



# THE CHESAPEAKE CHEMIST

MARYLAND SECTION  
AMERICAN CHEMICAL SOCIETY

VOL. LI

JAN. - FEB., 1995

NUMBER 1-2



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## ANNOUNCEMENT AND CALL FOR PAPERS

The Chemical Society of Washington  
of the American Chemical Society seeks your participation in

### The 29th Middle Atlantic Regional Meeting

The Washington MARM is scheduled for May 24 - 26, 1995  
on the campus of The American University.

Shuttle service available to the Subway.

GENERAL SCIENTIFIC PROGRAM  
WORKSHOPS      AWARDS      SHORT COURSES  
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Papers in all areas of chemistry will be considered. Specify whether oral or poster presentation is desired. Use the standard ACS abstract form (12 point Courier font). The original and 3 copies must be received no later than

**FEBRUARY 1, 1995.**

**29th MARM**  
**Department of Chemistry**  
**The American University**  
**Washington, DC 20016-8014**

*Washington in May is beautiful*



# THE CHESAPEAKE CHEMIST

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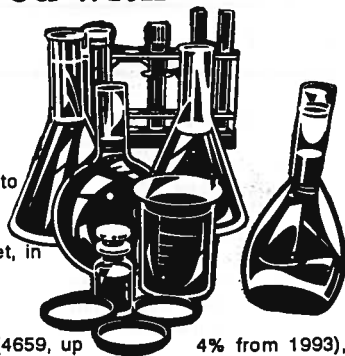
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The Chesapeake Chemist is published monthly September through May by the Maryland Section of the American Chemical Society. Address editorial comments to the Editor. Send advertising copy and inquiries to the Business Manager. The Maryland Section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

**We'll have all the elements you need!**

**The 1995 EAS will provide you with practical solutions to your diverse problems!**



November 1995 may seem a long way off, but now is the time to make plans to be at the Thirty-Fourth Annual Eastern Analytical Symposium & Exposition when it returns to the Garden State Convention & Exhibit Center and the Radisson Hotel Somerset, in Somerset, New Jersey.

#### The 1994 in Capsule

The 1994 EAS again broke all records, with more attendees (4659, up 4% from 1993), more exhibit booths (270, up 12%), and more Short Course and Workshop participants than ever before. With modest registration fees, EAS is committed to providing the greatest possible value for your continuing education dollar. As we have proven for 33 years, EAS is programmed for scientists by scientists. The result? A technical program packed with answers you can use!

#### Call for Papers

The 1995 EAS will be held November 12 - 17, 1995 at the Garden State Convention & Exhibit Center and the Radisson Hotel Somerset in Somerset, New Jersey. In 1995, EAS is committed to increasing the number of contributed papers, which formed 56% of the 1994 technical program.

You can be part of the 1995 EAS. We solicit your contributions for consideration by the Program Committee. Papers in all areas of the analytical and allied sciences are welcome. Please submit a 200 to 250 word abstract of the proposed paper, indicating your preference for either oral or poster format to: Program Committee, P.O. Box 633, Montchanin, DE 19710-0633 U.S.A. If the paper is accepted, the title and author(s) will be considered final. The deadline for receipt of preliminary abstracts is April 15, 1995. We do not require a special form for submission of the preliminary abstract, but please type your submission. In May 1995, authors of proposed papers will be notified regarding acceptance of their paper by the Program Committee.

#### Planning for 1995?

Long before the 1994 EAS ended, we began planning for the 1995 EAS. We hope that your November 1995 calendar already contains an entry for EAS! For travel-planning purposes, assume that costs may rise modestly in 1995. In 1995, we will again offer Full-Conferree (\$60 in advance, \$90 on-site in 1994), Exhibit-Only (\$20/\$30), and Student (\$20/\$20) registrations. Of course, a full complement of competitively priced EAS Exhibitor Workshops and EAS Short Courses will return as well.

**YES**

**Need other planning information?  
Want to exhibit at EAS? Need to be added to the mailing list?  
Any other . . . Questions?**

Contact the EAS HOTLINE at (302) 738-6218  
or the EAS FAXLINE at (302) 738-5275.

