

Mid-Hudson Chemist



September/October 2010

National Chemistry Week 2010

"Behind the Scenes with Chemistry!"

CELEBRATE OCTOBER 17-23!

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.

- **Family Night at Marist College, October 21**
7 PM, Donnelly Hall 231
Contact: Jocelyn Nadeau
(Jocelyn.Nadeau@marist.edu)
- **Mole Night at SUNY New Paltz, October 22**
Coykendall Science Building, 3rd Floor
Contact: Dan Freedman
(freedmad@newpaltz.edu)
- **Family Night at Mount St. Mary College, October 22**
6:30 PM
Contact: Lynn Maelia (maelia@msmc.edu)
- **Family Night at SUNY Orange, October 22**
Contact: Timothy MacMahon
(timothymacmahon@sunyorange.edu)
- **Vassar College**
 - **Magic Show, October 27**
3:30 PM, Sanders Auditorium
 - **Chemistry College Bowl, November 2**
7 PM, Mudd Chemistry, 3rd Floor
Contact: Joe Tanski (jotanski@vassar.edu)

See pages 8-9 for NCW Poster Contest rules...



2010 MID-HUDSON ACS TALKS

"GREAT MINDS DO NOT THINK OR LEARN ALIKE"

SPEAKER: RENEE WEISMAN, *WINNING AT WORK CONSULTING*

PLACE: POUGHKEEPSIE BARNES & NOBLE

DATE & TIME: OCTOBER 5, 7 PM

PLEASE SEE ANNOUNCEMENT ON P. 3.

"DOPING IN SPORTS: HOW CHEMISTS CATCH THE CHEATERS (SOMETIMES)"

SPEAKER: TOM WERNER, *PROFESSOR EMERITUS, UNION COLLEGE*

PLACE: VASSAR COLLEGE

DATE & TIME: OCTOBER 26, 7 PM

PLEASE SEE ANNOUNCEMENT ON P. 4.

"LABORATORY AND FIELD STUDIES DIRECTED TOWARD ACCELERATING ARSENIC REMEDIATION AT A MAJOR US SUPERFUND SITE IN NEW JERSEY"

SPEAKER: KAREN WOVKULICH, *INSTRUMENTATION MANAGER, VASSAR COLLEGE CHEMISTRY DEPARTMENT*

PLACE: MARIST COLLEGE

DATE & TIME: TBA (THIS TALK IS SCHEDULED FOR NOVEMBER.

CHECK WWW.MIDHUDSONACS.ORG NEXT MONTH FOR DETAILS...)

2010 Executive Committee:

Chair: Joe Tanski; **Chair-Elect:** George Ruger ;
Past Chair: Timothy MacMahon; **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

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).

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 2011. 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, Joe Tanski, at jotanski@vassar.edu or 845-437-7503.

Open Positions for 2011:

Chair-Elect
Councilor
Secretary
Treasurer
Member-at-Large

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.

September 22, 2010

"Hurricanes"

Timothy Hall, Senior Scientist, NASA Goddard Institute for Space Studies, New York City

October 27, 2010

"How Evolution Happens: Lessons from Molecular Biology"

Toby Rossman, Ph.D., Professor of Environmental Medicine, NYU Langone School of Medicine

November 17, 2010 – (3rd Wednesday)

"Mapping the Floor of the Hudson River Estuary - Using sonar to map fish habitat and investigate contaminant transport in the Estuary"

John W. Ladd, Ph.D., Benthic Mapping Coordinator, Hudson River National Estuarine Research Reserve, Hudson River Estuary Program, NYS Dept Environmental Conservation, Ossining, NY

December 15, 2010 – (3rd Wednesday)

"The story of Remicade®: How a biologic drug against rheumatoid arthritis and Crohn's disease advanced from modest beginnings to unforeseen therapeutic successes"

Jan Vilcek, M.D., Ph.D., Professor of Microbiology, NYU Langone School of Medicine

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).

(Please Post)

The Mid-Hudson Section of the American Chemical Society

Announces

Great Minds Do NOT Think or Learn Alike

Renee Weisman

Winning at Work Consulting

Tuesday, October 5, 2010

7:00 PM

Barnes & Noble Bookstore

2518 South Road

Poughkeepsie, NY 12601

845-485-2224

An ACS Science Café-Style Talk
Coffee and Cookies will be served

Abstract: This discussion focuses on how men and women do not think alike, do not learn the same way, and do not get excited by the same things. Whether solving problems, listening, or responding to praise and criticism, men and women often behave differently. It's genetic; it's environmental; it's inevitable! Understanding these differences can make you a better educator, manager, employee, spouse and friend. Join us for a lively and informative discussion which will make you think about how others think.

