



Green Mountain Section of the American Chemical Society

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

Officers 2006

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.....*Larry Marzec Gerrior*
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Upcoming Events

June 15 – “Publishing Chemistry”
Allison Doerr, assistant editor,
Nature Methods, speaking at
Middlebury College.

July TBD – Chemistry on the golf
course: joint the group for a round
of golf, followed by dinner.

August TBD – Tour of the Snow
Farm Winery, South Hero (joint
activity with the Northern NY Local
Section)

September 6 – John Meister, ACS
Tour speaker from the Forest
Products Research Center in
Albuquerque, NM, speaking at
Norwich University

October 5-7 – The ACS
Northeastern Regional Meeting,
Binghamton, NY

GMLS May Meeting

Dr. Chris Allen



Dr. Chris Allen, Emeritus Professor at UVM, and past chair of Vermont EPSCoR, will share anecdotes and insights from his many years "Talking to Politicians about Science at the National and State Level"

When: 5:30pm Tuesday May 23rd

Where: at the Kellogg-Hubbard Library in
Montpelier. Followed by Dinner at the NECI
Main Street Grill & Bar

Bio: Dr. Allen came to Vermont in 1967 after receiving his Ph.D. from the University of Illinois, where he studied with Therald Moeller. He has been a Senior Visitor at Oxford and Edinburgh and a consultant to several corporations. He serves on the editorial boards of the Journal of Inorganic and Organometallic Polymers, and Phosphorus, Sulfur, Silicon and the Related Elements. He was named a UVM University Scholar for 1982-83, received the George V. Kidder Outstanding Faculty Award in 1986. Dr. Allen was named a Mass High TECH "Allstar" in 2000, received the Dean's Lecture Award from the College of Arts and Sciences in 2004 and the Luther F. Hackett award from the Vermont Technology Council for contributions to economic development in Vermont in 2005. He was elected to the Vermont Academy of Science and Engineering in 2005. He served as the Director of the Vermont Experimental Program to Stimulate Competitive Research (EPSCoR) from 1995-2005. In addition to being an Emeritus Professor at UVM, he is the Senior Scientific Advisor to the Vermont Center for Emerging Technologies.

Brad Smith will be also joining us from the ACS Office of Legislative and Government Action to answer questions about the work they do on our behalf in Washington DC.

Directions: The Kellogg-Hubbard Library is at the corner of Main and School Streets in Montpelier. The NECI Main Street Grill & Bar is at 118 Main Street.

Please **RSVP** by May 21st if you are planning to join us for dinner.

The Vermont Science and Math Fair

The 43rd Annual Vermont State Science and Mathematics Fair was held at Norwich University. Fiona Case, Martin Case and Nathan Mahany led the Green Mountain Local Section judging team with assistance from Joe Byrne, Joe Rizzolo, Roy Butler, Alison Fisher, Natalia Blank, and Hollis McBride.

Award Winners



Heidi Kunkel, Northfield Middle/High School (teacher Daniel Ukolowicz)

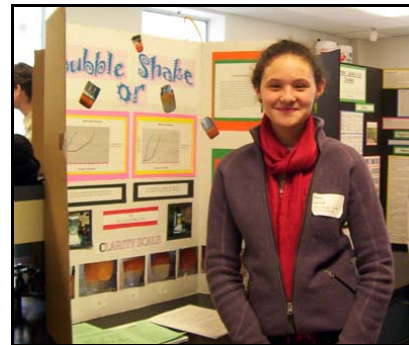
"Ethanol as a possible alternative fuel source when tested in mixtures with gasoline"

We were impressed with Heidi's creative use of a potato cannon to quantify power output from her fuel mixtures, and with her thoughtful data analysis and application of the scientific method. She carried out a literature search and found her results in good agreement with previously published data.



Eric Sadler, South Burlington High School (teacher Curtis Belton)

"Simply Green" Eric compared the toxicity of household cleaners used by people in his community with the Simply Green product. We were impressed by his research and background reading, and the knowledge he had gained about surfactants. We were also impressed by his data analysis and the care he took to isolate robust strains of bacteria from Lake Champlain water for testing purposes.



