



## Green Mountain Local Section of the American Chemical Society

e-mail: [GreenMntACS@yahoo.com](mailto:GreenMntACS@yahoo.com)

Green Mountain Section website:  
<http://membership.acs.org/g/greenmt>

### Officers 2009

Chair..... Fiona Case  
Chair-Elect..... Open  
Secretary..... Jody Chamberlain  
Treasurer..... Beth Medeiros  
Councilor..... Willem Leenstra  
Alternate Councilor..... Martin Case

### Committee Chairs

PR/Web Master..... Fiona Case  
Gov't Affairs..... Sarah Locknar  
Newsletter Editor... Willem Leenstra



### Upcoming Events

**Tuesday, December 8** – Holiday  
Party at the Swift House Inn in  
Middlebury



ACS website: [www.Chemistry.org](http://www.Chemistry.org)

# GMLS November Newsletter

## “Nanotechnology World”

**Date:** Tuesday, November 10, 2009  
**Time:** Talk at 5:30 PM -- Dinner to follow



**Speaker:** Jeffrey H. Byers  
Department of Chemistry  
Middlebury College

[biography can be found on the next page]

**Title:** “Buckyballs, Tiny Machines  
and Nanoputians”

“Nanotechnology” is an often cited, but misunderstood term describing a wide array of modern applications at the interface of chemistry, physics, biology and engineering. Jeff Byers will discuss some of the more chemical aspects of nanotechnology, examining the connection between molecular structure, function, and whimsy as they apply to nanotechnology.

**Location:** Lecture Hall  
Rutland High School  
Rutland, Vermont

Directions to the Rutland High School venue: Follow Route 7 into the heart of Rutland, then take Route 4 East for 0.9 miles. Take a right onto Stratton Road. Once in the High School, the Lecture Hall is on your left just after entering at the main entrance.

Dinner will follow the talk, at approximately 7:00 PM, at the Three Tomatoes restaurant in Rutland. You are cordially invited to join us for dinner; please RSVP Beth Medeiros by Monday, 10/12 at 802-770-7238, or via e-mail to [beth.medeiros@omya.com](mailto:beth.medeiros@omya.com).



**Jeff Byers** is one of our own Green Mountain Local Section members. Dr. Byers received his B.S. from the University of Rochester, and his Ph.D. in 1984 from Dartmouth College. After a postdoctoral research position at the University of Utah, he joined the faculty of Middlebury College in 1986. He is currently Professor of Chemistry and has previously served as Chair of the Department of Chemistry and Biochemistry. Prof. Byers's primary teaching responsibilities are in organic chemistry and general chemistry. Other subjects taught include advanced integrated laboratory (inorganic synthesis techniques), instrumental analysis, senior thesis seminar, and freshman seminars (including freshman composition). His research interests are in synthetic organic chemistry, organic free-radicals, organoselenium and heterocyclic chemistry, and he has mentored over 80 Middlebury College undergraduate research students over last 23 years. Jeff and his students are have regularly presented at regional and national ACS meetings, and they appear as authors on 19 papers from his laboratory.

Prof. Byers is also known for his presentation on "Love, Pain and Chocolate" - one of the highlights of the Chemistry Enthusiasts Program at NERM2008, and for his performance as Professor Snape, the Hogwarts potions teacher, during the 2008 Intercollegiate Quidditch for Muggles World Cup, hosted by Middlebury College. During his half-time show he blew hydrogen into soap bubbles; as they floated about, he ignited them with a candle. In another display, he filled rubber gloves with acetylene and lit the fingertips making a flaming jet into the air. The event was featured in C&E News.

Outside of chemistry, Jeff enjoys spending time with his wife and children, particularly on family outings to ski or hike in the Vermont woods, and is an avid amateur pianist.

### Report from our October Meeting

Last month, Prof. Mike Cann of the University of Scranton provided an educational as well as entertaining talk on the subject of green chemistry.



