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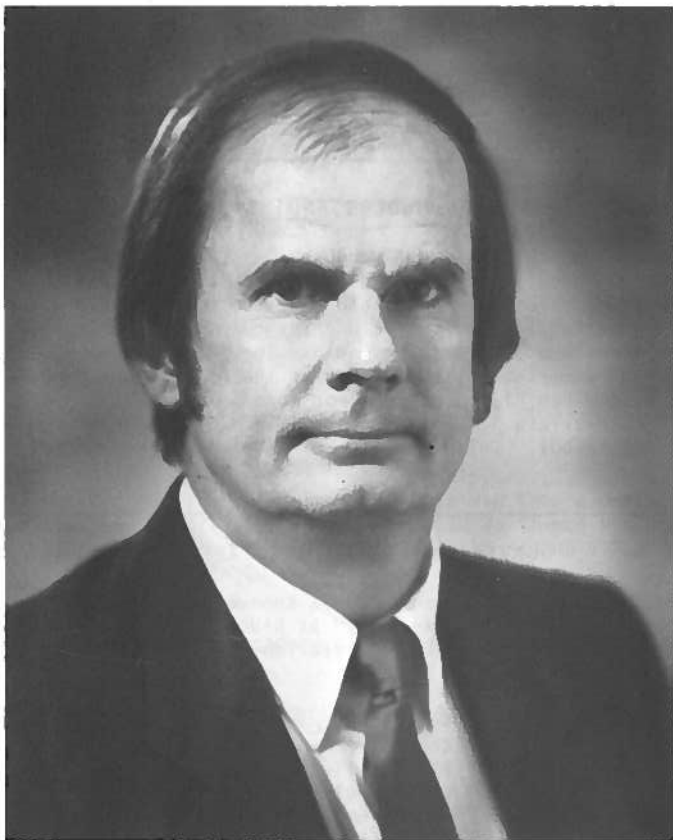
CHESAPEAKE CHEMIST

MARYLAND SECTION
AMERICAN CHEMICAL SOCIETY

VOL. XLIII

OCTOBER, 1987

NUMBER 8



KENNER C. RICE

THE EDITOR NOTES

Once again it is time for our annual visit to the W. R. Grace Research Center. We urge you all to attend this very popular meeting.

Special thanks are due Hope and Al Bober for their efforts in arranging and conducting the joint picnic with the Chemical Society of Washington held at the ACS Belmont Conference Center in July. A fine time was had by all, but we were outnumbered by our counterparts from D.C. Don't miss it next time.

1987 EDITION OF "WHAT'S HAPPENING IN CHEMISTRY?" AVAILABLE

The latest (1987) edition of "What's Happening in Chemistry?" is now available to local sections for distribution to schools, libraries, and other outlets in their areas. The price is \$4.00 per copy, or \$3.50 in quantities of 50 or more. Flyers describing the contents and carrying an order blank are available without charge.

This year's edition includes articles on the following: Novel foams that made exploration of the "Titanic" possible; an easy way to make diamond film; new approaches to cancer therapy; the chemical basis of memory; key bacterial toxin discovered; solar-powered pesticides; chemical "scissors" speed rDNA work; and organic chemicals that challenge silicon's reign as king of semiconductors. The 54-page paperbound handbook, published by the ACS Department of Public Communication, has for a wraparound cover a striking painting of the "Alvin" and "Jason Jr." examining the sunken "Titanic" on the ocean floor.

NEW AWARD FOR PUBLIC UNDERSTANDING OF SCIENCE & TECHNOLOGY

A new annual award, the AAAS/Westinghouse Award for Public Understanding of Science and Technology, has been opened for nominations until October 15. It is for working scientists and engineers from all disciplines who make outstanding contributions to public understanding of science and technology and are not members of the working media. The \$2,500 prize will be presented during the AAAS (American Association for the Advancement of Science) annual meeting in Boston Feb. 11-15, 1988. For more information and nomination forms, contact Patricia S. Curlin; AAAS; 1333 H St. NW; Washington, DC 20005 (phone: 202-326-6600). This should be of interest to many local section members.