Jade Leven, Green Mountain Union High School (teacher Dr. Rice)

"Bubble of Shake: Cleaning Biodiesel" Jade studied a problem of direct relevance in her community: the cleaning of biodiesel. She compared two methods: shaking the biodiesel with water, and bubbling water through the biodiesel.

Honorable Mentions:

The following projects caught the judges eye's are receive an honorable mention:



Emily Scherer "Apples to Apples" - for a careful application of the scientific method and thoughtful control of variables in her experiment.

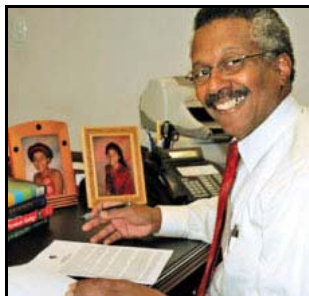


David Ribbans, "Does the types of acid affect the voltage of a wet cell" – for a clear description, and for his insight into the chemical basis of his results.



Steven Akiki, "Fuel Cells" - for careful design of his experiment, and honest analysis of limited data. (Steven was also an award winner in 2005)

Meeting Report: A visit by Dr. Chris Hollinsed, Director of the ACS Petroleum Research Fund



Dr. Chris Hollinsed's visit last month almost became the second ACS Green Mountain Local Section event this year to be ruined by the weather (our March ski-trip suffered from a lack of snow). We were concerned by the gathering storm clouds and relieved to receive his phone call to say that he had landed - until we realized that his flight from Washington DC had been diverted into Albany NY. While Chris sat on the US Airways-provided bus driving North, Martin Case phoned and emailed faculty around the state to cancel afternoon meetings he had arranged for them with Chris to discuss the Petroleum Research Fund. We reached most people in time. But the weather had become quite bad, and the forecast was for worse. Members from the south and east of the state started to call in canceling their dinner reservations. We were worried that Chris might not have an audience once he finally arrived!

The bus pulled into Burlington Airport with minutes to spare before the start of the meeting. Chris was whisked away to the new Chera Science Hall at St. Michael's College, where 17 brave souls were well rewarded: Chris provided a fascinating and thoughtful insight into the world of industrial chemistry. He discussed the way that industrial research is carried out - calling on his extensive experience in the laboratory, and in management positions at Polaroid and Dupont Research. He described motivations and drivers for industrial research and the ways that these are linked with concepts of corporate culture and the culture of science. He emphasized the past impact that industrial research has had on society, and the need for industrial research to contribute to innovation and economic development growth in the US and globally. The insight was, I think, important for an audience of faculty members from Vermont Colleges and Universities. This is the world that so many of their students will be entering - and the world they will interact with as consultants, on Government committees, and increasingly during the funding process. It was a

pity that no students chose to attend. I would welcome suggestions from members about how to encourage student attendance since our June event should also be of interest to them as they consider possible future careers.

In the end our April meeting was a success. The talk was interesting, the dinner was lively, and Chris generously offered to stay for Wednesday morning to meet with UVM faculty members before heading over the lake for an evening event with our neighbors in the Northern New York ACS Local Section. By then the sun was shining - it was a lovely Spring day!

Fiona Case

GMLS Meeting 15 June



Allison Doerr

Dr. Doerr will tell us about the world of scientific publishing and share her experiences as Assistant Editor of Nature Methods.

Allison began conducting research in chemistry as an undergraduate at Vassar College, where she studied polymer synthesis and characterization. She recently obtained her Ph.D. in Chemistry from Princeton University working with Martin Case in George McLendon's laboratory. There, she studied de novo protein receptor design and investigated protein-ligand interactions using NMR spectroscopy. Allison joined Nature Methods as an Editorial Intern in February 2005.

The Chemistry Faculty at Middlebury College has kindly agreed to host this event, which will be followed by dinner at Tully and Maries.