



THE

CHESAPEAKE CHEMIST

MARYLAND SECTION
AMERICAN CHEMICAL SOCIETY

VOL. LII

APRIL, 1996

NUMBER 4

AMERICAN CHEMICAL SOCIETY



For
Outstanding
Achievement
in
Chemistry

MARYLAND SECTION STUDENT AWARDS

Chairman Carl E. Minnier of the Students Awards Committee has announced the nominees for the ACS Maryland Section Student Awards for 1996. Winners were selected by their respective institutions.

The nominees will be guests of the Section at the April 17 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*.

The awardees are:

Yvette Ward, Morgan State University
 Ivan Baxter, Goucher College
 Yolanda Alston, Baltimore City Community College
 Vickie Baldwin, Anne Arundel Community College
 Sandra Minchow-Proffitt, Anne Arundel Community College
 Lisa Elliot, Catonsville Community College
 Joanna B. Rawlings, Harford Community College
 Ditina D. Raval, College of Notre Dame of Maryland
 Yonatan H. Grad, The Johns Hopkins University
 Kenneth V. Mills, Loyola College in Maryland
 Stephenie A. Boykin, University of Maryland, Baltimore County
 Thang Quoc Le, Essex Community College
 Adam M. Kline, Western Maryland College
 Charles Ciampaglio, Towson State University
 Melanie D. Ruane, Washington College
 Dawn McDowell, Hood College
 Robert A. Liotta, United States Naval Academy
 Karen E. Brown, Villa Julie College
 Shannon S. Yoon, St. Mary's College

THE JOHNS HOPKINS UNIVERSITY
 1996 SPRING CHEMISTRY COLLOQUIUM SCHEDULE

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

April 2	Professor John H. Griffin Stanford University	"Catalytic and other New Functions for Receptor-like Antibacterial Agents"
April 16	Professor Barry Trost Stanford University	"Alkynes - Atom Economical Building Blocks for Natural Product Synthesis"
April 23	Professor Michael Summers UMBC	"NMR Studies of HIV-I Proteins: Defining New Targets for Anti-viral Strategies"
April 30	Professor Robert Bowman University of Kansas	"Femtosecond Spectroscopy of Semiconductor and Molecular Systems"
May 7	Professor Michael Berry University of Bristol (U.K.)	"The Colours of Caustics"
May 13	Professor Masato Koreeda University of Michigan	"Chemistry of 1,2-Dithiins"



THE CHESAPEAKE CHEMIST

VOL. LII

APRIL, 1996

NUMBER 4

THE CHESAPEAKE CHEMIST STAFF

Raymond C. Petersen.....Editor
 9329 Joey Drive
 Ellicott City, MD 21042
 (410) 465-8520

Bruce L. Solnick....Business Manager
 P. O. Box 2355, Lab. Adm.
 Baltimore, MD 21203
 225-6209

SECTION OFFICERS

Shirish Shah.....Chairman
 College of Notre Dame
 4701 North Charles Street
 Baltimore, MD 21210
 (410) 532-5712

Mike Zapf.....Chairman-elect
 McCormick & Co., Inc.
 202 Wight Avenue
 Hunt Valley, MD 21031
 (410) 771-7471

Jan Kolakowski.....Secretary
 2610 Stanley Drive
 Baldwin, MD 21013
 (410) 836-6712

Robert von Tersch.....Treasurer
 Chemistry Department
 U. S. Naval Academy
 Annapolis, MD 21402
 (410) 293-6607

COUNCILORS

Donald Jones.....Western MD College
 (410) 857-2493 or 876-2055

David Roswell.....Loyola College
 (410) 617-2563

Charles Rowell....U.S. Naval Academy
 (410) 293-6602

Merle I. Eiss.....Home
 (410) 484-0521

ALTERNATE COUNCILORS

Elwin Penski Joseph Topping
 Linda Sweeting Joseph DeFrank

COMMITTEE CHAIRPERSONS

Remsen Award.....Timothy J. McNeese
 Loyola College
 617-2237

Maryland Chemist Award..Elwin Penski
 2515 Jerusalem Road
 Joppa, MD 21085
 (410) 877-2923

Maryland Service Award..Shree Iyengar
 Student Awards.....Carl Minnier
 Essex Community College
 7201 Rossville Blvd.
 Baltimore, MD 21237
 (410) 780-6613

Chem. Ed. and Safety....Shirish Shah
 Archives.....Ernest Silversmith
 House.....Shirish Shah
 W.R.Grace & Co. Award..William White
 ERDEC, Edgewood
 (410) 671-3058

Member Assistance.....Merle Eiss
 (410) 484-0521

Membership.....Joseph Lomax
 U.S. Naval Academy
 (410) 293-6611

Publicity.....Donald Jones
 Western Maryland College

Finance.....Jan Kolakowski
 Hospitality.....Robert von Tersch
 (410) 293-6607

Women Chemists.....Esther Gibbs
 (410) 337-6300

Professional Liaison.....Yhong Guo
 (410) 531-4588

Long Range Planning and Public
 Relations.....Shekar Munavalli

MEMBERS-AT-LARGE

Donald Hoster Catherine Fenselau
 Dale L. Whalen Asoka Katumuluwa
 Harold D. Banks

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.

