Health, October 2005.
 20. *Review of the Chemical Agent Air Monitoring Program at the Umatilla Chemical Agent Disposal Facility*, Technical Evaluation Report, National Center for Environmental Health, October 2005.
 21. *Review of the Chemical Agent Air Monitoring Program at the Anniston Chemical Agent Disposal Facility (ANCDF)*, Technical Evaluation Report, National Center for Environmental Health, November 2005.
-

C. Research Support

Ongoing Research Support

2 P20 RR016461-05A1 Baynes (PI)

07/01/2005 – 04/30/2010

SC Idea Network of Biomedical Research Excellence

The major goal at Winthrop University is to increase research capacity through faculty development, research infrastructure development, and increased student research participation particularly those from underrepresented groups.

Role: Principal Investigator and Project Director for Winthrop University

Completed Research Support

Owens (PI)

08/01/2000 – 07/30/2002

Research Contract with the North Carolina Division of Air Quality (NC DAQ) to provide quality assurance and analytical support for the ozone precursor hydrocarbon sampling and analysis program

The goals of this work were to provide the State of North Carolina with recommendations to improve the quality of analytical PAMS data, to examine the impact of hydrocarbon levels on same-day ozone concentrations, and to develop mathematical techniques for the analysis of ozone PAMS data for the Charlotte region.

Role: Principal Investigator

DUE-9650782 Calloway (PI)

07/01/1996 - 06/30/1998

NSF

Development of Undergraduate Curriculum Through Computer Based Molecular Modeling

The purpose of this grant was to introduce students to computer based computational chemistry by introducing projects in the first year courses, and continuing throughout their undergraduate education, rather than through a single course.

Role: Co-PI
