

**Mid-Hudson Chemist
American Chemical Society
Department of Chemistry
SUNY New Paltz
1 Hawk Drive
New Paltz, NY 12561**



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National Chemistry Week 2008

October 19-25

Theme: *Having a Ball with Chemistry*

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<http://www.midhudsonacs.org>

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Hudson Valley Science Café

A Science Café is a monthly gathering in a Café, Pub or Restaurant, open to the public, with a short presentation of a topic followed by discussion. The essence of a Science Café is informality, with groups seated around tables with food and drink to encourage conversation. Hudson Valley Science Café usually meets on the 4th **Wednesday** of the month, except where noted.

Website: <http://www.cafescientifique.org/hudsonvalley.htm>

NEW Meeting site:
Diana's

1015 Little Britain Road (Route 207)
in New Windsor (just east of Stewart Newburgh Airport, on
the opposite side of the road from the airport entrance).
Visit <http://www.dianasny.com> for menus and map.

\$3.00 admission fee includes coffee or tea. If you arrive at
6 PM, you can order from the Early Bird menu. No orders
are taken during the Presentation (7:00-7:30).

SAVE THESE DATES

September 17 (3rd Wednesday)

"Inflammation and the Downfall of Vioxx"

Teresa Garrett, Ph.D., Assistant Professor of Chemistry
Vassar College

October 29 (5th Wednesday)

"Why People Believe in Pseudoscientific and Paranormal
Claims"

Terrance Hines, Ph.D., Professor of Psychology, Pace
University, Adjunct Professor of Neurology, New York
Medical College, and author of "Pseudoscience and the
Paranormal"

November 19 (3rd Wednesday)

"The Astronomic Search for the Origins of Life on Mars"

Robert Novak, Ph.D., Professor and Chair of the Physics
Department, Iona College, New Rochelle, NY

Hudson Valley Science Café has received start-up funds
from WGBH-NOVA and The American Chemical Society.
To suggest a speaker (yourself included), please contact
Dr. Toby Rossman (toby.rossman@nyumc.org).

The Mid-Hudson Section of the American Chemical Society

and

The Chemistry Department of Mount Saint Mary College

Announce

A Chemist Makes Hard Apple Cider

Dr. Timothy MacMahon

Department of Chemistry
SUNY, Orange County Community College

Wednesday, September 10, 2008

7:00 PM

Aquinas Hall, Room 216

Mount Saint Mary College, Newburgh, New York

(Refreshments at 6:30 PM in Room 250)

Contact: Lynn Maelia at 845-569-3131 or by e-mail at maelia@msmc.edu

About the lecture: Apple cider was the drink of choice in the United States long before there was a United States. One of the first items imported to this country in the 1600's was the humble apple and its fruit bearing tree. The apple was imported to this country for the purposes of making apple cider and not to have the satisfaction of biting into the crunchy culinary treat to keep the doctor away. In fact, in early America it was much safer to drink the juice of the apple than to partake in the natural wonders of water. Water was often contaminated with bacteria and other nasty things that could and did make people sick in the early colonies. Cider, on the other hand, with its alcoholic content was safer and more hygienic than most of the water in the early 18th century. Many of the early founders of our country drank cider. Thomas Jefferson would have a glass or two of cider most mornings to settle his stomach and get him ready for the day. George Washington, John Adams, also drank cider. One could say that drinking cider is a patriotic duty. In 1840 William Henry Harrison ran for president with Tyler (remember the famous campaign slogan "Tippecanoe and Tyler too"?) by offering free cider for his supporters. Again, shouldn't we keep in touch with our past by drinking cider and thinking of our heritage? This talk will take you through a step-by-step description of how apple cider is transformed into hard apple cider. The talk will even describe the difference between apple cider and apple jack. The amazing chemistry of this near miraculous transformation will be discussed, as well as the need for sanitation and various chemical means of achieving said sanitation. Is it your patriotic duty to come to this talk? I am not sure but remember the more you understand about apple cider the more you can understand the history of the United States and why we are what we are.

About the speaker: Timothy MacMahon was born in the continental United States yet not in any state in the union. He spent much of his youth mired in mud and was generally considered an intellectual cripple. His formal mental development did not begin until college. He attended Rutgers University, the State University of New Jersey, and graduated with High Honors in the spring of 1982. After a brief stint as an industrial analytical chemist/ whipping boy at Spex Corporation in Metuchen, NJ, he decided it was time to continue his mental development. After two years as a bench chemist, he realized life as a BA chemist was dirty and hard. While he fondly remembered the times he spent as a youth encased in dirt and mud, he was unwilling to return there for long. Therefore, he returned to school to continue his exercise of the little gray cells. This time the school was Purdue, home of the Black and Gold Boilermakers. Since Purdue is in West Lafayette, IN, he became a Hoosier. In his stint as a boilermaker, the football team did not win one game, but he did manage to see the Goodyear Blimp up close and personal. Well maybe they did win one game, but did not win many more than that. He attended Purdue from 1984 to 1989. At that point he felt he had grown intellectually enough to escape so he wrote a thesis and absconded with a Ph.D. in analytical chemistry to New York and once again worked as an analytical chemist. This time he worked for one of the largest corporation in the world, IBM. After a few years as a mass spectroscopist specializing in Fourier Transform Mass Spectroscopy (FTMS), tandem mass spectroscopist EB design, FAB/MS, Thermospray/MS, and Particle beam/MS, he managed to dodge the layoffs and quietly slipped out of the building (310 for those who know) and resurfaced in Middletown, NY at Orange County Community College. As far as is known, he is still there teaching chemistry, what else?

