



THE

# CHESAPEAKE CHEMIST

MARYLAND SECTION  
AMERICAN CHEMICAL SOCIETY

VOL. XLIV

SEPTEMBER, 1988

NUMBER 6



**KATHLEEN A. BERES**

## THE EDITOR NOTES

A new season of lecture and dinner meetings is upon us. The program, in the capable hands of Joe Topping, is nearly complete (reported elsewhere in this issue) and begins with a meeting at the Maryland Science Center featuring one of NASA's teacher-astronaut finalists.

The Nominating Committee has also been at work and its proposed slate of 1989 officers is also reported herein.

## ACS CONGRESSIONAL FELLOWSHIP

Applications are due December 1 for the ACS Congressional Fellowship which places an ACS member in a staff position in Congress. This fellowship provides an opportunity for a member to gain firsthand knowledge of the operation of the federal legislature, to make technical expertise available to the government and to forge links between the scientific and governmental community.

For information on applications contact Meredith Bears, Department of Government Relations and Science Policy, American Chemical Society, 1155 Sixteenth Street, N.W., Washington, D. C. 20036. Telephone (202) 872-4467.

## GOLDEN ANNIVERSARY

This year marks the 50th anniversary of the Division of Analytical Chemistry of the American Chemical Society.

The Division, started on September 5, 1938 as the Microchemical Division of the ACS, expanded in 1940 into the Division of Analytical and Microchemistry. In 1949 the name was changed to the Division of Analytical Chemistry. Today it has the third largest membership of all ACS divisions.

To celebrate its anniversary, the Division is organizing a symposium at the Los Angeles National ACS Meeting (September 25-30, 1988). The symposium, Frontiers in Analytical Chemistry, is being arranged by Allen J. Bard. A number of former Fisher Award recipients have been invited to participate.

## CHEMISTRY AND PHYSICS ON STAMPS STUDY UNIT

The Chemistry and Physics on Stamps Study Unit is a group interested in collecting stamps which display some aspect of chemistry. They are currently campaigning to enlarge their membership. Dues are \$7.00 per year.

Philatelia Chimica et Physica is a quarterly journal devoted to the study of stamps having a theme of chemistry or physics. Issues average about twenty-four pages. A sample copy is available.

Chemists who would find this an interesting endeavor are encouraged to write to Edwin S. Hodge, 3133 Glendale Avenue, Pittsburgh, PA 15227.

## CHEMATHON

This year for the first time the Maryland Section provided support for the Chemathon held May 21 at the College Park campus of the University of Maryland.

The Section will present a one year subscription to Chem Matters magazine to each member of the winning Walter Johnson High School team.

Judges were Marcia Dresner (Chemtech), Mike Zapf and Ted Stockus.



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David Roswell.....Loyola College  
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Charles Rowell....U. S. Naval Academy  
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Merle I. Eiss....McCormick & Co., Inc  
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## ALTERNATE COUNCILORS

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Tim McNeese

Alvin Bober  
Mike Zapf

## COMMITTEE CHAIRPERSONS

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Maryland Chemist Award..James W. King  
Chemical R & D Center, EA  
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671-3482

Maryland Service Award...Donald Jones

Student Awards.....Donald Hoster  
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396-7991

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698-1604

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435-0100 Stephen Gregory

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## MEMBERS-AT-LARGE

Donald Hoster Dale L. Whalen  
Hope L. Bober Jeanette S. Hamilton  
James W. King

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#### HIGH SCHOOL TEACHER AWARD

The Maryland Section's 1988 High School Chemistry Teacher Award was presented at the April meeting to Barbara Jewett of Oakland Mills High School.

The local supplier award was provided by Baxter (American Scientific).



ANDY KUBIAK OF BAXTER PRESENTS TEACHER AWARD TO BARBARA JEWETT

#### 1989 HERMAN SKOLNIK AWARD

The Division of Chemical Information of the American Chemical Society is pleased to announce that the 1989 Herman Skolnik Award will be presented to two outstanding members of the scientific information community: Professor Michael F. Lynch, University of Sheffield, United Kingdom and Dr. Stuart A. Marson, Maxwell Communications Corporation, Berkeley, California.

The Award was inaugurated in 1976 to recognize outstanding contributions to, and achievements in, the theory and practice of chemical information science. The Award will be presented at the American Chemical Society National Meeting in Dallas, Texas, Tuesday, April 11, 1989.

The Award recognizes the more than two decades of Professor Lynch's pioneering research in the development of methods for the storage, manipulation and retrieval of chemical structures and reactions, as well as related bibliographic information.