**EAS: Providing Practical Solutions to Your Problems!**

#### 1995 POLYMER TEACHING AWARD

The Polymer Education Committee (POLYED) of the American Chemical Society (a joint committee of the Polymer Chemistry Division, Inc. and the Division of Polymeric Materials: Science and Engineering) announces the competition for the 1995 Award for Excellence in Polymer Education by a High School or Junior High Science Teacher.

This award recognizes the efforts of high school and junior high chemistry teachers who help students meet the challenges and responsibilities of living in a technological age and who encourage students to consider careers in chemistry. Awards are based on:

- the applicants' innovative use of classroom and laboratory activities to promote understanding of polymer chemistry and its role in the everyday lives of students, and
- the applicants' outreach activities to encourage other teachers to explore polymer chemistry with their students.

POLYED recognizes the national award winner at an American Chemical Society national conference. The award winner and honorable mention recipients receive a cash award, a set of polymer chemistry materials for use in the classroom, and a certificate of recognition. Applications for the 1995 award are available from Polymer Education Coordinator, Miami University-Middletown, 4200 East University Blvd., Middletown, OH 45042, phone: 513/424-4444 ext. 368, and will be accepted until March 1, 1995.

#### SUMMER INTERNSHIP POSITIONS NEEDED FOR YOUNG SCHOLARS

Summer at Notre Dame: Academic and Leadership Skills - Technology, Engineering, Mathematics and Science (SANDALS-TEAMS) is a Young Scholars program, which is in its eighth year under National Science Foundation funding, and the support of the College of Notre Dame of Maryland. The program will be held on the campus of the College of Notre Dame again in June, 1995. The program will feature a five week academic component and a three week internship component. Participants are students from Baltimore area public and private schools who are entering their senior year of high school and who have interest and aptitude in science, mathematics, engineering, and technology. Staff are drawn mainly from the College of Notre Dame faculty, as well as other colleges, universities, and high schools. The purpose of SANDALS is to help urban students develop skills, identify resources, gain experience and make prudent choices to realize their vision of success in both their academic pursuits and careers in science, mathematics, engineering, and technology. For this reason the three week internship component held in July is crucial to the success of the program. In the past, students have been placed with one primary mentor. These mentors came from colleges and universities, research laboratories, hospitals, industries, and informal science institutions such as the aquarium, science center, and nature center. Students perform a variety of activities in internships: laboratory research related to ongoing projects, an original mini project, caring for animal, interacting with clients in a study, working with younger students, etc. If you are interested in being a mentor for the 1995 SANDALS program, please contact:

Dr. Shirish Shah  
College of Notre Dame  
Department of Chemistry  
(410) 532-5712

or

Mary Agnes Sheridan  
College of Notre Dame  
Department of Mathematics  
(410) 532-5103

THOMAS W. COLE, JR.

Thomas W. Cole, Jr. graduated with honors from Wiley College in Marshall, Texas in 1961. He obtained the doctoral degree in organic chemistry at the University of Chicago, succeeding in the synthesis of the first highly strained carbocyclic cage compound, cubane.

He began his career in industry, spending summers in visiting professor positions at the University of Illinois, Champagne-Urbana, the Massachusetts Institute of Technology and Jackson State University. Irreversibly drawn to higher education, he accepted his first full-time position at Atlanta University, where he rapidly rose through the ranks to full professor, chairman and the Fuller E. Callaway chair. From 1978-1982, he served as Director of the Resource Center for Science and Engineering, and from 1979-1982 as Vice President for Academic Affairs.

In the spring of 1982, he accepted the presidency of West Virginia State College in Institute, WV. He was appointed Chancellor of the West Virginia Board of Regents in 1986, where he remained until accepting the presidency of Clark College. He is currently President of Clark Atlanta University. (Clark College and Atlanta University were consolidated in 1988.)

Dr. Cole has been an active participant on many regional, national and international committees on science education and a member of numerous scientific organizations. He has addressed many groups on education and science.

