



THE

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MARYLAND SECTION
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For

Outstanding Achievement in Chemistry



28TH MARM

May 25-27

Baltimore 1994



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VOL. L

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Many Attractions Rich Memories
Baltimore Attractions *Suburban Setting*

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Art Museums
Historic Fort McHenry
Chesapeake Bay Seafood

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MARYLAND HOSPITALITY

FEBRUARY MEETING

Our February meeting was cancelled because of the bad weather. February's scheduled speaker, Dr. Richard L. Doty of the University of Pennsylvania's Smell and Taste Center, will probably be invited to speak at one of our fall meetings, perhaps in October.

ACS STRENGTHENS EFFORTS FOR MINORITIES IN CHEMISTRY

Although ACS has been active in its programming directed toward minorities in chemistry, efforts are being strengthened significantly to meet the changing needs of our Society and country.

The ACS Blue Ribbon Advisory Panel on Minority Affairs advises the Society on its efforts to improve access to chemistry for minorities. The primary tasks of the panel are to review current programs, to evaluate progress from an external perspective, and to help form linkages with other organizations concerned with minority participation in the sciences. Chaired by ACS Executive Director John Crum, the Advisory Panel consists of Carlos Gutierrez (California State University - Los Angeles), Shirley Malcom (American Association for the Advancement of Science), Norbert Hill (American Indian Science and Engineering Society), Antonio Navarro (former director of Radio and TV Marti), and Allen Heininger (former president of ACS).

Another aspect of this strengthened effort consists of the recently formed Joint Board-Council Committee on Minority Affairs. This committee, chaired by Carlos Gutierrez (Professor of Chemistry, California State University - Los Angeles), has met twice and is vigorously pursuing ideas for new and improved programming for minority chemists.

The third group focusing on this issue is the Internal Coordinating Committee for Minority Affairs. Chaired by John Crum, the Internal Coordinating Committee consists of several senior staff members and is responsible for implementing the recommendations of the Advisory Panel and the Joint Board-Council Committee.

ACS Office of the Executive Director

CHANGE OF ADDRESS

It is not necessary to notify *The Chesapeake Chemist* of address changes. We get our mailing labels from the ACS each month, so if you inform the ACS of your address change, we will automatically receive the correct label.

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The Chesapeake Chemist is published monthly September through May by the Maryland Section of the American Chemical Society. Address editorial comments to the Editor. Send advertising copy and inquiries to the Business Manager. The Maryland Section is not responsible for opinions expressed herein. Editorials express the opinions only of their authors. The Editor is responsible for all unsigned material.

NED D. HEINDEL

Ned D. Heindel, 1994 President of the American Chemical Society, is the H.S. Bunn Chair Professor of Chemistry at Lehigh University. Ned obtained his B.S. at Lebanon Valley College, his Ph.D. from the University of Delaware, and his post doctoral education at Princeton University. He has served on the faculties of the University of Delaware, Ohio University, and Marshall University before joining Lehigh University in 1966. He is also Visiting Professor of Nuclear Medicine at Hahnemann University in Philadelphia.

Ned is a member of ACS, American Association of Pharmaceutical Scientists, American Pharmaceutical Association, The Royal Society, and Sigma Xi. Besides service on the ACS Board of Directors, Ned serves on two editorial boards, two corporate boards and two non-profit boards. He and his students conduct research on new targeted chemotherapeutic agents and on diagnostic immunoassay development.

ACS AT THE SMITHSONIAN: A SCIENCE EXHIBIT OF PAST AND FUTURE

From the first synthesis of dyes to the discovery of the hybridoma cell, from persistent pesticides to biodegradable plastics, from the Congressional passage of the Pure Food and Drug Act to the demise of the superconducting supercollider... the visitor to this new ACS-sponsored exhibit at the Smithsonian will relive a century of American Science. This new exhibit which will open in April 1994 has been underwritten by a grant of \$5.3M from the ACS. Named "Science in American Life", the exhibit will blend historical artifacts with chemical demonstrations, a hands-on laboratory, and interactive teaching devices. By slides and visuals this lecture will tell the story of the exhibit and its accompanying laboratory.

RECYCLING INFORMATION PAMPHLET AVAILABLE

Recycling has been added to the titles available in the American Chemical Society's series of information pamphlets. Recycling was developed by the ACS Department of Government Relations and Science Policy under the auspices of the Society's Committee on Environmental Improvement. The pamphlet concentrates on the science and technology behind the recycling of the major constituents of the municipal solid waste stream; paper, plastic, glass, aluminum, steel, and yard waste. The key recycling steps--sorting, processing, and the development of new products--are reviewed for each material. The document also highlights the importance of recycling markets, marketing, and market development. ACS Information Pamphlets are written for the educated non-scientist.