YOUNGER CHEMISTS COMMITTEE ROAD SHOW

The Younger Chemists Committee of ACS is sponsoring a road show entitled "Perspectives on Careers in Chemistry" at Rider College on Saturday November 7 from 8:30 am to 4:30 pm. The registration fee of \$4.00 should be sent by November 1 to:

Dr. John E. Sheats
Chemistry Department
Rider College
Lawrenceville, NJ 08648
Phone (609) 896-5092

This road show is geared to high school and college students, their teachers and persons just starting in the chemistry profession. It is one of two in the east and six nationally to be held this year.



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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.

OCTOBER MEETING

Dr. Kenner C. Rice received his B.S. from Virginia Military Institute in 1961 and his Ph.D. from Georgia Institute of Technology in 1966. He was in the new antimalarial drug synthesis program while on active duty in the U.S. Army at the Walter Reed Army Institute of Research and was later employed as Senior Scientist by Ciba-Geigy Corporation. He joined the National Institute of Diabetes, Digestive and Kidney Diseases in 1972 as a post-doctoral fellow and became a senior investigator in 1977. Dr. Rice now serves as chief of the Section on Drug Design and Synthesis in the Laboratory of Neuroscience of this Institute. He is the author or coauthor of about 140 research papers and patents, principally in the area of the chemistry and pharmacology of drugs which affect the central nervous system. Dr. Rice developed the first practical total synthesis of opium derived narcotics and antagonists, now known as the NIH Opiate Total Synthesis, which offers independence from natural sources of these drugs. In recent years he has been the recipient of several major research awards including the 1985 Chemical Society of Washington Hillebrand Prize and the 1987 American Pharmaceutical Society Research Achievement Award in Pharmaceutical and Medicinal Chemistry.

OPIATES

Opiate receptors are saturable, high affinity, stereospecific binding sites localized in anatomically well-defined regions of the mammalian central nervous system, which mediate the effects of narcotics, their antagonists and the endogenous opioid peptide ligands (endorphins). The opiate receptor-endorphin system consists of several well defined receptor subtypes and numerous endorphins, and it appears likely to control many aspects of the human perception of pain, pleasure and mood. Abnormal function of this system is probably involved in schizophrenia, various affective and other little-understood mental disorders. We are utilizing a multidisciplinary approach to gain further insight into the enormously complex problem of understanding the structure and function of the opiate receptor endorphin system in normal and pathological states. An overview of our program, in which drug design and synthesis plays a central role, will include (a) development of the NIH Opiate Total Synthesis, (b) imaging opiate receptors in the living primate brain and (c) autoradiographic mapping and purification of opiate receptors.

HISTORICAL MATERIAL NEEDED

The Maryland Section will observe its 75th anniversary in October, 1989. Susan and John Lever of Johns Hopkins's Department of Environmental Health Sciences and Radiology are co-chairing a committee that is putting together a gala celebration to mark this event. Naturally, a look at the section's history will be an important part of the observance; for this, we need your help.

Please look around for any letters, photographs, documents and other memorabilia that have something to do with the history of our section. We could use these as displays (posters, exhibits, etc.) at the celebration and/or incorporate them in the official anniversary program booklet. Please send these materials to the archivist:

Ernie Silversmith
2607 Taney Road
Baltimore, Maryland 21209

We will, of course, return your items to you if you wish. Many thanks for your cooperation.

DATE & PLACE:

October 21, 1987
W. R. Grace Research Center
Rte 32 west of Rte 29
Clarksville, Maryland

Dinner price \$12.00 per person, but spouses, retired chemists and students may attend for \$10.00.

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

SCHEDULE:

5:30 Early speaker
To be announced

6:30 Social Hour
Sponsored by W. R. Grace

7:00 Dinner

8:00 Kenner C. Rice
N.I.H.
"Opiates"

John Corliss
P.O. Box 20899
Baltimore, MD 21209

by October 15. Late reservations may be made by calling:

John Corliss at (301) 235-6612
Nolan Phillips at (301) 939-3500
Douglas Dudis at (301) 267-3302

by October 20.