The Award also acknowledges Dr. Marson's development of innovative, user-friendly software which has, over the past decade, allowed the bench chemist to more productively utilize chemical information as a daily resource.

Both Professor Lynch and Dr. Marson have made significant contributions to the scientific community, contributions which have improved and forever changed the handling of chemical information.

#### COUNCIL MEETING - ACS NATIONAL MEETING THIRD CHEMICAL CONGRESS OF NORTH AMERICA TORONTO, CANADA

JUNE 8, 1988

The Council Meeting of the American Chemical Society was convened at 8:00 a.m. on June 8, 1988 by President Gordon Nelson. All four Maryland Councilors were present: M. Eiss, D. Jones, D. Roswell, and C. Rowell.

Brief oral reports were presented by Society officers and staff. Over 14,000 scientists attended the Third Chemical Congress, making it the largest scientific meeting ever held in Canada.

President Nelson reported that the 1987 National Chemistry Day was an outstanding success and will be held again in the late Fall of 1989. The ACS will have the opportunity to prepare a 12,000 sq. ft. interactive, high tech molecular science exhibit for the Smithsonian National Museum of American History. ACS has raised \$2.5 million toward this exhibit through its Campaign for Chemistry. Other funds will be sought. An estimated 6 million people will see the exhibit yearly.

President-Elect Clayton Callis reported on various ACS programs. He indicated that all ACS members will be asked to contribute to the Campaign for Chemistry. In addition to the Smithsonian exhibit, funds will be used for the \$75 - \$80 million expansion of Chemical Abstracts Service -- capital improvements in computer software and systems to allow chemists to do research on-line with CAS databases.

The primary focus of this year's Council Meeting was finance and membership dues. 1987 saw the levelling off of membership growth that had been anticipated for several years. Projections show that our traditional membership base will continue to decline in 1988 and the coming years.

The Budget and Finance Committee presented a one hour tutorial on ACS budgets and finances for the Council. The ACS \$151 million budget receives funds as follows:

Chemical Abstract Services	\$96.5 million
Books & Journal	44.1
Member Dues	7.9
Investments	<u>2.5</u>
	\$151.0 million

Member activities supported by dues are supplemented with investment income. The Budget deficit in 1988 is expected to be between \$250,000 - \$500,000 and to grow over the next few years to \$1 million.

After considerable discussion, the Council voted to increase membership dues \$3 for a total of \$82/year. The Maryland Councilors concurred. This was the increase suggested by the inflation index.

The City of Baltimore was invited by the ACS to submit a bid for the 1998 Spring National Meeting. The Council Meeting was adjourned at 12:20 p.m.

Respectfully submitted,

*Merle Eiss*                      *Dave Roswell*  
*Don Jones*                      *Chuck Rowell*

Kathleen Anne Beres is a former teacher of high school biology, field biology, and physical science in Baltimore County, Maryland. She is a trained mountain climber, an experienced photographer, and she is certified in coastal and celestial navigation. Ms. Beres is now a Manager at the Westinghouse Electric Corporation working with the President and his assistant and also is active in the Space Division.

Ms. Beres majored in pre-medical biological science at the College of Notre Dame of Maryland, and received a master's degree from the Johns Hopkins University. She has done biological field work in Iceland, East Africa, Patagonia, the Galapagos Islands and Fiji. Kathleen has climbed in the Equadorian Andes, the Himalayas, East Africa, Alaska, and the northwest United States and was selected for the lead rope team in a three week glacier traverse in Greenland. In Alaska she traveled by kayak in the company of whales and icebergs. Kathleen recently made a trans-Atlantic crossing in a 31-foot sailboat with three other people, and has also served as navigator in an Annapolis-to-Bermuda ocean race. Study travel has taken her to Western Europe, the Soviet Union, Poland, Australia and New Zealand. She is active in a number of professional, ecological and community organizations. She raised funds for the Baltimore Zoo, the National Aquarium, the Baltimore Symphony, the March of Dimes and the American Field Service.

#### THE TEACHER-ASTRONAUT EXPERIENCE

In July, 1985, she was chosen from among twelve thousand applicants as one of ten finalists in the NASA Teacher in Space Project. From this national program, a teacher was selected to be the first private citizen to fly aboard the Space Shuttle. Ms. Beres was involved in the same training exercises designed for career astronauts. As a teacher astronaut candidate, Kathleen underwent several days of comprehensive physical testing. Additionally, she received instruction to meet the requirements for the high altitude physiological training program, which included testing in high altitude and hyperbaric chambers. Kathleen also experienced weightlessness aboard NASA's KC 135 aircraft. Two years ago, Kathleen was assigned to the Marshall Space Flight Center where she gained experience in the Center's Space Flight Center Laboratories and Propulsion Systems. Last year, she was assigned to the Goddard Space Flight Center in Greenbelt, Maryland involved in the Hubble Space Telescope Project.