JEFFERY K. SMART

Jeffery K. Smart is the Command Historian of the U.S. Army Chemical and Biological Defense Command at Aberdeen Proving Ground, MD. In this capacity, he is one of the Army's few specialists on the history of chemical and biological (CB) warfare and research and development of CB equipment and weapons. His office provides extensive support to chemical engineers and equipment developers conducting research at CBDCOM. He also provides environmental histories of former chemical production sites, serves as a resource for media inquiries, research requests, and special projects, and helps train soldiers by providing historical resources and staff rides to local Civil War battlefields.

At CBDCOM, Smart maintains a historical research collection of approximately 150 file cabinets of CB records dating from 1915. Unfortunately, the collection is not open to the public due to the nature of the information in the collection. Smart has written several special studies on the history of CB research and development and installation history, and has provided many colloquiums to Army personnel on the topic.

His professional education included a bachelor's degree (1978) and a master's degree (1981) in history from San Jose State University, San Jose, CA. His specialty was military history, with a concentration on the American Civil War. His master's thesis on a small battle in Missouri is currently being published as a full length book.

On his own time, he is a Director of the Harford County Historical Society and is the Editor of their quarterly publication, the *Harford Historical Bulletin*. As a hobby, he collects Civil War history books.

CHEMICAL WARFARE DURING THE CIVIL WAR

The Civil War proved to be a fertile time for inventors and developers of weapons and military equipment. Many of these inventions and concepts were the forerunners of items used on a much larger scale during the wars of the 20th century. Chemical warfare was a prime example.

In World War I, the Germans initiated large scale chemical warfare by releasing chlorine from cylinders at Ypres, Belgium. Yet the knowledge of chlorine as a weapon was much older. Shortly before the American Revolutionary War, Carl Wilhelm Scheele prepared chlorine from hydrochloric acid and manganese dioxide. Two years before the start of the War of 1812, Sir Humphry Davy further identified chlorine. In 1862, during the American Civil War, John W. Doughty, a New York school teacher, wrote the U.S. Secretary of War proposing a chlorine filled artillery shell for use against the Confederates.

During World War I, both sides undertook a tremendous effort to provide adequate gas masks for their troops exposed to chemical agents. Yet the technology was much older. In the 15th Century, Leonardo da Vinci envisioned a protective mask consisting of fine cloth dipped in water. In 1847, during the War with Mexico, Lewis P. Haslett designed a mask that used water moistened woolen fabric as a filtering device with an exhaust valve to prevent carbon dioxide poisoning. In 1854, during the Crimean War, John Stenhouse designed a protective mask using a charcoal filter and velvet lined facepiece that protected against chlorine and other gases. A year after the American Civil War, Theodore A. Hoffmann patented a mask that covered the mouth and nose, with an elastic border to prevent leakage.

Thus, the Civil War, with chemical weapons and gas masks on the drawing table, came very close to being the country's first chemical war. Instead, the war proved only to be the forerunner of what was to come.

APRIL MEETING

SCHEDULE:

- 6:00 Social Hour
Decker Auditorium
Lewis Hall
- 7:00 Dinner
- 8:00 Student Awards
- 8:30 Lecture
Jeffery K. Smart
Aberdeen Proving Ground
"Chemical Warfare During
the Civil War"

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

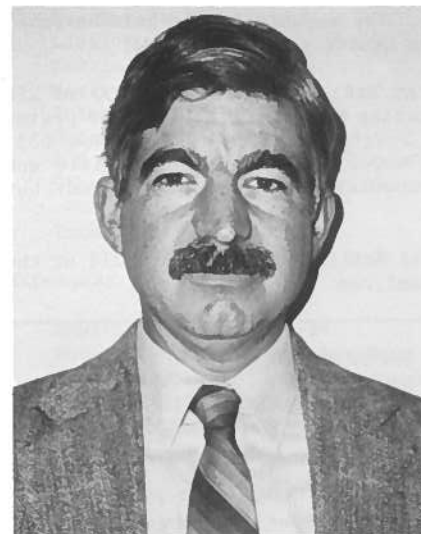
Dr. Shirish Shah
College of Notre Dame
4701 North Charles Street
Baltimore, MD 21210

by April 10. Late reservations may be made by calling

(410) 532-5712

by April 12. An 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.



