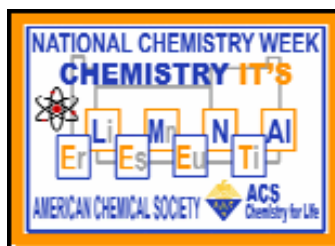
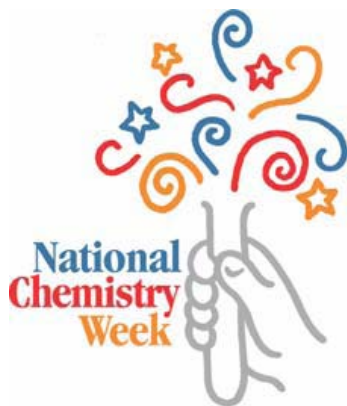


Mid-Hudson Chemist
American Chemical Society
Department of Chemistry
SUNY New Paltz
1 Hawk Drive
New Paltz, NY 12561



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October 18-24, 2009
"Chemistry – It's Elemental!"

2009 Executive Committee:

Chair: Timothy MacMahon; **Chair-Elect:** Joe Tanski;
Past Chair: Neil Fitzgerald; **Treasurer:** Joan Skinner;
Secretary: John Edwards; **Councilor:** David Straus;
Alternate Councilor: Dan Freedman; **Members-at-Large:** John Galbraith, Cynthia MacMahon, Jocelyn Nadeau; **NCW Chair:** Dan Freedman; **Science Olympiad Chair:** Lynn Maelia; **Awards Chair:** Patti Cusatis; **WCC Co-Chairs:** Janet Petroski and Margaret Larrousse; **YCC Chair:** George Ruger; **Publicity Chair:** Chet Dziobkowski; *Mid-Hudson Chemist* Editor/Publisher: Gissel Mentore

Call for Nominations for Mid-Hudson ACS Board

We need volunteers to help run the Mid-Hudson Section of the American Chemical Society. There are a few positions on the Board that need to be filled for 2010. Elections will be held in November. If you are interested in running for one of the positions listed below, or would like more information about the positions, feel free to contact the current Chair, Timothy MacMahon, at timothy.macmahon@sunyorange.edu.

Open Positions for 2010:

Chair-Elect
Secretary
Treasury

Upcoming November Talks

Matt McLaughlin (SUNY New Paltz graduate and graduate student at the University of Rochester) will present "Iron(II)-azurin: A low coordinate iron-sulfur site in a simple protein scaffold" on Monday, November 16. The time is TBD, but the talk will take place in the Coykendall Science Building (CSB) Room 321 on the SUNY New Paltz campus.

Also in November, Chris Smart (Assoc. Professor of Chemistry at Vassar College) will present a Science Café-style talk on beekeeping. Date, time, and location are TBD.

Check www.midhudsonacs.org next month for more details...

Mid-Hudson ACS Website:

www.midhudsonacs.org

~Join the Mid-Hudson ACS Discussion List~

The following website may be used to subscribe, unsubscribe, or view the archive:

lists.msmc.edu/mailman/listinfo/acs-mh

To post a message to all the list members, send e-mail to acs-mh@lists.msmc.edu.

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: www.cafescientifique.org/hudsonvalley.htm

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 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 PM).

September 23, 2009

"Arsenic Biogeochemical Cycles: The Biology of Environmental Arsenic"

Barry Rosen, Ph.D., Assoc. Dean for Basic Research and Graduate Programs, Florida International University Medical School

October 28, 2009

A special evening of science and music: "Song Culture and Song Learning in Songbirds"

Ofer Tchernichovski, Ph.D., Assoc. Professor of Biology
City University of New York

PLUS: Music by David Rothenberg (author of "Why Birds Sing") and friends

November 18, 2009 – (3rd Wednesday)

A talk on geospatial technologies

John Mickelson, Geospatial and Ecological Services, Monroe, 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 (tobyrossman@yahoo.com).