#### PROJECT SEED TURNS TWENTY

The ACS's Project SEED is celebrating its twentieth anniversary this year. A symposium is planned for Los Angeles to note the event. Project SEED (Summer Educational Experience for the Disadvantaged) has benefitted more than 2,000 students in its twenty years.

Contributions in support of Project SEED come from industry, ACS members and local sections, and more is always needed. Contributions or requests for information should be directed to ACS Project SEED, American Chemical Society, 155 Sixteenth Street, N.W., Washington, D.C. 20036.

#### CHANGES OF ADDRESS

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

## SEPTEMBER MEETING

#### DATE:

Wednesday, September 14, 1988

#### PLACE:

Maryland Science Center  
601 Light Street  
Baltimore, Maryland

#### SCHEDULE:

6:00 Social Hour (sponsored by  
Beckman Scientific)

7:00 Dinner

8:00 Lecture - Boyd Theatre  
Kathleen A. Beres  
Westinghouse Electric Corp.  
"The Teacher-Astronaut  
Experience"

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

Ms. Julia Pearson  
Nova Pharmaceutical  
Corporation  
6200 Freeport Center  
Baltimore, Maryland 21224

by September 7. Late reservations may be made by calling (301) 563-6183 by September 9 (answering machine available).

Dinner price is \$19.00 per person, but spouses, retired chemists and students may attend for \$17.00.

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

#### BALTIMORE SCIENCE FAIR

The 33rd Baltimore Science Fair was held on March 26 at Towson State University and featured 202 exhibits from students of area high schools and middle schools.

The Maryland Section awarded a plaque, a \$50 savings bond and attendance with a guest at a Section dinner meeting to one winner in each of the two divisions. The winner in Division I was Noelle Kraft of North Harford High School and the Division II winner was Dinakar Shenbagamurthi of Roland Park Middle School.

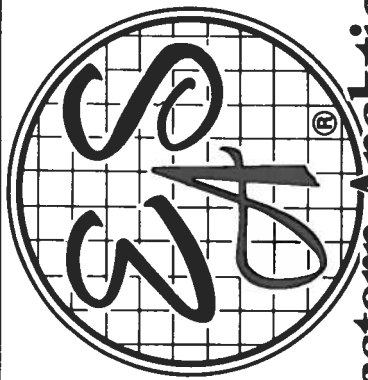
Certificates of merit in Division I were awarded to Scott Needle (Pikesville), Allison Thomson (C. Milton Wright), Kevin Gould (Oakland Mills), Christopher Buck (Oakland Mills) and Lalitha Tadikonda (Oakland Mills), while certificates of merit in Division II went to Christen Rukowicz (St. Rita), Leda Pawliuk (St. Dominic), John Bowman (Perry Hall), James Pociluyko (St. Michael's) and Jeffrey Simons (Pikesville).

Section members serving as judges were Harold Klapper, Judy Pack, Joe DeFrank, Al Pribula, Linda Sweeting and Ted Stockus.

#### NOMINATING COMMITTEE REPORT

Chairman Al Bober of the Maryland Section's Nominating Committee has announced the following slate for 1989 officers: Chairman-elect, J. Paul Carter; Secretary, Stephen M. Gregory; Treasurer, Joseph J. DeFrank; Alternate Councilor, Ann Abeles; Members-at-large, Donald Hoster, Hope L. Bober, Bhim S. Dhingra, Dale Whalen and Jeanette S. Hamilton.

The official Ballot will appear in a future issue of *The Chesapeake Chemist*.



