

## CURRICULUM VITAE

Susan Sutheimer

Green Mountain College  
One College Circle  
Poultney, VT 05764  
802-287-8302  
sutheimers@greenmtn.edu

174 College St Apt 2  
Poultney, VT 05764  
802-287-9023

### Education

Ph.D. Analytical Chemistry, Kent State University, 1995  
Dissertation title: "Aluminum Speciation in Natural Waters Using High Performance Liquid Chromatography with Aluminum Specific Detection"  
Advisor: Professor Stephen E. Cabaniss, Ph.D.  
A.S.C.P. Certified Medical Technologist in Clinical Chemistry  
B.S. Chemistry, Marquette University, 1970

### Academic And professional Experience

2003-present Associate Professor of Chemistry, Director of Service-Learning  
Green Mountain College  
2002-2003 Lecturer in Chemistry, North Carolina State University  
2001- 2002 Associate Professor of Chemistry, Green Mountain College  
1999-2000 Associate Professor of Chemistry, Notre Dame College of Ohio  
1995-1998 Assistant Professor of Chemistry, Notre Dame College of Ohio  
1993 Summer Research Assistant in Limnology, Kent State University  
1992-1993 Graduate Research Assistant in Environmental Chemistry,  
Kent State University  
1990-1991 Graduate Teaching Assistant, Kent State University  
1989-1990 Clinical Chemistry Medical Technologist, Acute Care Laboratory  
The Cleveland Clinic Foundation  
1980-1981 Clinical Chemistry Medical Technologist, Immunoassay  
BioScience Laboratories

### Interests

- Service-learning as a pedagogy especially in chemistry and the natural sciences
- Aquatic ecosystems studies based on the chemical analysis of freshwaters
- Curriculum development in the chemical and environmental sciences
- Use of computers in chemistry: web and tutorial based instruction
- Analyzing and modeling aluminum, chromium and lead speciation, binding and toxicity in natural systems

### Professional Societies

- American Chemical Society, Environmental Chemistry Division and Educational Division
- American Society of Limnology and Oceanography

## Honors and Grants

2004	Pittsburgh Memorial National College Grant
2002	NSF Course Curriculum and Laboratory Improvement Adaptation and Implementation (CCLI-A&I) Grant
2001	EPA EPSCoR Stimulus Grant for Lake Monitoring
1998-99	Notre Dame College Faculty Grant for Computer Technology
1997	Geauga Park District Grant for Research and Teaching
1997	Lake Erie Protection Fund Grant
1995	Water Resources Research Institute Grant
1993	B.F. Goodrich Co., Semon Graduate Student Grant

## Educational Accomplishments

- ◆ Originator of block course "The Adirondacks" planned for fall, 2004
- ◆ In process of developing theme-based undergraduate chemistry laboratory curricula (NSF grant)
- ◆ Implemented WebAssign web based homework into chemistry classes
- ◆ Introduced extensive field trip programs for courses in limnology, chemistry and earth science
- ◆ Developed of interactive computer programs for training students on chemical instrumentation
- ◆ Integrated spreadsheet software into chemistry lecture and laboratory courses
- ◆ Created web sites for natural sciences department [www.greenmtn.edu/dept/ns](http://www.greenmtn.edu/dept/ns)
- ◆ Created web site "Building Stones of Downtown Cleveland" with the Cleveland Museum of Natural History for use with earth science courses

## Courses Taught

Courses for chemistry and biology majors that included labs: general chemistry I and II, organic chemistry I and II, biochemistry, limnology, analytical chemistry, environmental chemistry

Courses without laboratories: polymer chemistry and nuclear chemistry

Courses for non-science majors: environmental chemistry, earth science, environmental science, and fundamentals of chemistry

## Service to College and Community

- Director of Service-Learning at Green Mountain College
- Supervisor of VISTA Campus Outreach Coordinator
- Chair of Service-Learning Advisory Committee
- Co-Chair of Self-Study Committee for NEASC reaccreditation
- Grant proposal reviewer for National Science Foundation
- Board member of the Poultney-Meadowee Watershed Partnership
- Member Faculty Development and Evaluation Committee
- Member *ad hoc* committee on Faculty Compensation
- Chair of a review Committee for a contract renewal

## Scientific Publications

1. Sutheimer, S.H. "Effects of Low POC/DOC on Metal Speciation in Lake Erie, A Report to the Lake Erie Protection Fund", **1999**.
2. Sutheimer, S.H.; Maurice, P.A. and Zhou, Q. "Dissolution of Well and Poorly Crystallized Kaolinites: Al Speciation and Effects of Surface Characteristics", *Am. Mineralogist* **1999**, *84*, 620-928.
3. Sutheimer, S.H.; Cabaniss, S.E. "Aluminum Binding to Humic Substances Determined by High Performance Cation Exchange Chromatography", *Geochim Cosmochim Acta*, **1997**, *61*, 1-9..
4. Sutheimer, S.H.; Cabaniss, S.E. "Aqueous Al(III) Speciation by High Performance Cation Exchange Chromatography with Fluorescence Detection of the Aluminum-Lumogallion Complex", *Analytical Chemistry* **1995**, *67*, 2342-2349.
5. Sutheimer, S.H.; Cabaniss, S.E. "Acidity and Visible Absorbance of Lumogallion, an Aluminum Fluorophore", submitted to *Analytica Chimica Acta*.
6. Sutheimer, S.H.; Ferracco, M.J.; Cabaniss, S.E. "Molecular Size Effects on Carboxylate Acidity: Implications for Humic Substances", *Analytica Chimica Acta* **1995**, *304*, 187-191.
7. Sutheimer, S.H.; Cabaniss, S.E. "Determination of Trace Aluminum in Natural Waters by Flow Injection Analysis with Fluorescent Detection of the Lumogallion Complex", *Analytica Chimica Acta*. **1995**, *303*, 211-221.

## Presentations

1. "The Speciation of Aluminum by HPLC", poster presentation, The Gordon Conference on Environmental Sciences: Water, June, 1996.
2. "Aluminum Speciation by High Performance Liquid Chromatography", presentation at the Cleveland Section, Society of Applied Spectroscopy, May, 1996.
3. "Aluminum Speciation in Acid Lakes: What, Why and HPLC", Clarkson University Civil Engineering Seminar, June, 1995.
4. "Aluminum Speciation in Natural Waters Using Flow Injection Analysis and High Performance Liquid Chromatography", presentation at the ACS Meeting in Miniature, Cleveland Section, March, 1995.
5. "Aluminum Speciation in Natural Waters Using Flow Injection Analysis and High Performance Liquid Chromatography", presentation at The 17th Midwest Environmental Chemistry Workshop, Michigan State University, October, 1994.
6. "Determination of Dissolved Aluminum Species in Acid Waters Using Flow Injection Analysis and High Performance Liquid Chromatography", poster presentation at the Gordon Research Conference on Environmental Sciences, Water; June, 1994.
7. "Determination of Dissolved Aluminum Species in Acid Waters Using Flow Injection Analysis and High Performance Liquid Chromatography", poster presentation at the American Chemical Society Meeting; August, 1994.
8. "The Determination of Aluminum in Natural Waters by Flow Injection Analysis", poster presentations at the Kent State University Water Resources Research Institute Symposium; 1993-1995.

