

# Chesapeake Chemist

*Maryland Section  
American Chemical  
Society*



**Dr. Linda M. Sweeting**  
**2003 Maryland Chemist**

## Section National Chemistry Week activities

### Local School and Library Visits

Sandra Young

Here is a summary of the section's activities for children in area schools and libraries for National Chemistry Week 2003:

Saturday	18 Oct	Elkridge Library (Howard County)	22 kids
Tuesday	21 Oct	North East Middle School (Cecil County)	150 kids
Wednesday	22 Oct	Moravia Park Middle School (Baltimore City)	114 kids
		Colgate Primary School (Baltimore City)	63 kids
Thursday	23 Oct	Hall's Cross Elementary School (Harford County)	100 kids
Saturday	25 Oct	Hamilton Library (Baltimore City)	10 kids

Total number of kids participating in our activities was 459.

### ChemMagic Show:

Shirish Shah

This year's Chemistry Magic Show at the October dinner meeting, which was held at Villa Julie College, was attended by 45 students, faculty members, and members of the Maryland Section. Fifty-five people, including administrators, faculty and the students of Villa Julie College as well as guests from the elementary schools and, of course, section members, attended the dinner and talk, featuring the current president of the American Chemical Society, Elsa Reichmanis.

Two other Chemistry Magic Shows were held on Saturday, October 25, as part of the family weekend at Towson University. About 100 people, mostly parents and several freshmen, attended. The age range of the audience was 3 years old to 80 years old.

In addition to the ChemMagic Show, some area college students participated in the environmental theme of National Chemistry Week by watching a movie, creating posters, or visiting the websites related to the environmental issues.

### Member Alert: ACS Amendment to Board Regulation IX

At the ACS National Meeting in New York, Board Regulation IX was amended. The purpose of the amendment is to help ensure that members and users of ACS programs, products, and services be made aware that ACS is the provider. The Committee on Professional & Member Relations recommended to the board and the board passed a resolution amending its regulations as follows:

d. "All publications, products, services, and programs of the society and their marketing and promotional communications shall clearly be identified as being provided by the American Chemical Society, unless the executive director determines that there is compelling reason for an exemption from these requirements."

If you have any questions regarding this amendment, please contact the ACS Membership Division at (202) 872-6379 or contact [pmr@acs.org](mailto:pmr@acs.org) or [c\\_avery@acs.org](mailto:c_avery@acs.org).

**Chesapeake Chemist**

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## December 2003 Meeting

Wednesday, December 10, 2003, Berkshire Hotel, Towson, MD

### Schedule

6:30-7:00pm	Social hour and registration
7:00-7:50pm	Dinner
8:00-8:10pm	Maryland Chemist Award presentation
8:10-8:30pm	Dr. Joseph Topping and Dr. Lev Ryzhkov, Towson University Department of Chemistry, will pay tribute to Dr. Linda Sweeting, her research and innovative approach to teaching
8:30-8:50pm	Section members and guests are encouraged to share their memories briefly of Dr. Linda Sweeting

Cost for the dinner is \$25.00 for members; \$20.00 for spouses, retired chemists and guests; and \$15.00 for students. For reservations, contact Dr. Shirish Shah at 410-323-0803(H) or via e-mail at dr.shah@juno.com.

### Dr. Linda M. Sweeting

Dr. Sweeting was born in Canada on December 11, 1941. Upon completion of her B.S. (1964) and M.A. (1965) from University of Toronto, she went to University of California, Los Angeles, for further studies. She completed her Ph.D. in organic chemistry in 1969 under the direction of Professor Frank Anet. She spent a year as an assistant professor at Occidental College, Los Angeles, before coming to Towson. Dr. Sweeting came to Towson University as assistant professor in 1970. She was professor of chemistry since 1985.

In her 30-plus years at Towson, Dr. Sweeting had achieved a record of distinction in research, teaching, and service. Her research interests in the chemistry of organic materials and spectroscopy led her to examine the phenomenon of triboluminescence, the emission of light when a crystal is crushed. Her pioneering work attracted international notice, not only in the scientific community, but also in the popular media: the glow from breakage of a winter-green candy is an example of triboluminescence. Dr. Sweeting was chosen for a sabbatical appointment at the National Science Foundation and subsequently furthered her research in the laboratory of Professor George Whitesides, Harvard University. In addition to her work in physical organic chemistry she has written and spoken widely in the field of professional ethics for scientists. Her CHEM 301 course on that topic is a popular choice for the Advanced Composition GenEd requirement. She also developed the Chemistry for Nonscientists course and made significant innovations in the teaching of Organic Chemistry. Dr. Sweeting mentored dozens of research students at Towson. She performed many important service functions for the Department, College, and University. She was active in professional associations such as the American Chemical Society and Association for Women in Science.

