

# Sheryl Dee Mebane

## CURRICULUM VITAE

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- EDUCATION            Ph.D., University of California at Berkeley, Physical Chemistry, 2003
- B.S., University of North Carolina at Chapel Hill, Chemistry, 1998  
(Research Advisor, Cynthia K. Schauer)
- DISSERTATION        “Molecular Dynamics Simulation of Organometallic Reaction Dynamics AND Enhancing Achievement in Chemistry for African American Students Through Innovations in Pedagogy Aligned with Supporting Assessment and Curriculum and Integrated Under an Alternative Research Paradigm”
- Committee: Charles B. Harris and Angelica Stacy (co-chairs), Bernard Gifford, William Lester
- HONORS                Chancellor’s Postdoctoral Fellow for Academic Diversity, 2005-07  
Graduate Opportunity Award, 1998-2000  
Award for Highest Physical Chemistry GPA, 1998  
Phi Beta Kappa, 1997  
Morehead Award, 1994-98
- TEACHING  
EXPERIENCE            *Co-Instructor and Course Developer*, California Teach Science and Mathematics Initiative at UC Berkeley, 2006-07  
*Guest Instructor*, Joint Doctoral Program for Leadership in Educational Equity, 2005  
*Graduate Student Instructor (GSI) and Head GSI*, Chemistry Department, 1998-2000  
*Chemistry Instructor*, Multicultural Engineering Program, 1999  
*Minority Advisor & Tutor*, Office for Student Counseling, 1995-96  
*Science Department Head*, Summerbridge Cambridge, 1995

RESEARCH INTERESTS	Environmental Chemistry Education, Equity in Science Education, Green Chemistry, Participatory Research, Service-learning
RELATED RESEARCH EXPERIENCE	Drafted and contributed to the development of the University of California at Berkeley's faculty climate study Designed and drafted items and contributed to the development of a computer-adaptive version of the ChemQuery assessment
PROFESSIONAL MEMBERSHIP	California Science Teachers' Association, 2006 North American Association for Environmental Education, 2006 American Chemical Society, 1998-2001
PUBLICATIONS	Mebane, Sheryl. Chemistry Literacy Research: Opportunities for Essential Synergy in Instruction and Action. (Under revision)  Mebane, Sheryl. Perspectives of Success: Enhancing Achievement in Chemistry for African American Students. (Manuscript under revision for <i>Science Education</i> )  Scalise, Kathleen, Gifford, Bernard and Mebane, Sheryl. The U.S. Black-White SAT gap and the Missing Many in the Talent Pool: A Brief Estimate of Some Effect Sizes (Manuscript under revision for <i>Analyses of Social Issues and Public Policy</i> )  Snee, P.T., Payne, C. K., Mebane, S. D. and Harris, C. B., <i>Journal of the American Chemical Society</i> , 2001, <b>123</b> , 6909.
PRESENTATIONS	American Chemical Society National Meeting, 2006 American Educational Research Association Annual Meeting, 2006 Biennial Chemistry Education Conference, 2006 California Science Education Conference, <i>co-presenter</i> , 2006 Green Chemistry & Engineering Conference, 2006 North American Association for Environmental Education's 35 <sup>th</sup> Annual Conference, 2006 Leadership for Equity and Excellence in Math and Science, <i>speaker and discussant</i> , 2005 Women's Rights Conference, 2005 AfroGEEKS Conference: From Technophobia to Technophilia, 2004 Berkeley Independent Charter School, 2004 American Chemical Society National Meeting poster session, 2000
ADDITIONAL DATA	Proficient in French, SPSS, StatPac, MathCAD, Matlab and C++