Directions to Mount Saint Mary College: Mount Saint Mary College is located at 330 Powell Avenue in Newburgh, NY. Take I-84E to Exit 10. At the bottom of the ramp take a right onto 9W South. (From the East, take I-84W to the second exit after the Newburgh-Beacon Bridge (Exit 10S). At the bottom of the ramp, turn right onto Rte. 32 and then another right at the first traffic light onto 9W South.) From 9W South, turn left onto North Plank Road (south of the I-84 overpass). Stay on North Plank Road 1/4 mile and turn right at the first traffic light onto Powell Avenue. The College is 1/4 mile on the left. For additional information, please visit <http://www.msmc.edu>.

The Mid-Hudson Section of the American Chemical Society

Announces

**The Microbiology of Cheeses, Wines, Beers,
and Other Fermented Foods**

Dr. Betsey Dyer

Department of Biology
Wheaton College, MA

Wednesday, October 15, 2008

7:00 PM

Benmarl Winery
Marlboro, New York

Contact: Neil Fitzgerald at 845-575-3000, x2491 or by e-mail at Neil.Fitzgerald@marist.edu

There will be a winery tour at 6:30 PM. A wine tasting (\$4 per person) will follow the talk. Please contact Neil Fitzgerald if you would like to attend the tasting.

About the lecture: This talk celebrates our intimate, beneficial, and enriching relationships with the microbial world, especially through our foods and drinks and our essential interactions for digestion and general good health. All of the great cuisines of the world have evolved their unique flavors, aromas, and textures thanks to the activities of microbes. If a food or beverage is not absolutely fresh (fresh strawberries, fresh peas, fresh salmon) then it is most likely on its way to decomposition. This was especially true for the tens of thousands of years of human evolution when refrigeration was not a possibility. Our hungry human ancestors were not likely to toss out an item that was frothing, bubbling, discoloring, and exuding new aromas. Instead those transformations became part of the cuisine and eventually came to define regional cuisines. Thus cheeses (decomposing milk), wines (decomposing grapes), beers (decomposing grains) and a host of other comestibles (fermented fishes, beans, cabbages) were invented or at least embraced over and over again by cultures far and wide.

About the speaker: Betsey Dexter Dyer teaches genetics, bacteriology, and parasitology at Wheaton College in Massachusetts. She received her Ph.D. in Biology from Boston University. Among her research interests are bioinformatics, microbial speciation and symbiosis. She has written *A Field Guide to Bacteria* (Cornell 2003.)

For directions to Benmarl Winery, visit <http://www.benmarl.com>.

College Recognition Awards – 2008

The following students were nominated to receive the College Recognition Award for 2008. The Mid-Hudson Section presents these awards to an outstanding student from each of the colleges in the Section. The students were nominated by the chemistry faculty at their college based on a strong academic record in their chemistry studies. These students were recognized at the Undergraduate Research Symposium in April. Please join us in congratulating these deserving students!

College	Student	Advisor
USMA	Cadet Eric Creighton	Andy Biaglow
Vassar	Patrick Lang	Sarjit Kaur
Marist	Jillian Lennartz	Neil Fitzgerald
SUNY Ulster	Michael King	Dennis Swauger
SUNY Dutchess	Myvan Beehler	Abdul Brimah
SUNY Orange	Aaron Anselmo	Tim MacMahon
SUNY New Paltz	Darren Ceckanowicz	Pamela St. John
MSMC	Bryan DeLaRosa	Janet Petroski
Bard	Ava Kreider-Mueller	

From the 2008 Undergraduate Chemistry Research Symposium at Mt. St. Mary College



At the poster session...



2008 College Recognition Award Winners



2008 Research Award Winners

LOCAL STUDENTS WIN CHANCE TO QUALIFY FOR INTERNATIONAL CHEMISTRY OLYMPIAD

Seven outstanding high school chemistry students from the Mid-Hudson section took a national exam at Mount Saint Mary College in April to qualify them to become members of the U.S. National Chemistry Olympiad team. Based on the results of the national exam, twenty students were selected to undergo intensive training in June at the U.S. Air Force Academy in Colorado Springs. The top four were chosen to represent the U.S. in the International Chemistry Olympiad (IChO) competition in Budapest, Hungary in July. Although none of the Mid-Hudson student candidates were the top 20 in the country who passed on to the next level of competition, they should be commended for their outstanding performance on the local exam and their willingness to attempt the grueling 4 hours and 45 minutes of national testing. These students and their faculty mentors are:

Student	Faculty Mentor	School
Aarti Agarwal	Shirley Thompson	Middletown High School
Amelia Fish	Shirley Thompson	Middletown High School
Mark Rovereto	Jim Starr	Kingston High School
Akira Shimizu	Don Bucher	Onteora High School
Michael Zylstra	Jim Santos	Port Jervis High School
Matt Pizonia	Terri Campbell	Valley Central High School
Alex Harmuth		Poughkeepsie High School

The Mid-Hudson Section would also like to acknowledge the contributions of the following high school teachers who took the time to encourage students to participate in the local testing. Without their involvement in the process, our local Chemistry Olympiad competition would not be possible. Because of them, 150 students from 11 schools in the area participated in the first round of local section testing from which the top students were selected to take the national exam.

