

R. STEPHEN MOCK

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Education

- B. S.** Biology, 1977, Manchester College, N. Manchester, Indiana.
- Teaching Cert.** Broadfield Science and Biology, 1980, The University of Montana, Missoula, Montana.
- Ph.D.** Analytical Chemistry, 1989, Montana State University, Bozeman, Montana.

Dissertation: The Photodetachment Modulated Electron Capture Detector.

Professional Experience

- 1997-present Professor of Chemistry, Dept. of Environmental Sciences, The University of Montana Western
- 2011-present Climbing Instructor, Khumbu Climbing Center, Phortse, Nepal
- 2011-present Director, Khumbu Climbing Center, Phortse, Nepal
- 5/01-8/05 FIPSE Grant Project Director-Facilitating Experiential Learning with Immersion Scheduling, The University of Montana Western
- 5/01-12/02 Dean of Arts and Sciences, The University of Montana Western
- 8/94-7/97 Associate Professor Chemistry, The University of Montana Western
- 8/91-8/94 Assistant Professor Chemistry, The University of Montana Western.
- 1992-94 Visiting summer Research Professor, Department of Chemistry, Montana State University-Bozeman
- 1992-present Climbing Instructor, The University of Montana Western
- 8/90-7/91 Analytical Chemist, Energy Laboratories, Billings, Montana
- 8/89-5/90 Visiting Assistant Professor, Department of Chemistry, Gonzaga University, Spokane, Washington
- 4/89-7/89 Post-doctoral Research, Department of Chemistry, Montana State University
- 9/85-3/89 Graduate Teaching and Research Assistant, Department of Chemistry, Montana State University
- 8/80-5/85 High School Science Teacher, Lima, Montana; Clyde Park, Montana

Courses taught

General Chemistry, Organic Chemistry, Quantitative Analysis, Biochemistry, Physical Chemistry, Introduction to Chemistry, Environmental Chemistry, History and Philosophy of Science, Introduction to Geology, Beginning through advanced Rock Climbing, Winter Camping.

Awards

2012 Montana Ambassador Educator of the Year Award with Dr. Rob Thomas

Research Opportunity Award, \$13,000 research award, MONTS program, 1994.

Merit Share Award, The University of Montana Western, 1993, 1996.

Gordon Pagenkopf Research Award in Graduate Chemistry,
Montana State University, 1989.

Best graduate student presentation, Montana Chapter ACS Meeting,
Butte, MT, March 26, 1988.

Presentations

The Selective Detection of Organic Iodides and Bromides by a Photodetachment-Modulated Electron Capture Detector, Montana Section ACS Meeting, March 26, 1988.

The Selective Detection of Organic Iodides and Bromides by a Photodetachment-Modulated Electron Capture Detector, 36th ASMS Conference on Mass Spectrometry and Allied Topics, June, 1988.

Gas Phase Electron Photodetachment Spectroscopy of the Molecular Anions of Nitroaromatic Hydrocarbons at Atmospheric Pressure, Montana Section ACS Meeting, April 22, 1989.

What Challenge Means to Me, Honors Convocation, Autumn, 1995.

The Integration of the Sciences at Western Montana College, R. Thomas, J. Kirkley, S. Mock, S. Roberts, K. Ulrich, C. Zaspel, Geological Society of America meeting, Denver, CO, October, 1996.

Environmental Science Projects as Learning Experiences, R. Thomas, S. Mock, J. Kirkley, S. Roberts, K. Ulrich, C. Zaspel. Montana Education Association Conference, Helena, Montana, Oct. 1996

Chemical Characterization of Clark Canyon Reservoir, Montana, Ryan Ragain, Steve Mock. Montana Academy of Sciences, Montana State University-Billings, April 12, 1997.