1995 JAMES FLACK NORRIS AWARD

Nominations are being received for the 1995 James Flack Norris Award for Outstanding Achievement in the Teaching of Chemistry. The Norris Award, one of the oldest awards given by a Section of the American Chemical Society, is presented annually by the Northeastern Section. The award consists of a certificate and an honorarium of \$3000. Nominees must have served with special distinction at any level: Secondary school, college, and/or graduate school. Since 1951 awardees have included eminent and less-widely-known but equally effective teachers at all levels. The awardee for 1994 was Professor Emeritus Samuel P. Massie of the United States Naval Academy.

Nominations for 1995 will be received until April 15, 1995. The nomination material must be limited to thirty pages and focus specifically on the nominee's contribution to and effectiveness in teaching chemistry as distinguished from research. These qualities are demonstrated by a condensed curriculum vitae with listings of honors, awards, and publications relating to chemical education. The individual(s) coordinating the nomination presents this curriculum vita as a portion of a nominating letter which in turn is supported by as many seconding letters as are necessary to convey the nominee's qualification for the award. Some seconding letters may show the impact of the nominee's teaching in inspiring colleagues and students toward an active life in chemistry and/or related sciences. Other seconding letters may attest to the influence of the nominee's other activities in chemical education such as textbooks, journal articles, or other professional activity at the national level. Materials should be of a standard 8½ by 11 inch-size for binding by the committee but should not include books or reprints.

1995 nominating materials should be sent before April 15, 1995, to Dr. Cynthia McGowan, Department of Chemistry, Merrimack College, Turnpike Street, North Andover, MA 01845. Internet address: CMCGOWAN@Merrimack.EDU.

WHEN DID YOU LAST ATTEND A  
MARYLAND SECTION MEETING?

## FEBRUARY MEETING



THOMAS W. COLE, JR.

DATE & PLACE

Wednesday, Feb. 15, 1995  
Merrick Hall  
Goucher College  
Towson, Maryland

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

DIRECTIONS: Take I-695 to Exit 27A (South) - Towson/Dulaney Valley Road. The college entrance is 1/2 block ahead on the left. After entering the campus, bear left at the fork in the road, then take the first right into the parking lot. Kraushaar Auditorium is adjacent to this parking lot.

INFRARED SAMPLING WORKSHOP

Infrared Analysis Sampling Device Workshop will be given at Goucher College at 4:30 PM, on February 15th before Section meeting. The use of several devices will be described and demonstrated; target audience: college chemistry students and industrial technicians and chemists. No fee. For registration, please contact Mike Zapf at 410-771-7471. Voice mail available.

SCIENCE FAIR JUDGES

Science Fair Judges are needed to build teams for March and April, 1995: Saturday schedule for about 4 to 6 hours. Please contact Mike Zapf, 410-771-7471 for further information.

SCHEDULE:

- 6:00 Social Hour  
Rosenberg Gallery  
Kraushaar Auditorium
- 7:00 Dinner
- 8:00 Thomas W. Cole, Jr.  
President  
Clark Atlanta Univ.  
"The Story of Cubane"

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

Dr. Shirish Shah  
College of Notre Dame  
4701 North Charles Street  
Baltimore, MD 21210

by February 8. Late reservations may be made by calling

(410) 532-5712

by February 10. Answering machine is available at this number.

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

CALL FOR PAPERS

1995 INTERNATIONAL CHEMICAL CONGRESS OF PACIFIC BASIN SOCIETIES  
HONOLULU, HAWAII  
DECEMBER 17-22, 1995

The Congress program will contain 146 symposia organized in topical areas. A full list of symposia can be obtained from the Congress office. An attendance of over 6,000 persons from countries bordering the Pacific is expected. Contributed papers will be accepted in all areas.

Required • Short abstract on Congress Abstract form • Long abstract of 800-1,000 words.

Deadline for papers • March 31, 1995

For forms and further information, contact Ann Nelson, Pacificchem Secretariat, c/o ACS Meetings, 1155 16th St., NW, Washington, DC 20036. Tele: 202-872-4396. Fax: 202-872-6128. Internet address: acn91@acs.org

Authors of contributed papers will be notified of their acceptance around July 15, 1995.