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

FUTURE MEETINGS 1987-1988

DATE AND LOCATION	SPEAKER AND AFFILIATION	SUBJECT
November 18, 1987 Aberdeen Proving Ground	Dr. Gary W. Carriveau National Gallery of Art	Chemistry as an Aid in Understanding Art
December Johns Hopkins	Maryland Chemist Award	
February 3, 1988 College of Notre Dame	Dr. Rita R. Colwell University of Maryland	Developments in Marine Biotechnology
	Early speaker not yet identified	
March 16, 1988 Linthicum	Not yet identified	Maritime Institute of Technology
April College of Notre Dame	Dr. Alan McClellan E. I. DuPont	Chemical Careers in Industry

REMSEN AWARD NOMINATIONS

The Remsen Award Committee is soliciting nominees to be considered for future Remsen Awards. The nomination should include all information which could help the committee in making its selection as well as a curriculum vitae and list of publications of the nominee.

Send nominations to Timothy J. McNeese, Department of Chemistry, Loyola College, 4501 North Charles Street, Baltimore, MD 21210.



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Chemical Cleaning Solvent Analyses and Selection
Interpretation of Results

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American Chemical Society
American Institute of Chemists
Society for Applied Spectroscopy

CHEMISTRY DAY CELEBRATION

NOVEMBER 6, 1987

MARYLAND SCIENCE CENTER

CEREMONIES (3-5pm) INCLUDE

Presentation of Maryland Section Service Award

Main Speaker: Dr. William N. Lipscomb, Nobel Laureate

*Reception : 5-7 pm. Complimentary food and drinks

* Advance reservations necessary for reception.
Please contact Dr. Paul Carter (301-563-6168)

ELECTION OF OFFICERS

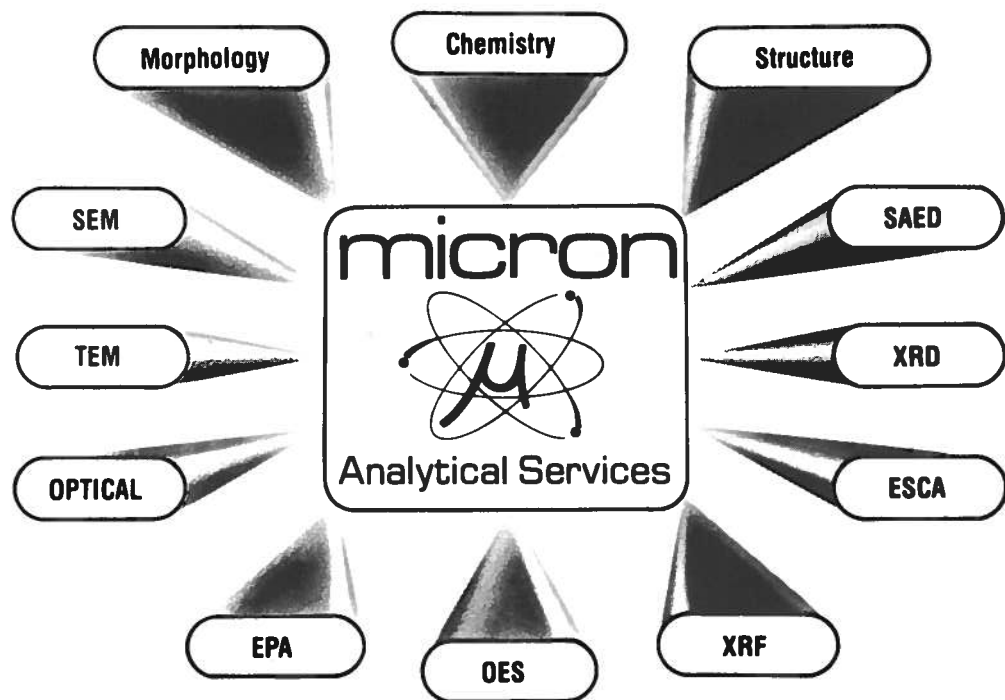
Please complete the following ballot for the election of the 1988 officers, councilors and members-at-large of the Maryland Section and mail it to Kris Kirk, 4000 Mayberry Avenue, Baltimore, MD 21206. Please sign the envelope, but not the ballot itself, so that membership can be verified.

Table with 2 columns: Position and Name. Includes Chairman-elect, Secretary, Treasurer, Councilor, Alternate Councilor, Members-at-large and names like Joseph Topping, Maria (Kris) Kirk, Joseph DeFrank, Donald Jones, David Roswell, Timothy McNeese, Elwin Penski, Hope Bober, Donald Hoster, James King, Dale Whalen, Jeanette Hamilton.

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