Preliminary Study of the Beaverhead River and the Effects of the Dillon Community: Chemistry, Steve Mock, Sheila Roberts, Ivan Andrus, Stephanie Frisbee, Susie Hamilton, Jack Hayes, Joshua Mock, Cori Freshour, Jennifer O'Loughlin. Montana Academy of Sciences, Montana State University-Billings, April 12, 1997.

The Integration of the Sciences at Western Montana College-UM: Environmental Science Projects as Learning Experiences, Rob Thomas, Steve Mock, Jack Kirkley, Sheila Roberts, Karl Ulrich, Craig Zaspel, Andrea Easter-Pilcher. Montana Academy of Sciences, Montana State University-Billings, April 12, 1997.

Graduation Speaker, Lima High School, Lima, Montana, May, 1994.

"It's Not about You", Americorp Dinner Speech, Spring, 2012.

Publications

R.S. Mock and E.P. Grimsrud, The Photodetachment-Modulated Pulsed Electron Capture Detector. Iodide- and Bromide-Specific Detection for the Trace Analysis of Halocarbon Mixtures. Photodetachment Cross Sections of the Halides., Analytical Chemistry, 1988, 60, 1684.

R.S. Mock and E.P. Grimsrud, Gas Phase Electron Photodetachment Spectroscopy of the Molecular Anions of Nitroaromatic Hydrocarbons at Atmospheric Pressure., J. Am. Chem. Soc., 1989, 111, 2861.

R.S. Mock, D.R. Zook, and E.P. Grimsrud, Electron Capture Chemistry of CBrCl₃ at Atmospheric Pressure by Mass Spectrometry and the Photodetachment-Modulated Electron Capture Detector., Int. J. Mass Spectrom. and Ion Proc., 1989, 91, 327.

R.S. Mock and E.P. Grimsrud, Thermal Electron Detachment Rate Constants for Azulene⁻ at Atmospheric Pressure by the Photodetachment-Modulated Electron Capture Detector., Int. J. Mass Spectrom. and Ion Proc., 1989, 94, 293.

R.S. Mock and E.P. Grimsrud, Optically Enhanced Electron Capture by p-Benzoquinone and Its Methylated Derivatives., J. Phys. Chem., 1990, 94, 3550.

R.S. Mock and E.P. Grimsrud, Electron Photodetachment of the Molecular Anions of SF₆ and Several Perfluorinated Hydrocarbons., Chem. Phys. Let., 1991, 184, 99.

W.B. Knighton, R.S. Mock, D.S. McGrew, and E.P. Grimsrud, Resonance Electron Capture Rate Constants for Substituted Nitrobenzenes., J. Phys. Chem., 1994, 98, 3770.

Funded Proposals

Optimization of a Methyl Bromide Conversion Column for the Specific Analysis of Brominated Compounds in the Atmosphere, Research Opportunity Award, MONTS, 1994. Amount: \$13,000.

Integration of Research Projects into Science Courses, co-investigators: Karl Ulrich and Sheila Roberts, 1996, \$26,000. STEP (Systemic Teacher Excellence Program) grant to incorporate field-based research into the introductory level science classes.

Effect of Dillon on the Chemistry and Biology of the Beaverhead River, co-investigators: Sheila Roberts and Andrea Easter-Pilcher, 1997. This was a service learning grant funded by the Montana Campus Compact. This project involved the incorporation of a research component into several chemistry and biology courses, and the results of the study were presented to the Beaverhead County Commissioners and the Beaverhead County Planning Board.

Selected Campus service

Tenure and Promotion Committee, 94-95, 95-96, 2000-01, 03-04, 07-08 (chair), 08-09(chair)
Chemical Stockroom manager, 1991-present
Chair-Dean of Faculty Search Committee, 1997
Member-Search Committee for Deputy Commissioner of Higher Education (Montana University System search), 1998
Chair-Chancellor's Search Committee, 1999
Chair-many faculty search committees
Chair-Director of IT search committee, 2011
Chair-General Education committee, 2012-14, Member 2011-present

Member Safety and Security Committee, 2012-present