Sarah Angell	Arlington High School
Jim Starr	Kingston High School
Shirley Thompson	Middletown High School
William Istone	Newburgh Free Academy
Don Bucher	Onteora High School
Terri Campbell	Valley Central High School
Jim Santos	Port Jervis High School
David Baruch	Carmel High School
Lisa DellaGuardia	Our Lady of Lourdes High School
Randal Anderson	Spackenkill High School
Veronica O'Donnell	Cornwall Central High School



National Chemistry Week 2008



"Having a Ball with Chemistry " Celebrate October 19-25, 2008

Please join the Mid-Hudson Section of the ACS in celebrating National Chemistry Week. We are having National Chemistry Week events at a number of colleges in the area where 8-12 year-old kids will be able to do some hands-on science experiments related to this year's theme. Contact NCW Coordinator Dan Freedman (freedmad@newpaltz.edu) if you are interested in volunteering.

National Chemistry Week 2008 Poster Contest

A message from the NCW Coordinator:

The Mid-Hudson Section of the ACS will once again be participating in the National Chemistry Week Poster Contest. This year's theme is "Having a Ball with Chemistry" and the posters should promote the important role of chemistry in athletics (I don't believe titration counts as an athletic contest, even though it should). Contest rules are listed on the next page. Awards will be given for K-2, 3-5, 6-8, and 9-12. **Due to the number of entries last year, please send in only 3 entries in each category per school.** All entries should be submitted by **Friday, October 17** to:

Daniel Freedman
Chemistry Department
SUNY New Paltz
1 Hawk Drive
New Paltz, NY 12561

National Chemistry Week 2008 Poster Contest

Contest Rules:

- All entries must be original works without aid from others.
- Posters must be no larger than 14 x 22 inches.
- Entries on foam board will not be accepted.
- Entries must be hand-drawn using crayons, paint, colored pencils or markers.
- Posters must be sent to the ACS Local Section NCW Coordinator. Contact the coordinator in your area via the “Coordinator Lookup” at www.acs.org/ncw. **NOTE:** Posters received directly from schools/students will not be eligible for the contest.
- Posters must be submitted to NCW Coordinators in time for the local contest (**deadlines will vary**).
- All entries **must** have the following information included on the back of the poster: student’s name, grade, name of school or sponsoring group (e.g. Boys and Girls Club or Scout Troop), adult contact address, contact name, contact telephone number, student/adult contact email address. Home schooled students are eligible for the contest and should include the name of any homeschool group with which they are associated.
- Entries lacking complete and legible information will be disqualified.

Judging:

Entries will be evaluated based on the following:

1. **Artistic Merit** (use of color, quality of drawing, poster design & layout)
2. **Poster Message** (should be fun, motivational and promote chemistry’s important role in the field of athletics)
3. **Originality and Creativity** (unique, clever and/or creative design)
4. **Neatness** (free of spelling and grammatical errors and/or stray marks)

Seminars at SUNY New Paltz – Fall 2008

The following is a list of seminars to be held in the Coykendall Science Building (CSB) at SUNY New Paltz this fall. For more information about these seminars, contact Dr. Pamela St. John (stjohnp@newpaltz.edu, 845-257-3794).

For directions to SUNY New Paltz, visit <http://www.newpaltz.edu/about/directions.html>.

SPEAKER	TITLE	DATE	TIME	PLACE
Susan Bane Organic and Biological Chemistry/SUNY Binghamton	TBA	Tuesday, September 9	3:30 PM	CSB 321
Pat Holland University of Rochester	Iron with only Three Bonds: Useful for Catalysis and Nitrogen Fixation	Tuesday, September 16	3:30 PM	CSB 321
Gunter Wagner Yale University	Evolution of Gene Regulation as it Pertains to the Origin of Evolutionary Novelties	Thursday, September 25	4:00 PM	CSB Auditorium*
David Hanson SUNY Stony Brook	Guided Inquiry Learning	Thursday, October 23	4:00 PM	CSB Auditorium*
Robb Engle Sono-Tek Corp.	Ultrasonics for Atomization	Tuesday, November 4	3:30 PM	CSB 321
William Herbst Wesleyan University	The Case of the Winking Star: New Insights into the Formation of Terrestrial Planets	Thursday, November 20	4:00 PM	CSB Auditorium*
John Hassett SUNY ESF	Stalking the Wily Hydrophobe	Friday, November 21	3:30 PM	CSB 321

*The seminars scheduled in the CSB Auditorium are part of the SUNY New Paltz School of Science and Engineering Colloquium Series.