JEFFERY K. SMART

DATE:

Wednesday, April 17, 1996

PLACE:

Western Maryland College
Westminster, Maryland

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

NOMINATING COMMITTEE

Maryland Section Chairman Shirish Shah has appointed the following members to a nominating committee: Joseph Defrank, Kris Kirk, Shekar Munavalli, Mike Zapf and Shirish Shah, Chairman.

If the proposed by-law changes detailed in our January-February issue receive final approval in 1996, this nominating committee will propose slates for officers to be voted upon in the elections of both 1996 and 1997. The committee is thus accepting recommendations for both years.

In the 1996 election, there will be chosen a chairman-elect, secretary, treasurer, two councilors, one alternate councilor and five members-at-large of the Executive Committee.

In the 1997 election, there will be chosen a chairman, chairman-elect, vice chairman, secretary, treasurer, three alternate councilors and five members-at-large.

EAS DEADLINE APPROACHES:
CALL FOR PAPERS

The deadline for receipt of preliminary abstracts for the 1996 Eastern Analytical Symposium (EAS) is April 15, 1996. Papers in all areas of the analytical and allied sciences are welcome. The meeting will be held November 17-22, 1996 at the Garden State Convention Center in Somerset, NJ.

Anyone interested in presenting a paper at EAS should submit a 200 to 250 word abstract of the proposed paper, indicating preference for oral or poster form. The abstract should be sent to Program Committee, P.O. Box 633, Montchanin, DE 18710-0633 USA. If the paper is accepted, the title and author(s) will be considered final. A special form is not required, but submissions must be typed.

For additional information, contact the EAS Hotline at (302) 738-6218 or the EAS Faxline at (302) 738-5275 or easinfo@aol.com

KEEP AN EYE OUT FOR BREAKTHROUGH

In spring 1996, *BreakThrough*, a documentary that will profile 20 African-American, Latino, and Native American scientists, will air on PBS. It will show the rewards and challenges minorities face when entering careers in the sciences and should increase the awareness of the contributions they make.

Another goal of the program is to increase the number of minority students who pursue careers in science, mathematics, and engineering by launching an outreach campaign in conjunction with the program. At the end of the program, 800 numbers will be posted for information nationwide on mentoring, associations, scholarships, and science career organizations. A World Wide Web site will be posted from which information can be downloaded. An expert's guide of minority scientists will be distributed to major media outlets, and print materials and a CD-ROM reference tool will be available for classroom instruction.

ACS has joined the list of outreach contacts to help students in grades 4-12, their parents, and teachers become aware of ACS education services and resources. Please support our efforts and be sure and keep an eye out for the program this spring!

- reprinted from ACSess

FORD TRAVEL GRANTS

Through a generous grant from the Ford Motor Company, the ACS Division of Polymeric Materials: Science and Engineering (PMSE) has established travel grants of \$500 for minority or female students pursuing advanced degrees in polymer science and engineering-related disciplines. Awardees can attend ACS national meetings and present their graduate work in either poster or oral format in PMSE-sponsored symposia and/or general sessions. A total of four awardees, two at each national meeting, will be selected each year based on submitted abstracts, preprints, and letters of recommendation.

These grants are intended to assist the growing numbers of minorities entering the science and engineering workforce in networking with their colleagues. For further information, contact Elsa Reichmanis, chairman of the PMSE Division, AT&T Bell Laboratories, 600 Mountain Avenue, Room 1D-260, Murray Hill, NJ 07974.

-reprinted from ACSess

MARYLAND SECTION 1995 FINANCIAL REPORT

Revenues:

Annual ACS Allotment.....	\$10,741.00
New Member Commissions.....	50.00
Local Section Dues.....	5,482.97
Newsletters.....	5.00
Meals (Total Revenues).....	5,166.50
Interest, Dividends.....	852.30
Donations, Contributions.....	5,210.00
ACS Rebate for Councilor Travel Expenses.....	675.00
Other - Includes Regional Meeting Income.....	2,453.83
Total Revenues.....	\$30,636.60

Expenses:

Administrative Expenses.....	\$ 1,013.00
Short Courses (Continuing Education).....	149.43
Local Meetings - Includes Speaker Expenses.....	2,549.15
Meals (Total Expenses).....	6,938.14
Newsletters, Meeting Announcements.....	10,452.71
Awards.....	7,398.71
Travel Subsidies to Councilors.....	1,359.16
Other - Includes Regional Meeting Expense.....	659.49
Total Expenses.....	\$30,519.79

HALL OF FAME
CALL FOR NOMINATIONS

The Sampling, On-Site Analysis and Sample Preparation Conference Hall of Fame award is an annual recognition made to an individual who has made significant technical and/or business developments in one of these subjects. Criteria used in judging include career history, relationship with others in the subject, publications and presentations, teaching, leadership, product and business development and other related accomplishments. A luncheon presentation for this Award will take place during the Sampling, On-Site Analysis and Sample Preparation Conference in Pittsburgh, PA on June 27, 1996. Dr. Larry Keith from Radion Corporation won this award last year.