About the speaker: Renee Weisman, owner of Winning at Work Consulting, charted new territory as one of the first woman engineers, managers, executives, and working mothers in the male-dominated semiconductor industry. Over her 40 years in education and industry, she learned to make gender differences work for her – and teaches others how to do the same. A frequent speaker at corporations and conferences around the US, she teaches classes tailored to enhance women in their careers and to enable male managers to better understand how to capitalize on the differences between men and women in business.

Renee was a Distinguished Engineer and Director of Engineering at IBM Corporation prior to retiring in 2008. Her experience included executive and technical leadership roles in engineering as well as a history of fostering women in technology. Author of *Winning in a Man's World* and *5 Ways to Get a Man to Listen*, Renee is a featured writer for the Poughkeepsie Journal, excelle.monster.com and Womenradio.com.

You can read some of her articles at www.winning-at-work.net/articles.

Directions to the Poughkeepsie Barnes & Noble Bookstore are available at <http://store-locator.barnesandnoble.com/store/2886>

(Please Post)

The Mid-Hudson Section of the American Chemical Society

and

the Chemistry Department of Vassar College

Announce

Doping in Sports: How Chemists Catch the "Cheaters" (Sometimes)

Tom Werner, Ph.D.

Tuesday, October 26, 2010

7:00 PM

Mudd Chemistry Building, SciVis Classroom

Vassar College

Poughkeepsie, New York

(Refreshments at 6:30 PM)

Contact: Joe Tanski at jotanski@vassar.edu or 845-437-7503.

About the lecture: "Doping is to sport what criminality is to society, and there will always be criminality in society." -- Jacques Rogge, President, International Olympic Committee. The alleged use of performance-enhancing drugs is increasingly tainting athletic accomplishment. Examples of this sports "doping" problem appear almost daily in the news: pro cycling is brought to its knees by doping allegations, resulting in the loss of sponsorship, the BALCO case and the Mitchell Report pummel Major League Baseball with evidence of steroid use and drug testing concerns become a higher profile issue at the Olympics. This talk will focus on the methods that chemists use to detect sports doping with substances such as amphetamine, steroids, human growth hormone and EPO. Limitations of these methods will be discussed, along with a listing of some of the enormous challenges facing chemists as newer doping substances and methods become available. The talk is based on a course entitled Chemistry and Athletic Performance, which was developed by the speaker with the aid of Dr. Don Catlin and staff at the UCLA Olympic Analytical Laboratory and Anti-Doping Research, Inc.

About the speaker: Tom Werner received a B.S. in Chemistry from Juniata College and a Ph.D. in Analytical Chemistry from MIT. After postdoctoral appointments at Harvard and Tufts Medical Schools, he taught for 36 years at Union College (Schenectady, NY), retiring as Florence B. Sherwood Professor of Physical Sciences Emeritus in December, 2007. Dr. Werner has served as Principal Investigator on several external grants awarded for the support of undergraduate research including funding from Petroleum Research Fund, Research Corporation, NSF-ILI, NSF-AIRE and the Camille and Henry Dreyfus Foundation. Dr. Werner served as Chair of the Board of Governors of the National Conference on Undergraduate Research (NCUR), as Director of the NCUR/LANCY Initiative and as a NCUR Board Member. In 2002, he received the American Chemical Society Award for Research at an Undergraduate Institution. Over the past three years, he has developed a course entitled "Chemistry and Athletic Performance" that combines his expertise in analytical chemistry, his interest in sports and his goal to teach chemistry with more social relevance. The course syllabus was developed with input from Dr. Don Catlin and his staff at the UCLA Olympic Analytical Lab and Anti-Doping Research, Inc.

Directions to Vassar College are available at <http://www.vassar.edu/visitors/index.html>.

2010 College Recognition Award Winners

The purpose of the College Recognition Awards is to recognize achievement in the field of chemistry and to encourage further study in chemistry. One student from each college in the Mid-Hudson Section was chosen for this award and honored at the Undergraduate Research Symposium last April. Congratulations to the students and their advisors!

