THE 101ST PRESENTATION OF THE WILLARD GIBBS MEDAL
(Founded by William A. Converse) to
PROFESSOR MARK A. RATNER
sponsored by the CHICAGO SECTION AMERICAN CHEMICAL SOCIETY
FRIDAY, MAY 18, 2012

Casa Royale
783 Lee Street
Des Plaines, IL 60016
847-297-6640

Directions to Casa Royale are on page 2.

RECEPTION 6:00 P.M.
Hors-d’oeuvres
Two Complimentary Drinks

DINNER 7:00 P.M.
Dinner reservations are required. To reserve your tickets, please call the Chicago Section office at 847-391-9091 or register at http://ChicagoACS.org by Monday, May 14 and pay $40 at the door, or fill out the reservation form on page 5 and mail it with your payment of $40 by Wednesday, May 9 to the address given on the form. If you are not a member of the Chicago Local Section, you are not eligible for half price tickets for students, unemployed, or retired Chicago Section members. Tickets and nametags will be available at the door. No refunds will be made after noon on Monday, May 14, 2012.

Tables of 10 may be reserved. If you request seating for a group, please include a list of names of the people in your group and their meal choices. Tickets and nametags will be available at the door.

Seating will be available after the dinner for people not attending the dinner but interested in hearing the speaker.

(continued on page 2)

AWARD CEREMONY 8:30 PM
The Willard Gibbs Medal
Avrom C. Litin, Chair
Chicago Section, ACS
The History of the Willard Gibbs Award

Introduction of the Medalist
Presentation of the Medal
The Citation:
For principal achievements in
• Molecular Electronics
• Single-Molecule Aspects of Molecular Electronics
• Electron Transfer Mechanisms
• Quantum Dynamics
with substantial enhancement of our knowledge of the behavior of single molecules under transport conditions, as well as the dynamical properties of molecular systems.

Dr. Mark A. Ratner, Dumas University
Professor, Department of Chemistry,
Northwestern University, Evanston, IL

ACCEPTANCE ADDRESS
“From Rectifying to Energy: Some Reflections”

Abstract: The power of chemical science to transform our understandings of the world, and of the world itself, are remarkable. The talk will describe some of the excitement that I have been privileged to participate in, starting from some rudimentary ideas about how current moves through molecules, and fin-
(continued from page 1)

ishing (so far!) with a discussion of some of the ways that theory and experiment can come together to help us develop photovoltaic devices, devices that can lead to control of our energy future using molecules in an intelligent and interesting way.

The tour will feature some significant people, from Willard Gibbs on to 2012.

THE MEDALIST
Mark A. Ratner is a materials chemist, whose work focuses on the interplay between molecular structure and molecular properties. This includes such aspects as molecular electronics, molecularoptoelectronics, molecular systems design and biomolecular behavior, as well quantum and classical methodologies for understanding and predicting molecular structure and response. The major focus of his research for the last three decades has been the understanding of charge transfer and charge transport processes based on molecular structures, ranging from nonadiabatic intramolecular behavior to aspects of molecular devices, including photovoltaics, conductive polymers, molecular transport junctions and molecular switches.

His professional history involves undergraduate work at Harvard, graduate work at Northwestern, postdoctoral work at Aarhus University and Munich University, and faculty positions at New York University and Northwestern. He is now Dumas University Professor at NU and Co-Director of the Initiative for Sustainability and Energy at Northwestern (ISEN). He has very active international collaborations, particularly in Denmark, Israel and the Netherlands. He has been awarded the Feynman Prize, the Langmuir Award of the American Chemical Society, and is a member of the National Academy of Sciences, the American Academy of Arts and Sciences, the International Academy of Quantum Molecular Sciences, the Royal Danish Academy of Sciences, and is a member of the National Academy of Sciences and the American Chemical Society. He undertakes an annual canoe trip which puts all things back into perspective.