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### FUTURE MEETINGS 1988-1989

DATE AND LOCATION	SPEAKER AND AFFILIATION	TOPIC
October 19, 1988 W. R. Grace Washington Research Center	William A. MacCrehan National Bureau of Standards and Sheldon B. Markofsky W. R. Grace	Liquid Chromatography  Nitroparaffin Chemistry
November 16, 1988 Aberdeen Proving Grounds	(Speaker and Topic To be announced)	
December 14, 1988 Johns Hopkins University	(Maryland Chemist Award To be announced)	
February 22, 1989 College of Notre Dame	Robert L. Caret Towson State University and John H. Nelson McCormick & Co., Inc.	Industrial - Academic Cooperation -- Academic view Industrial - Academic Cooperation -- Industry view
March 29, 1989 University of Maryland, Baltimore County	Richard Smith Western Maryland College and (Second Speaker and Topic To be announced)	A New Class of Biological Alkylating Agents
April 19, 1988 Western Maryland College	(Student Award Night) Jay Tobin Maryland State Police Lab	Forensic Chemistry
May 17, 1989 Johns Hopkins University	(Remsen Award To be announced)	

### EXECUTIVE COMMITTEE MINUTES

The Executive Committee was called to order by Bill White, the Chairman, at 7:40 P.M. on April 6, 1988 in the Chemistry Reading Room of the College of Notre Dame.

The members present included: Joe Topping, Ray Petersen, Al Bober, Bruce Solnick, Joe DeFrank, Sr., Denise Eby, Kristine Kirk, Don Hoster, Bill White, Susan Lever, John Lever, Chuck Rowell, Howard Cohen, Harold Klapper, Rene Muller, and Don Jones.

The minutes, which had been mailed to the members after the meeting on January 20, 1988, were approved. The Secretary also distributed the 1988 Executive Committee Directory.

*Treasurer's Report:* Joe DeFrank reported that the Section's allotment from National totalled \$8193.00 for 1988, while Local Dues brought in \$3185.50. Income from the meals for February and March was \$1106.00 and \$1174.00. \$125 donations from Beckman and Macalester Bicknell were received for the social hours for March and May. Thanks to Bruce Solnick's efforts, advertising revenues from *The Chesapeake Chemist* came to \$2042.40. For February-March 1988, total receipts were \$16031.86 and total expenses came to \$5930.23. The major expense was the cost of the meals for the October, February and March meetings, \$832.00, \$1137.50 and \$1824.00, respectively. Printing the February

and March issues of the *Chemist* cost \$1134.00, and Student Awards expenses were \$375.00.

The Yorkridge-Calvert NOW account had a balance of \$15037.23, with \$5806.93 in the Y-C Certificate of Deposit. Including the checking account balance of \$2773.24, the Section's assets came to \$23617.40.

DeFrank had also analyzed the Section's expenditures during 1987. The biggest expenses are publishing *The Chesapeake Chemist*, a total of \$8191.96, and the cost of the monthly meetings, \$10131.41, which includes meals, speaker expenses, room rental, and sales tax. The Committee discussed whether the Section should continue to subsidize meals or try to break even on this expense. Cuts in printing costs could reduce expenses, while first-class mailings would increase postage costs.

*Nominating Committee:* Al Bober, the Past Chairman, announced that the slate of officers for 1989 would appear in the September issue with the ballot in the October *Chemist*. Floor nominations will be received at the May Executive Committee meeting.

*Awards:* Don Hoster reported that awards will be given to 13 students from 4-year colleges and 7 students from 2-year colleges at the annual Student Awards Night. The students will receive at the April meeting an award certificate, a subscription to the *Journal of Chemical Education*, and a copy of the April issue of the *Chemist*.

Mike Zapf has invited several high school chemistry teachers to attend, and the 2 Science Fair winners will also be present.

Bober received an announcement that the ACS Insurance Fund was granting \$1000 scholarships to 6 chemistry students; the Section nominated a student from UMBC. That only one nomination was received for this program could be due to several factors: there has been a 60% drop in the number of chemistry majors, freshmen would be in greater need of financial aid than upperclassmen, and announcement of the awards and the nomination deadline were poorly timed.

*Chemical Education:* No report.

*Program:* Joe Topping said that plans for the 1989 program are progressing well. The September meeting will be at Notre Dame or at Goucher (the February meeting will be held at the other campus), with Grace hosting the October meeting. The site of the November meeting will be Aberdeen. Both the December and May meetings will be at Johns Hopkins University. The Student Awards meeting will be held in April at Western Maryland. A meeting at the Maryland Academy of Sciences was suggested, possibly in March. Topping also said he is eager to establish ties with professional organizations in the area.

*House:* The answering machine for dinner reservations will be on in the evenings only.

*By-Laws:* No report.

*Member Assistance:* Employment assistance had been requested by a organic chemistry Ph.D.

*Public Relations:* No report.

*Membership:* The Section will have 8 50-year members, one of whom is John Lamboe, to honor this year.

*Finance:* Harold Klapper said he is working on revising the By-Laws to include a committee to oversee the Section's investments.