Bard College

Student: Emanuel Krantz
Advisor: Emily McLaughlin

Marist College

Student: Catherine DeBlase
Advisor: Jocelyn Nadeau
Year: Junior
Plans: PhD in Organic Chemistry

Mount St. Mary College

Student: Brian Browne
Advisor: Janet Petroski
Year: Senior
Plans: Graduate school

Orange County Community College

Student: Ryan Lazaroff
Advisor: Tim MacMahon/ Cyndy MacMahon
Year: Sophomore
Plans: Attend 4-year school for Chemical Engineering

SUNY New Paltz

Student: Jordan Sumliner
Advisor: Dan Freedman
Year: Senior
Plans: Graduate school at Emory University, Inorganic Chemistry

Ulster County Community College

Student: Hashim Al-Mashat
Advisor: Dennis Swauger
Plans: Baccalaureate degree in chemistry-related field.

USMA

Student: Cadet Archie Overmann
Advisor: LTC William Pearman
Year: Senior
Plans: Serve in the Army after graduation, attend graduate school within the next 5-7 years

Vassar College

Student: Will Jobs
Advisor: Chris Smart
Year: Senior
Plans: 1-year position at VC as the Collins Environmental Research Intern (full time)

2010 Undergraduate Research Award Winners

Earlier this year, the Mid-Hudson Section sponsored the Undergraduate Research Awards. Student researchers who were presenting their work at the 2010 Undergraduate Research Symposium in April were encouraged to apply. Outstanding submissions were selected to each receive a \$100 award. The 2010 recipients were **Laurie Dimisko (Marist College)** and **Gail Nakano (Vassar College)**. Congratulations to both winners!

2010 Dutchess County Regional Science Fair Results

The Annual Dutchess County Regional Science Fair was held on [April 10](#). Several members of the Section worked together to judge those exhibits related to the study of chemistry. The Section presents special awards to those students who are deemed best able to demonstrate understanding of their subject matter and were creative, thorough and clear in their presentation. It was time well-spent. Below are the names of this year's winners and judges. Many thanks to those who volunteered part of their precious weekend!!

Outstanding

Laya Varanasi
(Roy C. Ketcham High School)
Polymeric Sunscreens

Josephine Tai
(7th grade, Van Wyck Junior High School)
What Causes Iron Rust

Superior

Ananya Parlapalli and Neha Nair
(5th grad, Fishkill Elementary)
Veggie Batteries

Sahana Nateson
(6th grade, Van Wyck Junior High School)
What Do you Th^{ink}"

Alexis Ajello
(7th grade, St. Mary's, Fishkill)
Fuel Cells

McCarry Papula
(7th grade, St. Mary's, Fishkill)
"SO DIS" is How Long it Takes

Lindsay Chew
(Roy C. Ketcham High School)
The Effects of HCl and Pepsin on Protein Breakdown

Honorable Mention

Ethan Martell and Cody Homa
(5th grade, Alden Place Elementary)
Yeast Air Balloon

Chloe Eng
(5th grade, Nassau Elementary School)
The Aluminum Foil Trick

Emma Heraghty
(5th grade, Nassau Elementary School)
Spackly Me

Andrew Bucher
(5th grade, St. Martin de Porres)
What's For Breakfast?

Dhruv Parekh
(6th grade, Myers Corners Elementary)
Electrolyte Challenge

John McGahay
(7th grade, St. Martin de Porres)
Osmosis

Amanda Sayegh
(7th grade, St. Denis/St. Columba)
Do You "C" What I "C"?

Matthew Pampolina
(8th grade, St. Mary's, Fishkill)
CSI Fishkill

Judges: Beth Baumert
Ramez Boshra
Keith DeNivo
Josh Epstein
John Hummel
Paul Milne
Miriam Rossi
Glenn Roy
Dominic Schepis
Ashu Sharma



**Illustrated Poem Contest Winners
Chemists Celebrate Earth Day (2010):
Plants – The Green Machines**

The Mid-Hudson section participated in the ACS *Chemists Celebrate Earth Day* celebration. Local entries were solicited for the Illustrated Poem Contest for students in grades K -12. The following entries won the local contest and were submitted to the National competition, where Jessica Hough's poem was awarded second place! Congratulations to our local winners!

Grades 9 – 12

Jessica Hough

Valley Central High School, Montgomery

Teacher: Terri Campbell

Poem: Food Chain

From light to life energy rose
In us, through us, energy flows
Bringing life to Earth

Grades 6 – 8

Michael Fleckenstein

Bishop Dunn Memorial School, Newburgh

Teacher: Bernadette Kleister

Poem: Trees

Why cut down the trees?
They help us breathe
Plus, we like the breeze

Kids like their leaves
In their branches we play make believe

We like it when they flower
It gives the bees power

Don't pollute the air
It will give the trees a scare
Less of them we couldn't bear

**Mid-Hudson Section
Women Chemists Committee News**

The Women Chemists Committee (WCC) will host a Girl Scout Badge Day at Mount Saint Mary College on Saturday, October 23. Volunteers are welcome. Please contact Margaret Larrousse (larrousse@msmc.edu) for more information about the event.