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MINUTES of the SPECIAL MEETING of October 28, 1994, the MBK Building, Notre Dame College.

The meeting was called to order by Chairperson Alice Zeiger at 2:07 PM.

Members present: Al Bober, June Bronsenbrener, Bill White, Joe DeFrank, Mike Zapf, Tim Parr, Alice Zeiger, Asoka Katumuluwa, Shekar Munavalli, Shirish Shah, Elwin Penski, Shree Iyengar, Ray Petersen, Jan Kolakowski, Ernie Silversmith.

Alice Zeiger gave the ballots from the local election to Mike Zapf for recording the election results. The slate as issued in *The Chesapeake Chemist* was unanimously elected.

Elwin Penski began by introducing the National ACS Charter and the Maryland Section By-laws. He had taken the time to draw the Section boundaries on a Maryland map and indicated the locations where local meetings have been held. Special attention was given to Section 2 of the National Charter that discusses the purpose of the ACS.

Much discussion ensued with nearly everyone adding comments and raising ideas about how the Section could increase participation in local meetings. The annual program was mentioned many times as the focus of our success. Three letters were received from the membership outlining each member's interest and concerns about the success of the Section. During the course of discussion, two of these were read for the interest of the group. Two actions were discussed and brought to a vote and each was approved unanimously: Jan Kolakowski will work to hold a special Civil War Battlefield excursion sometime within the next year which could include some Chemistry topic, and a special night out will be endorsed by the Section to a comic play recently written and produced by Dr. Shree Iyengar about Indian Marriages, which was received well at Anne Arundel Community College. Al Bober will soon write an editorial about the Section to be placed in *The Chesapeake Chemist*. The Secretary has available for inspection copies of the letters received from the membership, copies of the ACS Charter and the Section By-laws, as well as a list of concerns and ideas raised at the meeting.

The meeting was adjourned at 5:10 PM.

MINUTES of the meeting of December 7, 1994 held at Knott Science Building, Notre Dame College.

The meeting was called to order by Chairperson Alice Zeiger at 7:38 PM.

Members Present: Alvin Bober, Howard Cohen, Subhash Dhanesar, Merle Eiss, Catherine Fenselau, Don Jones, Jan Kolakowski, Ray Petersen, Shirish Shah, Ernie Silversmith, Mike Zapf, Alice Zeiger.

The minutes of the executive meeting for September 7, 1994 were reviewed by each member and two small corrections were suggested. The minutes of the special meeting held on October 28, 1994 at the MBK building at Notre Dame College were also reviewed and one change was suggested. The reports were accepted.

The Treasurer's report was given out by Jan Kolakowski and several items were reviewed. As suggested at the September meeting, the current report contains a column for the previous year to date account balances. The meals category contains the expenses and receipts for the joint meeting with Sigma Xi. The meal expenses also contains the expenses for small gifts to speakers. National Chemistry Week expenses are accounted for up to the current date, and the MARM loans have been repaid to the Maryland Section by the MARM committee. The mailing category contains expense for both NCW and CC. The Treasurer's report was accepted.

Archives: Ernie Silversmith reported that he received a letter in response to his suggestion that the Bromo Seltzer Building in Downtown Baltimore be acknowledged as a historic site and that it was turned down as having little significance. No contact was received from Dr. Harford from North Carolina about his potential interest in helping to confirm some historical information about the chromium mines at the Soldier's Delight site.

Awards: A report was phoned in from Elwin Penski that nominations are due by May for the Maryland Chemist Award for 1995 and that the award would be given again in December of 1995. No report on the Maryland Section Service Award and some confusion ensued about where the award process stands. Mike remembered that Shree Iyengar might have some interest in keeping this award active and Mike will contact Shree. No report was received on the 1995 Remsen Award and a motion was made to increase the Award to \$1000 and it passed. No report on the Student Awards but Don Hoster will be contacted by Shirish Shah to take over once again and assist in keeping the 1995 awards on schedule.

