

VITA
Michael H. Schmidt

Education:

Princeton University
A.B., Chemistry, June 1984.

Thesis: Characterization of Nickel Hexacyanoferrate Thin Films by Spectroscopy and X-ray Diffraction.

Stanford University
Ph.D., Chemistry, September 1989.
Dissertation Advisor: Nathan S. Lewis

Dissertation: "Electrochemical Studies of Nafion Films and Carbon Dioxide Binding to Cobalt (I) Macrocycles."

Postdoctoral Experience:

Johns Hopkins University
Laboratory of Dr. Jeremy Berg, September 1989-June 1992.

Visiting Scholar:

University of California, Santa Barbara
Laboratories of Dr. Daniel Morse, Biology, and Dr. Galen Stucky, Chemistry, Fall 2000.

Teaching:

California State University, San Marcos
GES 101: Matter, Molecules, Life and the Environment, a lower-division General Education course
Chemistry 150: General Chemistry
Chemistry 275: Quantitative Investigations in Chemistry
Chemistry 300: Literature of Chemistry
Chemistry 311: Chemicals and the Environment, an upper division General Education course
Chemistry 314: Chemistry of the Earth, an upper division General Education course
Chemistry 404: Inorganic Chemistry, Inorganic Chemistry Lab
Chemistry 405: Advanced Laboratory
Portions of Chemistry 416: Instrumental Analysis
Chemistry 492A: Special Topics in Inorganic Chemistry: Bioinorganic Chemistry

Service:

University Service:
Waste Reduction Planning Committee, member, November 1992-May 1994.
Quantitative Literacy Task Force, member, February 1993-June 1993.
Summer General Education in Science Task Force, June-August 1994.
Foreign Language Policy Task Force, March 1994-June 1995.
General Education Committee, September 1995-May 2000; September 2002-present.
Chair, 1996-1997.
Chair of Critical Thinking Task Force, 1998-1999.
College of Arts and Science Organizational Task Force, January 1996-May 1996.
Faculty Senate, September 1994-May 1997; September 1998-May 2000; Sept 2001-present.
Parliamentarian, 1996-1996.
Delegate to CSU Academic Retreat, 1997.
Delegate to CSU Institute of Teaching and Learning Retreat, 1998.
Community Service:
Scientist, CSIN2 (California Science Implementation Network), a summer workshop for elementary school staff developers and lead teachers from throughout San Diego County and

other parts of California. I also provided several in-service workshops at elementary schools in the South Bay Union School District.

Reviewer, *Introduction to Chemistry*, T. R. Dickson, John Wiley & Sons.

Reviewer of manuscripts, *Inorganic Chemistry* and *Journal of Chemical Education*.

Publications and Invited Talks:

"Selective Inhibition of Aragonite Growth by Citrate and Isocitrate at Moderate Supersaturations, as Measured by an Optical-Microscope Flow-Cell Assay," Michael H. Schmidt, Ian Ellison, Kiel Holliday, Martin Kubin and Francisco Trujillo, *Journal of Crystal Growth*, **2008**, 310, 804-815.

"Kinetics of 2-Halopyridine Substitution at Pentaammineaquaruthenium (II)," M.H. Schmidt, Grady Horton and Ilan Tong, *Inorg. Chem.*, **1998**, 37, 5948-5951.

"Using 'Household Chemistry Projects' to Develop Research Skills and Teach Scientific Writing," M. H. Schmidt, *J. Chem. Educ.*, **1997**, 74, 393.

"Thermodynamics of Carbon Dioxide Conversion," M. H. Schmidt, International Workshop on CO₂ Chemistry, Hemavan, Sweden, September 19-23, **1993**. Proceedings published in *Carbon Dioxide Chemistry: Environmental Issues*, Paul, J.; Pradier, C.-M., eds., The Royal Society of Chemistry: Cambridge, U.K., **1994**.

"Metal Binding and Folding Properties of a Minimalist Cys₂His₂ Zinc Finger Peptide," S. F. Michael, V. J. Kilfoil, M. H. Schmidt, B. T. Amann, and J. M. Berg, *Proc. Natl. Acad. Sci*, **1992**, 89, 4796-4880.

"Metal-Binding Proteins Involved in Transcriptional Regulation: Predictions and Structures," M. H. Schmidt and J. M. Berg, in *Transcriptional Regulation*, S. L. McKnight and K. R. Yamamoto, eds. Cold Spring Harbor Press: Cold Spring Harbor, NY, **1992**.

"Design and Characterization of a Ligand-Binding Metallopeptide," D. L. Merkle, M. H. Schmidt and J. M. Berg, *J. Am. Chem. Soc.*, **1991**, 113, 5450.

"Effects of Redox Potential, Steric Configuration, Solvent, and Alkali Metal Cations on the Binding of Carbon Dioxide to Cobalt(I) and Nickel(I) Macrocycles," M. H. Schmidt, G. M. Miskelly, and N. S. Lewis, *J. Am. Chem. Soc.*, **1990**, 112, 3420.

"Reaction Entropies and Acid-Base Behavior of Transition Metal Complexes in Recast Nafion Films," M. H. Schmidt and N. S. Lewis, *J. Phys. Chem.*, **1988**, 92, 2018.

"Kinetic Studies of Ligand Substitution Rates for the Ru(NH₃)₅(H₂O) Ion in Nafion Films," C. M. Lieber, M. H. Schmidt, and N. S. Lewis, *J. Am. Chem. Soc.*, **1986**, 108, 6103.

"Reaction Entropy Measurements for Transition-Metal Ions Bound to Nafion-Coated Electrode Surfaces," C. M. Lieber, M. H. Schmidt, and N. S. Lewis, *J. Phys. Chem.*, **1986**, 90, 1002.

"Overlayer-Support Interactions Associated with the Formation of a Chemically Modified Interface: The Nickel Ferrocyanide Derivatized Nickel Electrode," L. J. Amos, M. H. Schmidt, S. Sinha, and A. B. Bocarsly, *Langmuir*, **1986**, 2, 559.

"Metalloicyanide Modified Nickel Electrode Surfaces: Enhanced Currents for Solution Species," S. Sinha, L. Amos, M. H. Schmidt, and A. B. Bocarsly, *J. Electroanal. Chem.*, **1986**, 210, 323.