The Mid-Hudson Section of the American Chemical Society
and
The Department of Chemistry, Biochemistry and Physics of
Marist College

Announce

A Self-Employed Application Chemist's Odyssey in the World of Analytical Instrument Development – The Viability of a \$50K High Resolution NMR and \$15K ESR Spectrometers

John C. Edwards, Ph.D.
Process NMR Associates, LLC
Danbury, CT

Wednesday, September 23, 2009
7:00 PM
Donnelly Hall, Room 225 (DN 225)
Marist College
Poughkeepsie, New York
(Refreshments at 6:30 PM)

Contact: Jocelyn Nadeau at 845-575-3000 x2224 or by e-mail at Jocelyn.Nadeau@marist.edu

About the lecture: The availability of cheap commodity electronics developed for the cellular phone industry is revolutionizing the design of NMR and ESR spectrometers. Rather than instruments that fill half a room, cost \$200-3,000K+, and intimidate users, it is possible to produce spectrometers that are an order of magnitude cheaper to produce. Examples of NMR and ESR spectrometer development projects will be described as well as the wide-ranging applications that these spectrometers can deliver to the areas of process control, food authentication and automated laboratory analysis.

About the speaker: John Edwards was born and raised in Bolton, UK. He graduated from the University of Durham, UK with a B.Sc. in Chemistry in 1986. He obtained his Ph.D. in Physical Chemistry from the University of South Carolina in 1990, working on solid-state NMR applied to heterogeneous catalysts under the guidance of Professor Paul Ellis. From 1990-1997 he worked as a research chemist at the Texaco R&D facility in Beacon, NY where he was responsible for global NMR support of upstream, downstream, and petrochemical Texaco ventures. In 1997 he formed Process NMR Associates which operates as a commercial analytical NMR spectroscopy service and consultancy. Process NMR Associates along with its engineering company partners, develops, markets, and supports on-line process NMR spectrometers utilized for control and optimization of refinery, petrochemical, pharmaceutical and food manufacturing operations. The company also acts as an application development company for several analytical instrument companies and supports the chemometric development of several process analytical products. He currently resides in Poughkeepsie, NY, with his wife and three sons. He is an affiliate professor of Chemistry at Marist College, a Research Associate at SUNY New Paltz, and an active member of the American Chemical Society.

Directions to Marist College: Marist College is located at 3399 North Road, just off Rte. 9, approximately 1 mile north of the Mid-Hudson Bridge in Poughkeepsie, NY. Detailed directions are available at www.marist.edu/about/directions.html. For a campus map, please visit www.marist.edu/about/map.html.

The Mid-Hudson Section of the American Chemical Society

and

The Department of Chemistry of SUNY New Paltz

Announce

Greening the Chemistry Curriculum

Michael C. Cann, Ph.D.
Professor of Chemistry, University of Scranton

Friday, October 16, 2009
7:00 PM

Coykendall Science Building (CSB) 321
SUNY New Paltz

(Refreshments in CSB 319 at 6:30 PM)

Contact: Dan Freedman at 845-257-3795 or by e-mail at freedmad@newpaltz.edu

About the lecture: Green chemistry in the US can trace its major roots back to the early 1990s with the passage of the Pollution Prevention Act of 1990 and the subsequent formal focus on green chemistry by the EPA in 1991. Since this time research and development in green chemistry/technology has gained considerable momentum. Many companies and academic research faculty now recognize the environmental and economic benefits that environmentally benign chemistry has to offer. If we are to broaden the base of those that view chemistry with a "green tint," then green chemistry must be infused into conventional chemistry courses that are offered in the traditional college chemistry curriculum. It should be "second nature" for our students of today and the chemists of tomorrow, to view all chemistry with pollution prevention in mind. Ways in which we have infused green chemistry into the curriculum will be addressed. This discussion will include 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 (Please see academic.scranton.edu/faculty/CANNM1/greenchemistry.html). In addition we will focus on the ACS/EPA Green Chemistry Educational Materials Development Project (please visit www.acs.org and click on the ACS Green Chemistry Institute® link for more information).

About the speaker: Michael Cann was born and raised in the Saratoga region of upstate NY and attended Marist College where he earned his B.A. in chemistry in 1969. Mike received his M.A. and Ph.D. in organic chemistry from SUNY Stony Brook in 1972 and 1973, he was a post-doctoral fellow at the University of Utah (1973-74), and a lecturer at the University of Colorado-Denver (1974-75). Since 1975 he has been a faculty member at the University of Scranton. He is also the co-director of the environmental science program and the director of medical technology. His areas of interest encompass nitrogen ions, nitrogen heterocycles and green chemistry. His interests in green chemistry consist of microwave assisted organic reactions, room temperature ionic liquids, and green chemistry education. He has taught a number of courses including general chemistry, organic chemistry, environmental chemistry, chemical literature and writing, chemistry seminar, topics in environmental science, internship in environmental science and graduate courses in mechanistic and structural organic chemistry. (Webpage: academic.scranton.edu/faculty/CANNM1/)

Directions to SUNY New Paltz: From NYS Thruway Exit 18, turn left at the traffic light after the toll booth. Turn left at the third traffic light onto South Manheim Boulevard (Rte. 32 South). Turn right onto Mohonk Ave. East. Please visit www.newpaltz.edu/about/directions.html for more detailed directions and a campus map.