DIRECTIONS TO THE MEETING
From Chicago or the west:
Take I-90 to I-294 North, exit I-294 at Touhy West and go to Mannheim Road. Turn north onto Mannheim Road (Mannheim Road becomes Lee Street). Casa Royale is located 2 miles north of Touhy on Lee Street.

From Wisconsin or the north:
Take I-294 South, exit onto Golf Road West (Rte 58) and go to River Road (Rte 45). Turn south onto River Road and go to Thacker/Dempster. Turn west onto Thacker/Dempster and go to Lee St./Mannheim Rd. Note: Lee St. is one-way northbound only. Go north one block to Casa Royale.

From Northern Indiana or the south:
Take I-294 North, exit I-294 at Touhy West and go to Mannheim Road. Turn north onto Mannheim Road -- Mannheim Road becomes Lee Street. Casa Royale is located 2 miles north of Touhy on Lee Street.

Parking: Free

THE MENU: Cream of Asparagus soup, Signature Salad pre-dressed with Raspberry Vinaigrette dressing; an entree choice of either Prime New York Strip, Baked Salmon with Dill Sauce, or Eggplant Parmigiana; Duchesse Potatoes and Green Beans Almondine; Warmed Apple Cobbler à la mode with Caramel Sauce; Wine

NOTICE TO ILLINOIS TEACHERS

The Chicago Section ACS is an ISBE provider for professional development units for Illinois teachers. Teachers who register for this month’s meeting will have the opportunity to earn CPDU’s.

IN THIS ISSUE

1 Award Ceremony
2 College Life Fair
3 ChemShorts for Kids
3 The Un-Comfort Zone
3 DSA Winner
4 Gibbs Awardees
5 Gibbs Dinner Coupon
6 Bulletin Deadlines
7 Public Lectures at Argonne
8 Chemistry History
9 Ad Index
10 Volunteers Needed
11 Free Teaching Resource
12 Calendar

Big Vacuum in a Small Package!

VACUUBRAND® XS-Series Vacuum Pumps

These oil-sealed rotary vane pumps are extremely compact, with a footprint one-third that of common belt-drive pumps, and half the weight. Yet ultimate vacuum is comparable, and pumping speed is higher than these older designs. The XS-series vacuum pumps are quiet, have very low power consumption, and are treated internally to improve chemical resistance.

COLLEGE LIFE FAIR

The New York Times is launching its first College Life Fair in Chicago in May. The Fair will provide students and their families with an introduction to the college experience and will incorporate exhibits and presentations on admissions as well as on the broader college experience, academic expectations, athletics, student life, technology, health, wellness, career counseling, tutoring and residential life.

The event will be an interactive one where attendees will have access to colleges, universities and other exhibitors. The New York Times College Life Fair takes place on Thursday, May 31, 2012 from 9AM to 2:30PM and from 5PM to 8PM at Navy Pier in Chicago. The Illinois Association for College Admission Counseling is supporting this event. For more information and to register, go to: www.nytimes.com/collegefair.

The mission of the Chicago Section of the ACS is to encourage the advancement of chemical sciences and their practitioners.
The Elementary Education Committee of the Chicago Section ACS presents this column. They hope that it will reach young children and help increase their interest in science. Please print it out and pass it on to your children, grandchildren, or elementary school teachers. Teachers are encouraged to incorporate the projects in this column into their lesson plans.

Wax Volcano in a Cup

Kids, a baking soda and vinegar volcano is fun but there are better models to show how a volcano actually works. In this activity, wax “lava” forms a volcano in sand, eventually erupting into the atmosphere, which is water in this model. A real volcano forms and erupts because molten rock (magma) and hot gases push up from the Earth's mantle into the crust. This material pushes up through the weakest spot in the crust to be released as an eruption. In this model, wax in the bottom of the cup is heated and becomes molten.

You’ll need a candle as a source of wax (use red or orange wax for realistic lava), sand, water, and a heat-safe clear glass cup or glass.