Ernie Silversmith offered his help to keep on target for 1995 until a new Chairperson can be found. The 1995 W.R. Grace Award will be given in October because September has a speaker.

By-Laws: A phone message was received from Elwin Penski to remind us that he has copies available for anyone interested.

Chemical Safety and Education: Chemical Safety and Hygiene seems to be a good topic for interest and the last course given three years ago should be rerun. The SANDALS Program at Notre Dame needs intern slots for the Summer '95 and Shirish Shah will place an ad in the CC to prevent the last minute problems encountered in 1994. Al Bober gave the program credit and remarked that the students do well in his lab.

Chesapeake Chemist: Ray Petersen reported that the December issue is out and that the deadline for entries for the February issue is in a week. Comments were accepted about changes to the committee page and will be taken care of by Ray if people will submit accurate changes. cont. on p 10...

...cont. from p 9

**Finance:** Nothing to add.

**High School:** Mike mentioned that no award was given in 1994 and that he has taken several steps to make changes in the award structure as a result of his contact with Baxter Scientific representatives and that a new channel for teacher nominations may open up in 1995 as a result of the State of Maryland contact suggested earlier by Don Jones. We will add the Morgan State Science Fair to our duties in 1995 and that perhaps no new funding for the Science Fair program will be needed due to the recent news that the Baltimore Science Fair will not be held. He will have a High School Teacher and three student guests at the December meeting. Plans are now in the works to assist with the Chemathon in the spring at the University of Maryland College Park.

**House:** Shirish Shah will not be at the December meeting and has asked Alice and Mike to assist.

**MARM:** Chuck Rowell phoned that things went well and that Tim Parr is still receiving some money from the conference. Alvin Bober mentioned that things went very well and that he complimented the staff at UMBC for their top-notch cooperation and knowledge. Catherine Fenselau suggested that the Chairperson contact the UMBC Executive Office about our success and satisfaction.

**Member Assistance:** Merle Eiss has had no calls to offer positions but had received one call from a member about assistance. Mike offered that he will give information about one position available in the local area.

**National Chemistry Week:** Subhash Dhanesar gave the report and mentioned that Anna Krouse, an environmental chemist took the initiative to do demos and give talks to students. Mike reminded the committee that many teachers participated in Chemical Bonding Day, a program run by the Chemical Alliance group at Towson State University. Alvin Bober commented that the Section should do some long term planning in order to produce some more ambitious projects during NCW. He will organize a small meeting for people interested in this topic.

**Program:** Shirish Shah is accepting ideas about the '95-'96 program and suggested that we consider his idea that we invite local CEOs with interest in Chemistry to the October meeting. Don Jones reminded the committee that we can budget for speaker costs and that this fact should not be overlooked at the planning stage. Alvin Bober suggested that the "Special Report Section" in journals be reviewed for good topics and speakers.

**Publicity:** Don Jones mentioned that the secretary at Western Maryland College Chemistry Department operates effectively and that any new addresses should be passed on and will be promptly attended to. The motion was made and was passed to allow a \$100 budget for a gift to show our appreciation for the secretary.

**Public Relations:** No report.

**Women Chemist:** Linda Sweeting can not chair any longer and no new chemist came to mind. It was decided to convert this committee to ad hoc status.

**Old Business:** None

**New Business:** Alice Zeiger reminded everyone about the play being held at Anne Arundel CC this Saturday that is sponsored by the Section as a social event. She passed on to Mike Zapf the information on Project SEED for 1995.

cont. on p 11...

...cont. from p 10

She read information related to three awards sponsored by the ACS Committee on Patents and Related Matters. The committee is soliciting nominations for: The National Inventors Hall of Fame, the National Medal of Technology, and the Donald J. Quigg Excellence in Education Award. The Secretary has the information. Alice will have a questionnaire to hand out to the attendees at the December meeting. She reminded the members about the schedule for the executive training sessions held by National. Linda Sweeting phoned in that she is interested in having the Section assist with a program on hazardous household chemical clean-up being sponsored in Baltimore City and County. She offered to coordinate but the Executive Committee will not sponsor but commented about the good idea. The next meeting will be held at NDC on February 1, 1995.