2009 Dutchess County Regional Science Fair Results

The Annual Dutchess County Regional Science Fair was held on Saturday, April 4. Several members of the Section assisted in judging those exhibits related to the study of chemistry. The Section presents special awards to those students who are deemed best able to demonstrate the understanding of their subject matter and were creative, thorough and clear in their presentation. The group reviewed about 48 projects and presented 14 awards. Below are the names of this year's award recipients and the members of our section who were this year's judges. Many thanks to those who volunteered their time on a Saturday morning!

Outstanding (\$50 Barnes and Noble Gift Card and ACS Certificate):

Laya Varanasi (Roy C. Ketcham High School)
Biodiesel: An Efficient Method to Improve Yields

Allison Moren (5th grader at Hagan Elementary)
Chocolate Ice Cream? Mom is Going to Scream!

Superior (\$25 Barnes and Noble Gift Card and ACS Certificate):

Daniel Casey (6th grader at St. Martin de Porres)
Food Energy

Richard Coffin (8th grader at St. Denis / St. Columba)
How Do the Agarose Concentration in the Agarose Gel and the Voltage Affect the Rate of Electrophoresis?

Alexandra Gusmano (6th grader at Myers Corners Elementary)
Melting Ice

Teren Wong (Roy C. Ketcham High School)
Got Fuel for Your Cell

Honorable Mention (ACS Certificate):

Diana Bortz (5th grader at St. Denis / St. Columba)
Smart Bio-Burger

Ashna Gupta (5th grader at Gayhead Elementary)
Just Keep Cool - How Evaporation Affects Heating and Cooling

Victoria Smith (5th grader at St. Mary's Fishkill)
Chromatography: Color or Clue

Viraj Parekh (9th grader at Roy C. Ketcham High School)
Candy Power

Andrew Davis (5th grader at Hagan Elementary)
Ready, Set, Race to Discover a Liquid's Viscosity

Manvitha Chintapatla (8th grader at Van Wyck Junior High School)
Do "Carbonic Acid" levels in Gases Contribute to Green House Effects?

Daniel Disbrow (8th grader at Wappingers Junior High)
Soda's Effect on your Teeth

Dhruv Parekh (5th grader at Myers Corners Elementary)
Mentos Geyser

Judges: Nancy Klymko, Dominic Schepis, Chet Dziobkowski, Sarjit Kaur, Paul Klymko, Joan Skinner, David Straus



**Illustrated Haiku Contest Winners
Chemists Celebrate Earth Day (2009):
Air - The Sky's the Limit**

The Mid-Hudson section participated in the *ACS Chemists Celebrate Earth Day* celebration. Entries were recently solicited for the Illustrated Haiku Contest for students in grades K -12. The following teachers submitted the best entries from their classes:

Grades 6 - 8:

Mrs. Kleister, Bishop Dunn Memorial, Newburgh
Mr. Evans and Mrs. Toback, Heritage Junior High School, Newburgh
Mrs. Woods-Coto, Gardnertown Fundamental Magnet School, Newburgh

Grades 9-12:

Mrs. Campbell, Valley Central High School

The top winners for our section received \$25 gift cards to Barnes and Noble. The top entry from each age category (noted by **) was also submitted for the National ACS competition. The ACS announced their winners on April 22.

Grades 6 - 8:

**** Leo Maniscalchi**, Grade 7, Bishop Dunn Memorial
*See Them All Spinning
Silently Working So Hard
Bringing Good to Man*

Lisa Suh, Heritage Junior High School
*Sky High Brown Wind Mills
Gently Turns with the Wind's Pulse
Forming Energy*

Chaeyoung Seo, Heritage Junior High School
*Ruffling Hair, Tickling Face-Free Flowing Mane of Sky
Invisible Wind*

Grades 9 -12:

**** Nicholas Torsone**, Grade 11, Valley Central High School
*The Air is Clean, Fresh
Until Mankind Pollutes It
Causing Disruption*

Marie Badalucco, Grade 11, Valley Central High School
*A Group of Turbines
The Wind Rushing Through the Air
Helps to Make Power*

From the Younger Chemists Committee

What is a Leader?

A Leader can be many things. This could be the Professor at the front of the classroom actively guiding the students through their coursework.