Make the Volcano

1. Have an adult partner light the candle and drip wax into the bottom of the cup.
2. Cover the wax with a layer of sand. The thickness of the wax and sand layers will affect the way your volcano erupts. If you have a thin sand layer, the wax will readily rise up through it. If you have a thick sand layer, the wax will have a harder time erupting through the sand. Thicker layers will produce a more cone-shaped volcano, but you may need to apply more heat or the “magma” may be unable to erupt.
3. Add water to nearly the top of the cup and let the sand settle.
4. Have an adult partner carefully and gently heat the bottom of the cup. A safe (though slow) method is to set the cup in a shallow pan of water. Heat the pan over low heat on a burner on a stove or hot plate. Don’t apply too much heat or raise the temperature too quickly or else the cup may shatter! The water will offer protection for the glass. Heat the cup until your volcano erupts.
5. This project can be repeated. After your volcano erupts, turn off the heat and let the cup cool. Remove the sand and wax from the cup. You can re-attach the wax to the bottom of the cup by melting a few drops of wax into the cup. Stick the other pieces to the melted spot. Add sand and water and try again.
6. The wax pushes its way through the gaps between the said grains, much like magma pushes up through rocks. You’ll get clouds of wax “ash” in your watery atmosphere. You can experiment with the amount of wax, quantity and type of sand and intensity of heat to form different types of volcanoes.

Reference:
Anne Marie Helmenstine at About.com: Chemistry
http://chemistry.about.com/od/chemicalvolcanoes/a/Wax-Volcano-In-A-Cup.htm

Watch a video of the wax volcano project at http://www.youtube.com/watch?v=RZhMmw0trl0

Submitted by DR. KATHLEEN CARRADO GREGAR

To view all past “ChemShorts for Kids,” go to:
http://www.chicagoacs.net/ChmShort/kidindex.html

2012 DISTINGUISHED SERVICE AWARD

Sanford (Sandy) A. Angelos, who passed away December 9, 2011 is the 2012 awardee of the Chicago Section’s DSA and will be honored posthumously at the June 21 Section meeting.

Toxicology Consulting

Medical Devices
Pharmaceuticals
Biologicals
Risk Assessments

Product Development
FDA Registration
Quality Assurance
Regulatory Compliance

Northup RTS
Sharon J. Northup, PhD,DABT
783 Ridge Road
Highland Park, IL 60035
Ph: 847-579-0049 Fax: 847-579-0052
Rtsnorthup@aol.com
www.toxconsultants.com

THE UN-COMFORT ZONE
with Robert Wilson

Life Lessons From My Cat

Roxy came up to my chair and meowed for attention. I picked her up, held her and started rubbing her soft fur. I knew from past experience that she didn't like that, and she immediately began to squirm and try to jump out of my arms. Nevertheless - in the spirit of Albert Einstein's observation that insanity is doing the same thing over and over again and expecting different results - I hoped that she would start liking it...

To read the entire article, go to http://www.jumpstartyourmeeting.com/articles/TUZ/34-theplatinumrule.shtml

Robert Evans Wilson, Jr. is a motivational speaker and humorist. He works with companies that want to be more competitive and with people who want to think like innovators. For more information on Robert's programs please visit www.jumpstartyourmeeting.com.
THE WILLARD GIBBS AWARD
Founded by William A. Converse

The award was founded in 1910 by William Converse (1862-1940), a former chairman and secretary of the Chicago Section. The medal was named for Professor Josiah Willard Gibbs (1839-1903) of Yale University. Gibbs, whose formulation of the Phase Rule founded a new science, is considered by many to be the only American born scientist whose discoveries are as fundamental in nature as those of Newton and Galileo.

Mr. Converse supported the award personally for a number of years, and then established a fund for it in 1934 that has subsequently been supported by the Dearborn Division of W. R. Grace & Co. Considerable contributions to the award have also been made by J. Fred Wilkes and his wife.