Prof. Cann traced the major roots of what we now call "Green Chemistry" in the US back to the early 1990s with the passage of the Pollution Prevention Act of 1990 and the subsequent formal focus on green methodologies by the EPA in 1991. Although many companies (as well as chemistry faculty) now recognize the environmental and economic benefits, Dr. Cann presented evidence that much more can be done. During the questioning period, Fiona Case recalled that a pharmaceutical company put a more green product "on ice" permanently in favor of continuing with a more lucrative product.

Within higher education, Dr. Cann highlighted ways in which we have infused green chemistry into the curriculum. The discussion included the green chemistry web-based modules that have been developed with the aid of a Camille and Henry Dreyfus Foundation grant, and the book "Real-World Cases in Green Chemistry" funded by the ACS/EPA.

### OMYA Open House

On Saturday October 17<sup>th</sup>, Local Section members had the opportunity to explore some real "hands-on" inorganic chemistry at the annual OMYA quarry Open House event in Middlebury.



Rapt attention was being paid by Benjamin and his mother, Fiona Case, to an explanation of what goes on at the quarry. Other activities included: exploring large trucks and loaders, learning about rocks and minerals, and adding artwork to a 24-foot mural.



And playing with small trucks, of course, while being watched by dad, Martin.

## Willem Leenstra Wins the E. Ann Nalley Award

The E. Ann Nalley Award for Volunteer Service to the American Chemical Society was initiated in 2006 by then-President Ann Nalley. It was started as an award to an individual in recognition for "contributing significantly to the goals and objectives" of the American Chemical Society through activities on behalf of the individual's Region. This year's award was bestowed on Dr. Willem Leenstra of the University of Vermont, at a ceremony during the 2009 Northeast Regional Meeting in Hartford, Connecticut in November.



The Green Mountain Local Section's Councilor, Dr. Willem Leenstra, has been an active member in the Green Mountain Section of the ACS, continuously in one capacity or another since 1982 when he was elected its Secretary (and Newsletter Editor). In the intervening times, Dr. Leenstra has served many years as Councilor, two terms as Chair of the Section, and terms as Secretary and as Program Chair. He also shouldered the overall responsibility for two NERMs (the 24<sup>th</sup> in 1994, and the 35<sup>th</sup> in 2008) as the General Chair for those meetings. In addition, he has organized technical symposia for two recent Northeast Regional Meetings.

Five years ago, Dr. Leenstra was instrumental in incorporating the Northeast Region, which encompasses 19 local sections in New England and upstate New York. He continues to serve on its Board, and is the Green Mountain section's representative.

In his capacity as Councilor, Dr. Leenstra has served as a member of the Committee on Local Section Activities. For the past six years, he has been a member of the Committee on Meetings and Expositions, of which he is currently Chair. M&E is the Council committee charged with oversight of logistics and the financial sustainability of the two ACS national meetings. Ensuring the success of regional meetings also is in its purview. Along the way, he has been asked to serve on a number of other national committees and task forces.

Within the Green Mountain Local Section, Dr. Leenstra has been recognized for his service and leadership with the Green Mountain Section Emerald Award in 2006.

# Green Mountain Local Section ACS December Meeting



## "Holiday Party"

**Tuesday, December 8, 2009  
Swift House Inn in Middlebury**



**Details:** We will be again hosting our annual Holiday Party at the Swift House Inn on 25 Stewart Lane in Middlebury. Please join us from 6 to 9 p.m. for the festivities with free hors d'oeuvres, one free drink, and a cash bar thereafter. All members are cordially invited to attend with a guest. This event is a wonderful opportunity to network and socialize with other local section members.

**RSVP:** If you are interested in attending, please RSVP no later than December 2 to Beth Medeiros at 802-770-7238 or via e-mail at [greenmntacs@yahoo.com](mailto:greenmntacs@yahoo.com).

**Directions:** From Rutland, take Route 7-North to Middlebury. Proceed through town. At the end of town, you will come to a traffic light with a Mobil gas station on your left. Turn right at the light onto Stewart Lane. Once on Stewart Lane, park in the lot across from the main house. From Burlington, take Route 7-South to Middlebury. Just before you enter Middlebury, there is a traffic light with a Mobil gas station on your right. Turn left at the light onto Stewart Lane. Once on Stewart Lane, park in the lot across from the main house.

**We look forward to celebrating the  
holidays with you!!**