A Leader can be a graduate student assisting with an undergraduate class. She can be the TA of the discussion section of your course.

A Leader can also be your boss at work. He may be your immediate supervisor or perhaps someone without an actual management title, but with the necessary skills to effectively be a mentor to other newer and less skilled employees.

A Leader can take many forms. This individual can also be a very good leader or a very bad leader. We all want to have the Professor who can inspire us to do great things, helps us truly understand the course material, and be someone that we can rely on to help us out when we are having trouble. Nobody wants to be stuck with the Professor that makes each class hour seem like a week. What creates the difference between the two?

A leader at your place of employment or community organization can have the same impact. A Great Leader can leave the group inspired to do their best, whether that means getting out there and putting in your maximum effort at your job, working to your maximum potential day after day, or it can be the head of a school band or a scout leader or anyone who inspires younger individuals to do their best so they can achieve greatness.

A Poor Leader, or someone who is just adequate, will not have the same ability to lead a group and motivate the individuals within that group. This is not necessarily a bad individual, just someone who has not yet developed the skills to become an Effective Leader.

So, How Can Someone Become an Effective Leader?

The YCC is offering the ACS Leadership Institute, January 22-24, 2010 at the Omni Ft. Worth Hotel in Ft. Worth, TX. Information about the sessions, as well as information about 15 scholarships available for those who meet YCC criteria, is available online at www.acsycc.org. The deadline for the scholarships is Thursday, October 1. Typically, YCC criteria means a member is 35 years old or less or within 10 years of their highest achieved degree.

This YCC Leadership Development Course is separate from the ACS Leadership Development Courses available to all members, which has already been introduced at the spring national meeting. That one is 15 courses, some of which are online learning and some are classroom sessions which take place at selected national, regional, and local sections. Information about those courses can be found at www.acs.org.

Feel free to share this information with those who do not regularly visit the Mid Hudson Chemist online.

Also, we now have a page on FaceBook: [American Chemical Society YCC- Mid Hudson \(NY\) section](#).

I would like to thank everyone who participated in our first annual YCC Welcome Back Outing at Dutchess Stadium as we watched the Hudson Valley Renegades play an excellent game which was followed by some fireworks. Next year we hope there will be an even bigger turnout.

To continue with the Leadership theme, at some point in the near future as part of our YCC programming, there will be a condensed version of Joe Folkman's lecture that was presented at the spring national meeting in Salt Lake City. The topic, Leadership, of course.

George Ruger, YCC Chair

National Chemistry Week 2009

"Chemistry – It's Elemental!" Celebrate October 18-24, 2009

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 locations in the area where children ages 8-12 will be able to do some hands-on science experiments related to this year's theme. If you would like to volunteer to help out at these events, please contact the person listed below.

SUNY New Paltz contact: Dan Freedman (freedmad@newpaltz.edu)

Marist College contact: Neil Fitzgerald (Neil.Fitzgerald@marist.edu)

Orange County Community College contact: Tim MacMahon (timothy.macmahon@sunyorange.edu)

Mount St. Mary College contact: Lynn Maelia (maelia@msmc.edu)

Valley Central Schools contact: Terri Campbell (tcampbell@vcmail.ouboces.org)

Vassar College will hold the Chemistry College Bowl on October 27 at 7 PM in Mudd Chemistry (3rd floor) and a Magic Show on October 28 at 3:30 PM in Sanders Auditorium. Contact Joe Tanski (jotanski@vassar.edu) for more information about these events.

National Chemistry Week 2009 Poster Contest

The ACS is again holding a poster contest for National Chemistry Week. The theme this year is "Chemistry - It's Elemental!" - a subject that should make any true chemist's heart start beating faster. The poster should have something to do with the chemical elements - uses, properties, history, etc. What could be more fun? Contest rules are listed on the next page. Entries are due to me by **October 16**. Prizes will be awarded for the best entry in each of the grade categories (Grades K-2, 3-5, 6-8, and 9-12) and the best posters in each category will be entered in the national contest. Please submit only **THREE** posters in each grade category from your classes. Poster entries can be sent to:

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

National Chemistry Week 2009 Poster Contest Rules

For complete details, visit www.acs.org/ncw.

- 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 Mid-Hudson ACS NCW Coordinator, Dan Freedman, by October 16. NOTE: Posters received by ACS directly from schools/students will not be eligible for the contest.

- 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 everyday life)
3. **Originality and Creativity** (unique, clever and/or creative design)
4. **Neatness** (free of spelling and grammatical errors and/or stray marks)