Since the sale of the Dearborn/Grace Division to Betz, the BetzDearborn Foundation, located in Horsham, Pennsylvania has most generously offered to continue the historic relationship between the Chicago section and Dearborn. This foundation has contributed annually since the purchase to the Willard Gibbs Medal Fund to help defray the cost of the medal and of the banquet itself --helping to make the banquet award the outstanding and gracious event that it is. We are most appreciative of their support.

The purpose of the award is “To publicly recognize eminent chemists who, through years of application and devotion, have brought to the world developments that enable everyone to live more comfortably and to understand this world better.” Medalists are selected by a national jury of eminent chemists from different disciplines. The nominee must be a chemist who, because of the preeminence of his or her work in and contribution to pure or applied chemistry, is deemed worthy of special recognition.

The award consists of an eighteen-carat gold medal having, on one side, the bust of J. Willard Gibbs, for whom the medal was named. On the reverse is a laurel wreath and an inscription containing the recipient's name.

Given annually for 100 years, the recipients span nearly a century of chemistry. Most of the names are familiar to chemists regardless of specialty. This fame may result from later recognition, including, in many cases, the Nobel Prize. Another reason for the familiarity of these names may be that textbooks have permanently associated many of these names with classic reactions or theories. In any case, the fame achieved by the Gibbs medalists has crossed the boundaries between chemistry specialties.

---

Svente Arrhenius 1911
Theodore W. Richards 1912
Leo H. Baekeland 1913
Ira Remsen 1914
Arthur A. Noyes 1915
Willis R. Whitney 1916
Edward W. Morley 1917
William M. Burton 1918
William A. Noyes 1919
F. G. Cotrell 1920
Mme. Marie Curie 1921
Julius Stieglitz 1922
Gilbert N. Lewis 1923
Moses Gomberg 1924
Sir James Colquhoun Irvine 1925
John Jacob Abel 1926
William Draper Harkins 1927
Claude Silburt Hudson 1928
Irving Langmuir 1929
Phoebus A. Levene 1930
Harold Clayton Urey 1931
Edward Curtis Franklin 1932
Richard Willstatter 1933
Charles August Kraus 1934
Roger Adams 1935
William Newby McCoy 1936
Robert R. Williams 1937
Donald Dexter Van Slyke 1938
Vladimir Ipatieff 1939
Edward A. Doisy 1940
Charles Midgley, Jr. 1941
Conrad A. Elvehjem 1942
George O. Curme, Jr. 1943
Frank C. Whitmore 1944
Linus Pauling 1945
Wendell M. Stanley 1946
Carl F. Cori 1947
Peter J. W. Debye 1948
Carl S. Marvel 1949
William Francis Giauque 1950
William C. Rose 1951
Joel H. Hildebrand 1952
Elmer K. Bolton 1954
Farrington Daniels 1955
Vincent du Vigneaud 1956
W. Albert Noyes, Jr. 1957
Willard F. Libby 1958
Hermann I. Schlesinger 1959
George B. Kistiakowsky 1960
Louis Plack Hammett 1961
Lars Onsager 1962
Paul D. Bartlett 1963
Izaak M. Kolthoff 1964
Robert S. Mulliken 1965
Glenn T. Seaborg 1966
Robert Burns Woodward 1967
Henry Eyring 1968
Gerhard Herzberg 1969
Frank H. Westheimer 1970
Paul John Flory 1971
Har Gobind Khorana 1972
Herman F. Mark 1973
Kenneth S. Pitzer 1974
Melvin Calvin 1975
W. O. Baker 1976
E. Bright Wilson 1977
Robert B. Woodward 1978
Elias J. Corey 1979
John T. Edsall 1980
Gerard K. F. Heggie 1981
John D. Roberts 1982
Allen L. Bradley 1983
Donald J. Cram 1984
Philippa Smith 1985
Elias J. Corey 1986
E. C. Taylor 1987
Rudolph A. Marcus 1988
Anthony D. Amundson 1989
Richard N. Zare 1990
Robert J. Colvin 1991
Harold A. Scheraga 1992
Jack Halpern 1993
Noriaki Masamune 1994
Paul D. Bartlett 1995
Fred Basolo 1996
Carl Djerassi 1997
Mario J. Molina 1998
Lawrence F. Dahl 1999
Nicholas J. Turro 2000
Tobin J. Marks 2001
Ralph Hirschmann 2002
John I. Brauman 2003
Ronald Breslow 2004
David A. Evans 2005
Jacqueline Barton 2006
Sylvia T. Ceyer 2007
Carolyn Bertozzi 2008
Louis Brus 2009
Maurice Brookhart 2010
Robert G. Bergman 2011