*High School Activity:* White gave Mike Zapf's written report: 8 nominations had been received for the high school teacher award, the winner of which will be announced soon. Zapf asked for volunteers to assist with the Chemathon sponsored by the University of Maryland; the Section will award T-shirts to the winners. Four students will take the exam for the International Chemical Olympiad.

Sr. Denise Eby received a letter from Hollins College asking financial support for a summer workshop; after discussion, the request was denied. The Committee also debated the need for guidelines to cover such requests.

Harold Klapper, the foreman of the Baltimore Science Fair judges (Judy Pack, Linda Sweeting, Al Pribula, Joe DeFrank, and Ted Stockus), reported that the 202 projects this year were of good quality.

*Chesapeake Chemist:* Ray Petersen said the May issue was in the printers. Information for the September issue was needed by July 4.

Bruce Soinick has about \$700 in outstanding ad bills. The proposed rate increase would not affect current advertisers. It was noted that advertising did not have to be limited to chemical or professional groups; banks, financial planners, and others might be additional clients.

*Women Chemists:* No report.

*Archives:* No report.

*Anniversary:* Tim Parr and Susan and John Lever are preparing a letter requesting funds for the Diamond Jubilee. The appeal must be defined so the purpose of the donation is clear. Sponsor categories also are effective in raising funds. They also have prepared a list of companies in the Section's vicinity, who might wish to participate in the celebration.

*Old Business:* Merle Eiss and Don Jones, two of our Councilors, will attend the National meeting in June. Chuck Rowell pointed out that the deadline for nominations for ACS President is in May and the ballots are in the mail, and that the proposed \$3 dues increase probably will be approved because programs and services have already been cut as far as possible.

The MARM Steering Committee members are Tim Parr and Don Jones. Al Bober is attending the Millersville, PA meeting and could substitute if either is unable to go.

Hope Bober has the plans for the joint CSW-MD Section picnic settled. The event will be held July 31 at Belmont.

*New Business:* Bill White has received a 44-minute videotape on dietary carcinogens from National. This could be shown at the Grace meeting.

The next Section meeting will be the Remsen Award meeting on May 18 at Hopkins.

The next meeting of the Executive Committee will be on September 7, 1988 at 7:30 P.M.

The meeting was adjourned at 9:30 P.M.

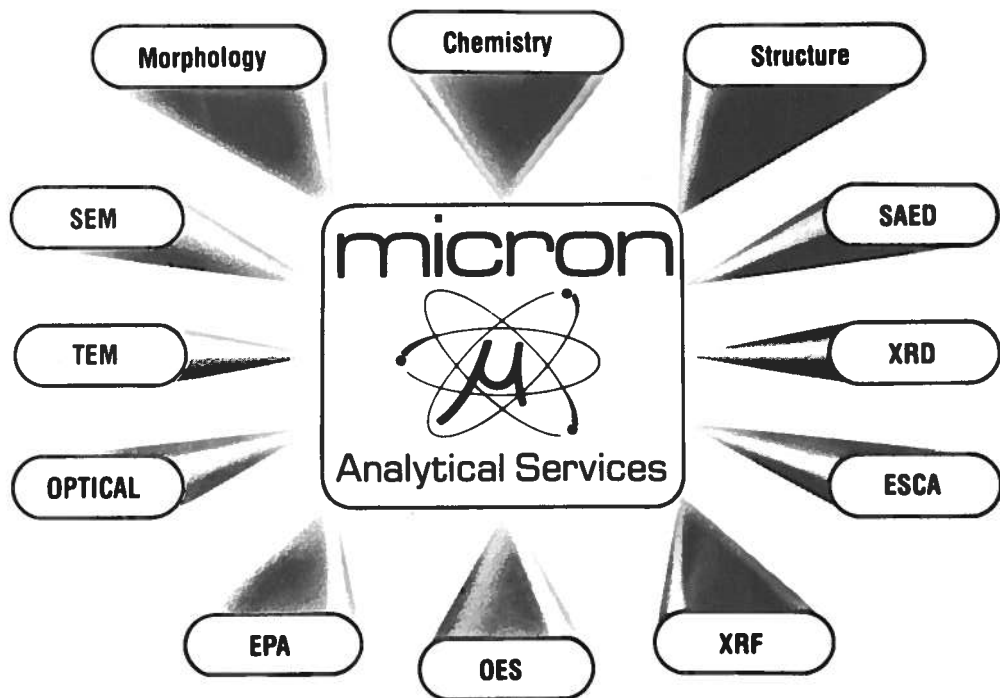
Respectfully submitted,

Kristine Kirk  
Secretary

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