Nominations must be received by May 1, 1996. The nominating letters should address the selection criteria considered relevant by the nominator. A current address and telephone number should be provided for each nominee and the nominator.

Send nomination letters for this Hall of Fame to: Henry Nowicki, 1996 Chairperson, PACS, Inc., 409 Meade Drive, Coraopolis, PA 15108, Phone: (412) 457-6576, FAX: (412) 457-1214.

MARYLAND CHEMIST AWARD NOMINATIONS

Nominations are solicited for the Maryland Chemist Award. For information on nomination procedures, please call Elwin Penski at (410) 877-2923.

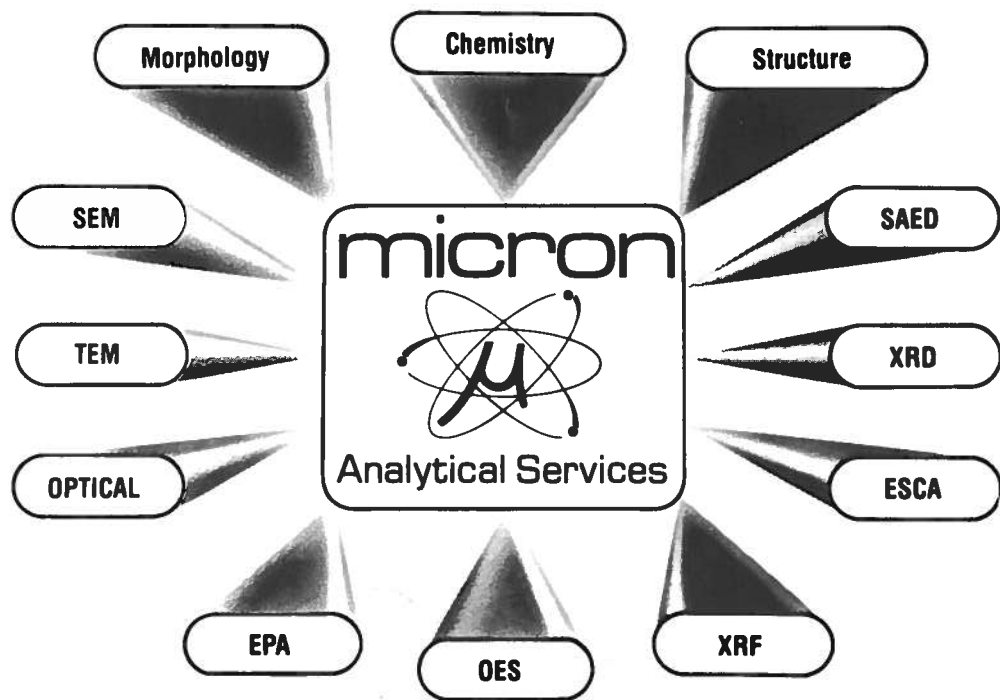
REMSEN AWARD

The 1996 Remsen Award meeting is scheduled for May 15 at The Johns Hopkins University.

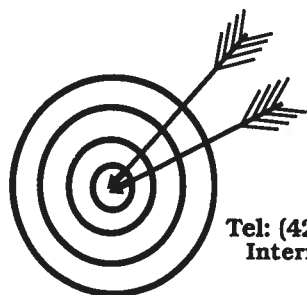
00117980 L301 396
YALE HOWARD CAPLAN
3411 PHILIPS DR
PIKESVILLE, MD 21208-1827

Nonprofit Org.
U. S. Postage
PAID
Baltimore, Md.
Permit No. 2917

PLEASE DO NOT DELAY — DATED NOTICE INSIDE



3815 Lancaster Pike Wilmington, Delaware 19805
(302) 998-1184



**Galbraith[®] Laboratories
Guarantees Accurate Results.**

Galbraith Laboratories guarantees
a bullseye every time. Isn't your
business worth the best?

Tel: (423) 546-1335 Fax: (423) 546-7209
Internet: <http://www.galbraith.com/labinfo>

Call or fax for more info.

Analysis for all elements • Trace Analyses • Environmental Analyses • GLP • cGMP