**Maryland Chemist Award Citation:** The Maryland Chemist Award 2003 is presented to Dr. Linda Sweeting in acknowledgement of her pioneering research in the field of triboluminescence, and in recognition of her energetic, exemplary and ardent advocacy of professional ethics for scientists, for her active, caring and genuine interest in her students and for her eagerness in enabling and enhancing the status of women in science and furthermore in appreciation of her innovative research and enthusiastic teaching and untiring involvement in the activities of the Section.

## Maryland Chemist Award

The Maryland Chemist Award was established in 1962 to recognize and to honor, each year, a member of the Maryland Section for outstanding achievement in the fields of chemistry. The achievement, as originally stated, may be in pure or applied chemistry, chemical engineering, or chemical education. Some recipients have distinguished themselves in management.

The section's Bylaw VIII establishes the rules of selection of recipients of the Maryland Chemist Award. Recommendations of the Awards Committee must be approved by the section officers. The applicable section of Bylaw VIII is quoted below:

*"Recipients of the Maryland Chemist Award must have been members of the section for a minimum of five years and have made outstanding contributions to chemistry as defined in the Constitution of the Society (chemistry is defined in broad terms). The work on which the award is based should have been performed in Maryland."*

### Previous Recipients of the Award

1962 E. Emmet Reid	1976 Richard L. Hall	1990 Alex Nickon
1963 W. Mansfield Clark	1977 Henry C. Freimuth	1991 Cecil H. Robinson
1964 Alsoph H. Corwin	1978 Gunther L. Eichhorn	1992 Craig A. Townsend
1965 John C. Krantz, Jr.	1979 Emil H. White	1993 Ernest F. Silversmith
1966 Belle O. Talbot	1980 M. Gali Sanchez	1994 Yale H. Caplan
1967 Walter S. Koski	1981 Paul O. P. Ts'o	1995 Richard H. Smith, Jr.
1968 George L. Braude	1982 Joseph L. Katz	1996 Shekar Munavalli
1969 Leslie Hellerman	1983 Shih-Yi Wang	1997 WuCheng Cheng
1970 Paul H. Emmett	1984 Nicolas Zenker	1998 Joel F. Liebman
1971 Giles B. Cooke	1985 John Lambooy	1999 Marc D. Donohue
1972 Arnold M. Seligman	1986 David F. Roswell	2000 Haleem J. Issaq
1973 Lester P. Kuhn	1987 Gary H. Posner	2001 Raymond A. Mackay
1974 Joyce J. Kaufman	1988 Edward J. Poziomek	2002 R. S. Hosmane
1975 Benjamin Witten	1989 Catherine C. Fenselau	

### Nominations for the 2004 Maryland Chemist Award

The Maryland Chemist Award Committee is requesting nominations and recommendations for the 2003 Maryland Chemist Award. Supportive documentation should include copies of the resume of the nominee and his/her list of publications. A short statement describing the outstanding contributions of the nominee to scientific research, education, industry, technology, etc., will be helpful and appreciated. Please send nominations to S. Munavalli, 700 Paige Circle, Bel Air, MD 21014.

The deadline for submission of nominations is **April 15, 2004**.

**Directions to the Berkshire:** Take exit 25, Charles Street, from 695. Follow Charles Street about 2 miles to Towsontown Blvd. Turn left. Follow Towsontown Blvd to West Burke Ave. Bear right onto West Burke Ave. The Berkshire is on the left side as you enter West Burke Ave. Meeting attendees should proceed to the left lane. Turn left into the Berkshire's parking entrance. Turn the corner and make an immediate right into the P2 parking garage. Please press the intercom button for admittance to the elevators. Proceed to the front desk to get a parking pass required for your car. Look for signs posted in the lobby and elevators to locate the dining room.

## ACS Scholars Program

The American Chemical Society Scholars Program is now accepting applications for the 2004-2005 academic year. This program, targeted at minority groups considered to be under-represented in the sciences, is for students majoring in and planning careers in the chemical sciences. Graduating high school seniors, college freshmen, sophomores and juniors are eligible to apply as well as students in two-year chemical technology programs. For more information, contact the American Chemical Society Scholars Program. Call toll-free 1-800-227-5558, extension 6250 or e-mail to [scholars@acs.org](mailto:scholars@acs.org), or on our web site <http://chemistry.org/scholars>. The deadline is February 15, 2004.