---

DEADLINES FOR CHEMICAL BULLETIN

Please submit all Chemical Bulletin copy to the editor before the deadlines listed below for each issue. Articles can be emailed to the editor, Cherlyn Bradley, cbrad1027@aol.com.

Since we like the Bulletin to be as timely as possible, we need the lead time indicated. You can help by early planning and submission of your information or articles.

**2012 Issue**

<table>
<thead>
<tr>
<th>Month</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>July 20</td>
</tr>
<tr>
<td>October</td>
<td>August 31</td>
</tr>
<tr>
<td>November</td>
<td>September 28</td>
</tr>
<tr>
<td>December</td>
<td>October 26</td>
</tr>
</tbody>
</table>

---
You and your guest(s) are cordially invited to attend the presentation of the 101st Josiah Willard Gibbs medal to Professor Mark Ratner, Dumas University Professor at Northwestern University, Evanston, Illinois, on Friday, May 18, at Casa Royale, 783 Lee Street, Des Plaines, IL 60016. A social hour begins at 6 PM. Dinner is served at 7 PM. Dr. Ratner’s talk will begin at approximately 8:30 pm.

After a social hour with Hors-d’œuvres and two Complimentary Drinks, dinner on this special occasion includes Cream of Asparagus Soup, Signature Salad Pre-Dressed with Raspberry Vinaigrette Dressing; a choice of Prime New York Strip or Baked Salmon with Dill Sauce or Eggplant Parmigiana; Duchesse Potatoes and Green Beans Almandine; and Warmed Apple Cobbler à la mode with Caramel Sauce, as well as Wine.

To reserve your tickets, please call the Chicago Section office at 847-391-9091 or register at http://ChicagoACS.org by Monday, May 14 and pay $40 at the door, or fill out the attached reservation form and mail it with your payment of $40 by Wednesday, May 9 to the address below. If you are not a member of the Chicago Local Section, you are not eligible for half price tickets for students, unemployed, or retired Chicago Section members. Tickets and nametags will be available at the door. No refunds will be made after noon on Monday, May 14, 2012.

The Gibbs Award Dinner is always a memorable occasion. Only the Nobel Prize is considered more prestigious. Please come to salute the recipient and rejoice in Dr. Ratner’s achievements in and contribution to the science of chemistry.

Margaret Stowell Levenberg
Gibbs Arrangements Committee

2011 GIBBS DINNER RESERVATION FORM

Name ___________________________________________ Affiliation____________________________________

Address ______________________________________________________________________________________ Phone(____)___________

Email Address _____________________________________________________________________________________

# tickets for ACS members & guests ($40.00/ticket) __________

#tickets for students, unemployed members, and retirees who are Chicago Section members ($20.00/ticket)__________

Note: Professors must make student reservations.

# dinners:

Prime New York Strip ___________

Baked Salmon with Dill Sauce ___________

Eggplant Parmigiana ___________

Total Enclosed $_______________ Payable at time of reservation if reservation is made by mail. Please include a list of your guests’ names, affiliations and dinner selections with this form.