The meeting ended at 9:25 PM.

TO THE EDITOR:

Dear Sir:

The Executive Committee of our Section has been in session to consider alternatives that will improve attendance at Section meetings. A variety of excellent ideas were voiced and schemes for their enactment put forth. Still, it was a fundamental precept that captured the Committee's attention. What is the scope and purpose of a section in the hierarchy of the American Chemical Society (ACS)?

The Maryland Section, American Chemical Society is in a favorable position. Let us count our advantages.

- **Geography** We are probably in one of the prime regions of the United States.
- **Resources** We have approximately 1800 members.
- **Facilities** We have superb meeting places available at little or no cost.
- **Varieties** Education, manufacturing, medicine, environmental, food, drug, research, etc.
- **Financial** We have a solid bank account. There is enough money to help small projects get started.

The Maryland Section was created almost eighty years ago because there was a need for chemists to interact and provide for the future. Are we different from those pioneers? Are we facing a new direction? Or are we at a crossroads and require a new interpretation?

The wisdom of teamwork is acceptable to each of us. Do we practice what we recognize intellectually? We all have to answer that question individually. The Maryland Section has eight (8) monthly meetings throughout the year. We have an annual picnic. This year we are going to sponsor a play written by a member. We are involved with regional meetings, science fairs, short courses, membership assistance, etc. Are these worthwhile activities? What else should we be doing? Your ideas are welcome and needed. Program your time so that you can attend a Section meeting this spring.

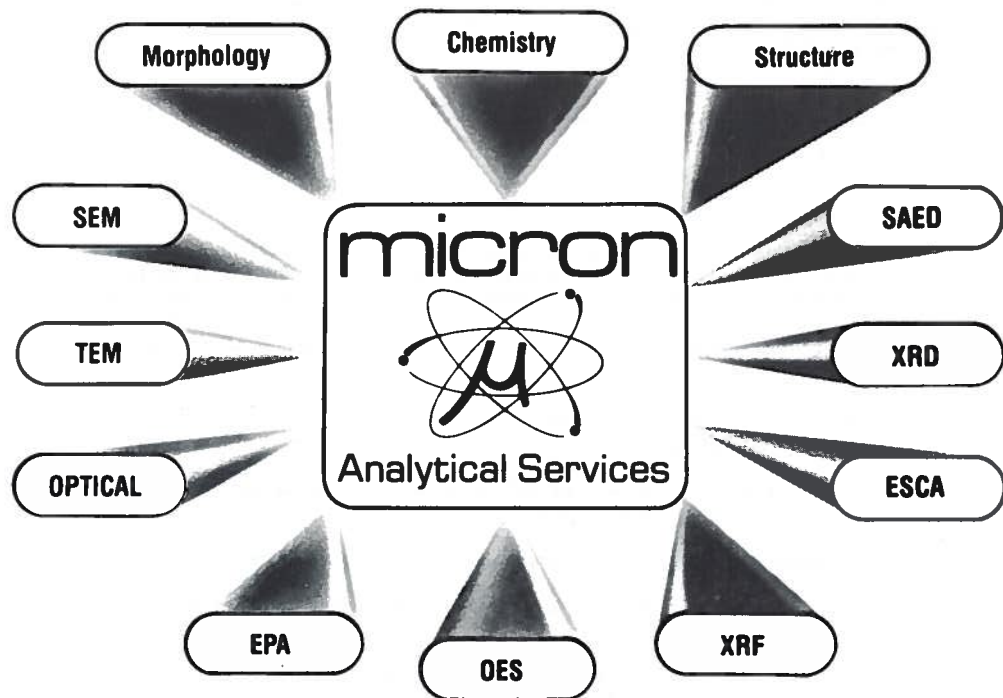
Join us. We are ready to welcome you. Call us at 410-532-5712 or FAX us at 410-333-5403 or e-mail us at lepley@umbc.edu.

Alvin Bober, Member  
Executive Committee

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