Celebrate NCW 2010

October 17-23

Behind the Scenes with Chemistry!

National Chemistry Week Poster Contest



Behind the Scenes with Chemistry!

All students are invited to participate in the American Chemical Society's annual poster contest to celebrate National Chemistry Week. Students should create a poster that celebrates the 2010 theme "Behind the Scenes with Chemistry!" The poster should be fun, motivational, informative, and inspire students to learn about the chemistry of the special effects used in movies and television. Students should consider the roles that chemistry can play in productions such as common special effects, makeup artistry, and movie set design and materials.

All posters must be:

- No larger than 14 x 22 inches.
- Original works by the student without aid from others.
- Hand-drawn using crayons, paint, colored pencils or markers.
- On poster boards (Entries submitted on foam board will not be accepted).
- Each entry must have the 2010 Contest Entry Form (see reverse) completely filled and attached to the back of the poster. Entries lacking complete and legible information will not be considered.
- Home schooled students are eligible for the contest and should include the name of any homeschooled group with which they are associated.

Entries will be evaluated based on:

- Artistic Merit (use of color, quality of drawing, poster design & layout)
- Poster Message (should be fun, motivational, and relevant to the theme)
- Originality and Creativity (unique, clever and/or creative design)
- Neatness (free of spelling and grammatical errors and/or stray marks)

Judging Categories

- Grades K - 2nd
- Grades 3rd - 5th
- Grades 6th - 8th
- Grades 9th - 12th

Winning Posters

The mid-Hudson section will identify and submit the winning poster in each grade category to the ACS Office of Volunteers Support in Washington, DC. for judging at the national level.

- Local Winners - through the Mid-Hudson American Chemical Society
- National Winners - through the National American Chemical Society

The top two posters in each category of the national contest will receive cash awards. First place winners receive \$100 and second place winners receive \$50. There are also prizes for teachers of the winning students!

Deadlines and Further information:

The Mid-Hudson ACS judging committee will consider entries submitted through schools or from classroom teachers. Please submit your top 3 posters in each category by **Friday, October 15th**. Contact Lynn Maelia at maelia@msmc.edu (or 845-569-3131) to register your school or class, for more information, or to arrange for the submission of entries.

2010 BEHIND THE SCENES WITH CHEMISTRY POSTER CONTEST ENTRY FORM

Please fill out this form and attach it to the back of your poster. All fields are required. Incomplete forms will invalidate the entry.

Student's Name				
Grade				
Parent/Guardian				
School or sponsoring club				
Street Address				
Address Line 2				
City		State		Zip
Judging Category				
K-2 nd <input type="checkbox"/>	3 rd -5 th <input type="checkbox"/>	6 th -8 th <input type="checkbox"/>	9 th -12 th <input type="checkbox"/>	

Acceptance of prizes constitutes consent to use winners' names and entries for editorial, advertising and publicity purposes.

MID-HUDSON ACS PHOTOS

Mid-Hudson Section Younger Chemists Committee Kicks Off the School Year!



Over Labor Day weekend, the Mid-Hudson Section YCC sponsored an outing to Dutchess Stadium to see the Hudson Valley Renegades play the Lowell Spinners. The tickets and pizza for the attendees were purchased with a mini grant from the National ACS YCC. We had representatives from the following colleges: Marist, Mount St. Mary, SUNY Orange, and SUNY New Paltz, as well as several local grade schools and the local chemical industry. Some of the grade school attendees were from the Plattekill Library BOAT (Board of Advisory Teens), an after school program for young adults in Plattekill. Everyone enjoyed the ball game and a fun time was had by the students who were just beginning a new semester. This was the second annual baseball extravaganza sponsored by the Mid Hudson ACS, a tradition we hope to continue next year.

Networking!



Bill Suits, ACS career consultant, presented "Networking Tips: The Key to Your Next Successful Career Transition" on March 31, 2010. The presentation was an informal "science café"-style talk held at the Poughkeepsie Barnes & Noble Bookstore.

Awards!



From left: Brian Browne (Mount Saint Mary College), Jordan Sumliner (SUNY New Paltz), Emanuel Krantz (Bard College), and Catherine DeBlase (Marist College).

Students from Mid-Hudson Section colleges received awards at the Undergraduate Research Symposium on April 23, 2010. The Symposium was held at Bard College.