Return with payment to: American Chemical Society, Gibbs Reservations
1400 Renaissance Drive, Suite 312, Park Ridge, IL 60068
PUBLIC LECTURES AT ARGONNE NATIONAL LABORATORY

Leading scientists and engineering experts will speak at the U.S. Department of Energy’s Argonne National Laboratory as part of a new public lecture series called “Argonne OutLoud.” The series highlight the cutting-edge research taking place at Argonne and topics of interest to the community at large. Lectures are free and open to the public but will require advance registration. There will be a lecture on June 14 featuring solar energy.

For further information and to register for this event, please visit www.anl.gov/community/outloud or contact Eleanor Taylor (etaylor@anl.gov).

---

Argonne National Laboratory seeks solutions to pressing national problems in science and technology. The nation's first national laboratory, Argonne conducts leading-edge basic and applied scientific research in virtually every scientific discipline. Argonne researchers work closely with researchers from hundreds of companies, universities, and federal, state and municipal agencies to help them solve their specific problems, advance America's scientific leadership and prepare the nation for a better future. With employees from more than 60 nations, Argonne is managed by UChicago Argonne, LLC for the U.S. Department of Energy’s Office of Science.
MAY HISTORICAL EVENTS IN CHEMISTRY

May 6, 1871  F. Victor Grignard, who shared the Nobel Prize in Chemistry for the discovery of the so-called Grignard reagent, which has greatly advanced the progress of organic chemistry, was born. He developed the magnesium reagent used in organic chemistry. The prize was shared with Paul Sabatier who received it for his method of hydrogenating organic compounds in the presence of finely disintegrated metals whereby the progress of organic chemistry has been greatly advanced in recent years.

May 7, 1939  Sidney Altman, who proved that ribonucleic acid (RNA) can act as a catalyst in a living cell, was born. He shared the Nobel Prize with Thomas R. Cech in 1989 for their discovery of catalytic properties of RNA.

May 8, 1873  Nevil V. Sidgwick, a researcher on molecular structure and theory of valency, was born. He did research in bonding in coordination compounds and investigated phase equilibria and the solubility of organic acids and bases.

May 11, 1904  Donald F. Othmer, a chemical engineer who developed the Othmer still, was born. He was co-founder and editor of the Kirk-Othmer Encyclopedia Encyclopedia of Chemical Technology.

May 16, 1950  J. Georg Bednorz, who shared the Nobel Prize in Physics with K. Alexander Müller for their important breakthrough in the discovery of superconductivity in ceramic materials, was born.

May 19, 1914  Max F. Perutz, who shared the Nobel Prize in Chemistry in 1962 with John C. Kendrew for studies of the structure of globular proteins, was born. He studied the structure of hemoproteins using x-ray diffraction.

May 22, 1912  Herbert C. Brown, a researcher in organoboron and carbocation chemistry, was born. He shared the Nobel Prize in Chemistry in 1979 with Georg Wittig for their development of the use of boron and phosphorus-containing compounds, respectively, as important reagents in organic synthesis.

May 24, 1640  John Mayow, who discovered that air contained two gases -- one of which supported life and combustion, spiritus nitro-aerous (oxygen), was born. He recognized the role of oxygen in the combustion of metals and explained the correct anatomical description of respiration.

May 28, 1887  Kasmir Fajans, who established the radioactive displacement law and initiated the concept of the heat of hydration of gaseous ions, was born.

May 29, 1794  Antoine A. B. Bussy, who isolated magnesium in 1828, was born.

May 30, 1912  Julius Axelrod, a researcher on catecholamines, was born. He shared the Nobel Prize in Medicine or Physiology in 1970 with B. Katz and U. Von Euler for discoveries concerning humoral transmitters in the nerve terminals and the mechanism for their storage, release and inactivation.