## New SCIFINDER® Edition positions CAS as leading synthetic chemistry resource

In its SciFinder 2004 Edition, Chemical Abstracts Service (CAS) has unveiled unique and powerful new capabilities for chemical reaction exploration and analysis. These enhancements are integrated with CAS' weekly updated reaction database now containing seven million reactions, making SciFinder the essential synthesis research tool for the chemical and pharmaceutical industries.

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"With SciFinder, scientists benefit from state-of-the-art exploration and analysis software capabilities, coupled with the intellectual contributions of CAS scientists who build our reaction databases," said CAS Vice President, Marketing & Sales, Suzan A. Brown. "SciFinder's new edition does more than ever to advance synthetic chemists' productivity, efficiency and creativity."

In addition to the new reaction features, SciFinder's new version provides structure searches of the entire CAS substance collection or allows focus by substance classes, such as coordination compounds, mixtures, polymers, etc. More information about SciFinder can be found on the CAS Web site at <http://www.cas.org/SCIFINDER/>.

## Recognizing scientists behind R&D

The American Chemical Society invites industrial chemical companies to nominate scientists for the Regional Industrial Innovation Award. Why should you nominate?

To recognize industrial researchers for their creative and valuable contributions

To promote the importance of the chemical profession and the support of corporate leadership in advancing science

To enhance the company's public image by promoting awareness about good science and successful commercialization

To showcase the advances of industrial companies within your region

For information on how to place a nomination, visit [www.chemistry.org/industry/regionalawards](http://www.chemistry.org/industry/regionalawards) or contact 1-800-227-5558, ext. 4373. Nominations are due by January 15, 2004.

## December Historical Events in Chemistry

by Leopold May, The Catholic University of America, Washington, D.C.

- December 1, 1743 Birthdate of Martin H. Klaproth, who discovered cerium with J. J. Jacob Berzelius and William Hisinger. He also discovered zirconium in 1789, uranium from pitchblende in 1789, and chromium, which had been discovered previously by N. L. Vauquelin, in 1797.
- December 3, 1933 Birthdate of Paul Crutzen, who is a researcher in chemistry of the atmosphere. He shared the Nobel Prize in 1995 with Mario Molina and F. Sherwood Rowland for their work in atmospheric chemistry, particularly concerning the formation and decomposition of ozone.
- December 5, 1896 Carl F. Cori, a researcher in carbohydrate metabolism, was born on this date. He shared the Nobel Prize in 1947 with his wife Gerty T. Cori and Bernardo Houssay, for their research on the hormone of the anterior lobe and its role in the metabolism of sugar; discovered how glycogen is catalytically converted.
- December 7, 1909 Patent was granted for the first thermosetting man-made plastic from a reaction of phenol with formaldehyde on this day.
- December 9, 1868 Fritz Haber, who was born on this date, synthesized ammonia from hydrogen & nitrogen under high pressures (Haber Process). In 1918 he received the Nobel Prize for the synthesis of ammonia from its elements.
- December 11, 1947 Vitamin B<sub>12</sub> was isolated by Merck, Sharp & Dohme Research Laboratories on this date.
- December 13, 1939 Perkin-Elmer Corp. was incorporated on this day.
- December 15, 1852 Birthdate of Antoine H. Becquerel, who shared the Nobel Prize with the Curies in recognition of the extraordinary services he had rendered by his discovery of spontaneous radioactivity. He also discovered radiation (Becquerel Rays) from uranium salts.
- December 22, 1903 Haldan K. Hartline was born on this date. He performed single-fiber analysis of the optic responses of the vertebrate retina and was a researcher in night vision in humans. He shared the Nobel Prize in Physiology or Medicine in 1976 with G. Wald and R. Granit, for their discoveries concerning the primary physiological and chemical visual processes in the eye.
- December 23, 1912 Birthdate of Anna J. Harrison, who 25 years ago was elected the first woman president of the ACS. She also served as president of the American Association for the Advancement of Science, 1983-1984.
- December 28, 1838 Birthdate of Vladimir V. Markovnikov, who synthesized cyclobutane and cycloheptane derivatives. He also developed the Markovnikov's Rule for additions to alkenes.

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