Other titles available in the ACS Information Pamphlet series include the following:

- Acid Rain (April 1991)
- Biotechnology (December 1985);
- Chemical Risk: A Primer (December 1984);
- Chemical Risk: Personal Decisions (November 1989);
- Global Climate Change (July 1990);
- Ground Water (August 1989);
- Hazardous Waste Management (September 1992), and;
- Pesticides (November 1987)

Copies of these pamphlets can be obtained by phoning 202/872-8725, or by writing the ACS Department of Government Relations and Science Policy, 1155 16th Street, NW, Washington, DC 20036.

FUTURE MEETING

Next month's meeting, the Remsen Award meeting, is scheduled for May 18 at The Johns Hopkins University.

APRIL MEETING



NED D. HEINDEL

SCHEDULE:

- 6:00 Social Hour
Decker Auditorium
Lewis Hall
- 7:00 Dinner - Dining Porch
Engler Dining Hall
- DOOR PRIZES ! ! !
- 8:00 Student Awards Ceremony
Decker Auditorium
Lewis Hall
- 8:30 Lecture
Ned D. Heindel
ACS President
"ACS at the Smithsonian:
A Science Exhibit of Past
and Future"

Dinner reservations should be made by mailing checks, payable to Maryland Section of ACS to

Dr. Stephen M. Gregory
College of Notre Dame
4701 North Charles Street
Baltimore, MD 21210

DATE:

Wednesday, April 20, 1994

by April 13. Late reservations may be made by calling

PLACE:

Western Maryland College
Westminster, Maryland

(410) 532-5714 or
(410) 833-9366

by April 15. Answering machines are available at these numbers.

It is not necessary to be a member of the American Chemical Society to attend. You may attend the meeting without attending the dinner.

Dinner price is \$16.00 per person, but spouses and retired chemists may attend for \$14.00; students may attend for \$8.00.

SUGGESTIONS REQUESTED FOR POSSIBLE NOMINEES FOR THE NATIONAL TECHNOLOGY MEDAL

All ACS members are invited by the Committee on Patents and Related Matters (CP&RM) to suggest possible candidates for nomination for the National Technology Medal. Recently funded by the United States Department of Commerce and established by the Stevenson-Wydler Innovation Act of 1980, the medal is awarded annually by the President of the U.S. It may be awarded to individuals, groups, companies or to institutions within the United States for outstanding contributions to technology or for the promotion of the technological workforce.

Nomination documents may be obtained by calling 202/872-8725, or writing to the staff liaison to CP&RM, Ms. Debora Fillinich, American Chemical Society, 1155 Sixteenth Street, NW, Washington, DC 20036. The deadline for submitting nominations for the 1995 Award is May 30, 1994.

MARYLAND SECTION STUDENT AWARDS

Chairman Stephen M. Gregory of the Student Awards Committee has announced the nominees for the ACS Maryland Section Student Awards for 1994. Winners were selected by their respective institutions.

The nominees will be guests of the Section at the April 20 dinner meeting at Western Maryland College. In addition to being recognized at the meeting and receiving an ACS certificate, each will receive a one-year subscription to *The Journal of Chemical Education* or some other comparable ACS journal.

The awardees, grouped by two-year and four-year colleges, are:

Philip M. Irwin, Anne Arundel Community College
Devin Avery, Baltimore City Community College
Hyo S. Park, Essex Community College
Angela Hawkins McFillin, Harford Community College
Kevin E. Cleaver, Howard Community College

Jessica Kiely Starnes-Law, College of Notre Dame of Maryland
Gwen Bennett, Hood College
David Chen, The Johns Hopkins University
Penny Jean Volcjak, Loyola College in Maryland
Jurgita Grigoraviciute, Morgan State University
Andrew J. Pelczar, United States Naval Academy
Titus C. Abraham, University of Maryland, Baltimore County
June Marie Crosby, Villa Julie College
Maria J. Jerardi, Washington College
Joseph Ciotola, Western Maryland College

UNIVERSITY OF MARYLAND BALTIMORE COUNTY
DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

SPRING 1994 SEMINAR SCHEDULE

March 29	Dr. Phyllis Robinson Department of Biology UMBC	"Constitutively Active Mutants of Rhodopsin"
April 12	Dr. V.S.R. Rao Indian Institute of Science NCI - Visiting Scientist	"Conformations and Interactions of Carbohydrates"
April 19	Dr. Stanley Pine California State Univ. (on leave at the NSF)	"Carbonyl Methenylation Using Titanium Reagents"
April 26	Dr. Quentin McDonald Department of Chemistry Columbia University	"Quantitative Simulation of the Conformational Preferences of Amides in Solution"
May 3	Dr. Kenneth Johnson Department of Biochemistry and Molecular Biology Pennsylvania State University	"HIV Reverse Transcriptase: Mechanism and Inhibition"
May 10	Dr. David Weber Dept. of Biological Chemistry UMAB	"Structure and Function Studies of the Enzyme Mut-T"

Seminars take place at 3:30 PM in Room 403, Biological Sciences Building unless otherwise noted. For additional information, please contact Dr. Aris Kalivrenos at (410) 455-2516 or Dr. George Murray at (410) 455-2190.