LEOPOLD MAY
Professor Emeritus of Chemistry
The Catholic University of America
Washington, DC

Additional historical events can be found at Dr. May's website, http://faculty.cua.edu/may/Chemistrycalendar.htm

Support Our Advertisers
Help The Chemical Bulletin stay healthy

ADVERTISING INDEX

<table>
<thead>
<tr>
<th>Company</th>
<th>Page</th>
<th>Telephone</th>
<th>URL/E-Mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacuubrand, Inc.</td>
<td>2</td>
<td>888-882-6730</td>
<td><a href="http://www.vacuubrand.com">www.vacuubrand.com</a></td>
</tr>
<tr>
<td>Northup RTS</td>
<td>3</td>
<td>847-579-0049</td>
<td><a href="http://www.toxconsultants.com">www.toxconsultants.com</a></td>
</tr>
<tr>
<td>Mass-Vac, Inc.</td>
<td>5</td>
<td>978-667-2393</td>
<td><a href="http://www.massvac.com">www.massvac.com</a></td>
</tr>
<tr>
<td>Micron Inc.</td>
<td>8</td>
<td>302-998-1184</td>
<td><a href="http://www.micronanalytical.com">www.micronanalytical.com</a></td>
</tr>
<tr>
<td>HNC Products Co.</td>
<td>8</td>
<td>217-935-6845</td>
<td></td>
</tr>
</tbody>
</table>

The Chicago Section’s e-mail address is chicagoacs@ameritech.net
May 18: Chicago Section ACS Gibbs Award Banquet and Lecture. **See details in this issue.**


May 31: The first New York Times College Life Fair in Chicago providing students and their families with an introduction to the college experience from 9AM to 2:30PM and from 5PM to 8PM at Navy Pier. For more information and to register, go to: [www.nytimes.com/collegefair](http://www.nytimes.com/collegefair).

June 5-9: Central ACS Regional Meeting (CERMACS), Dearborn, MI. For information, go to [www.acs.org/meetings/regional](http://www.acs.org/meetings/regional).

June 14: Public lecture at the Argonne National Laboratory on solar energy. For more information about the series and to register for this event, please visit [www.anl.gov/community/outloud](http://www.anl.gov/community/outloud) or contact Eleanor Taylor (etaylor@anl.gov).


June 21: Chicago Section ACS Distinguished Service Award and 50 & 60-year members honored.

August 10-19: ACS Illinois Sections' cooperative tent project at the Illinois State Fair in Springfield, IL. Our cooperative tent activities provide information to the public on chemistry with demos, hands-on activities, computer quizzes, posters, literature, and give-aways. They give us a chance to show the positive aspects of chemistry to many Illinois citizens and governmental leaders. **Last year, over 11,200 people visited our tent.**

**We particularly need volunteers to help during the fair. Student members and other student volunteers are welcomed!** If you are interested in helping us for a few hours in this fun and worthwhile outreach activity (you receive free admission to the Fair and free parking if you sign up to volunteer in time) -- call the Section office at (847) 391-9091 and go to our website at [http://chicagoacs.net/statefair/index.html](http://chicagoacs.net/statefair/index.html) for information and to sign-in using our online volunteer scheduler.

**FREE MIDDLE SCHOOL SCIENCE TEACHING RESOURCE FROM ACS**

The Education Division of the American Chemical Society has developed a new middle school chemistry resource called *Middle School Chemistry: Big Ideas about the Very Small.* This six chapter resource is available for free at [http://middleschoolchemistry.com](http://middleschoolchemistry.com) and can serve as either a stand-alone chemistry unit or as a supplement to any middle school science curriculum. *Middle School Chemistry* uses a hands-on inquiry approach, along with specially designed molecular model animations, to take students from concrete experiences to an understanding of the abstract world of atoms and molecules. Please share this free resource developed by your professional organization with the middle school teachers you know.

---

**HNC Products Company**

283 Cromwell Drive

Clinton, IL 61737

217/935-6845

Contract research and custom manufacturing of topical dermatology products: Rx, OTC and treatment cosmetics