The Johns Hopkins University
1994 Spring Chemistry Colloquium Schedule

Remsen 233, Tuesdays, 4:15 p.m.
For more information contact Rosalie Elder (410) 516-7432

April 5	Prof. Thomas E. Mallouk Penn State University	"Artificial Photosynthesis in Microporous Solids"
April 12	Prof. Thomas C. Bruice UC, Santa Barbara	"Approaches to DNA Recognition and Modification"
April 18 <i>Monday</i>	Prof. Christopher Switzer UC, Riverside	"Biotic and Extrabiotic Chemistry of Some Nucleic Acid Variants"
April 27 <i>Wednesday</i>	Prof. Carl Lineberger University of Colorado	"Time-Resolved Dynamics in Large Molecular Cluster Ions"

KIDS & CHEMISTRY OUTREACH PROGRAM

With kid-friendly kits like "Creatures from a Desert Pond" and "Jiggle Jelly," The American Chemical Society (ACS) is test-launching a new program designed to share the excitement of chemistry with children ages 9-12.

The Kids & Chemistry program pairs scientists with kids for hands-on experiments that relate science to everyday life. In the process they will learn about current science issues and basic chemistry principles. The program is a partnership between local volunteers and ACS, and it will be supported by schools, companies and parents in the communities where the program is being tested.

Kids & Chemistry will initially be tested for a year in Irvine, Calif.; Minneapolis; Baytown, Texas; and Arlington, VA. If the test run is a success, the program will go national through ACS's network of local sections.

Kids & Chemistry centers around hands-on kits supplied by ACS. These lunch-bag sized packages hold enough experimental materials for four children each, and are meant to be used outside school. The kits include "Creatures from a Desert Pond," "Jiggle Jelly," "Chemical Reactions," and "Acid Rain."

The experiments are designed to relate science to real-life applications. For example, the "Chemical Reactions" kit will give children insight on how their bodies digest food. The "Acid Rain" kit will show the effect of acid rain on different surfaces. These kits also will include instructions for other experiments, covering topics such as the polymer science behind disposable baby diapers.

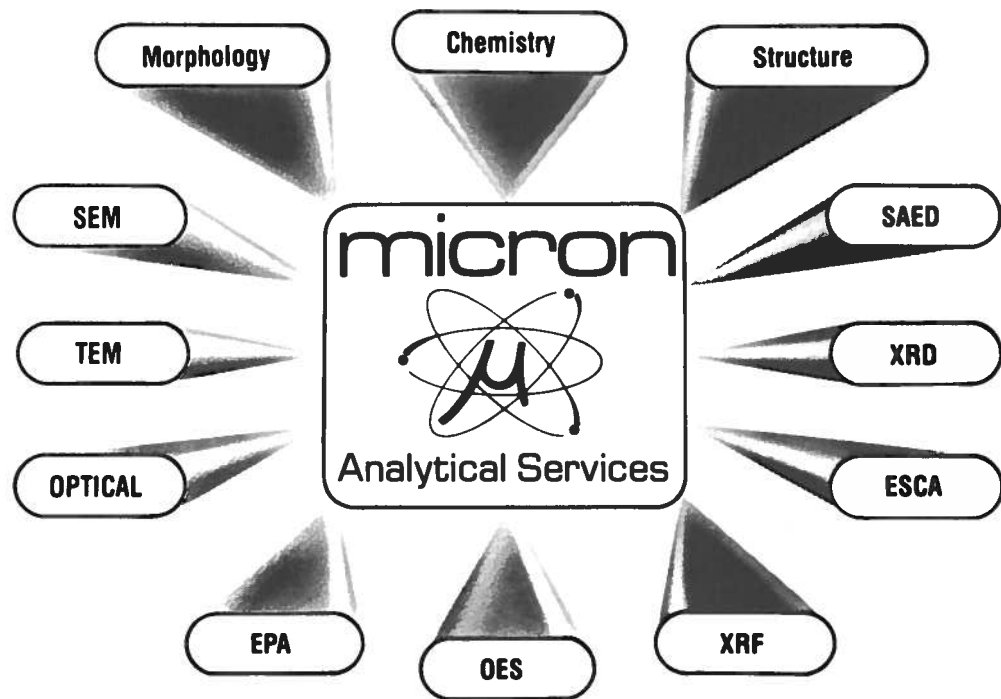
A second facet of Kids & Chemistry is CHEM (Chemicals, Health, Environment, & Me), a classroom program from the Lawrence Hall of Science in Berkeley, Calif. Other components include Science-By-Mail (a pen-pal program with scientists, developed by the Boston Museum of Science) and Project Link (a school-based mentoring program to promote gender equity in math and science).

Another crucial element of the program is the Science Alliance for Kids & Chemistry. This involves employers and civic groups, which can donate money, time or the use of facilities or materials to run the program. Communities also can get involved by providing a venue for the Kids & Chemistry sessions, for instance at scout meetings, museums, shopping malls and schools.

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