



THE **CHESAPEAKE
CHEMIST**

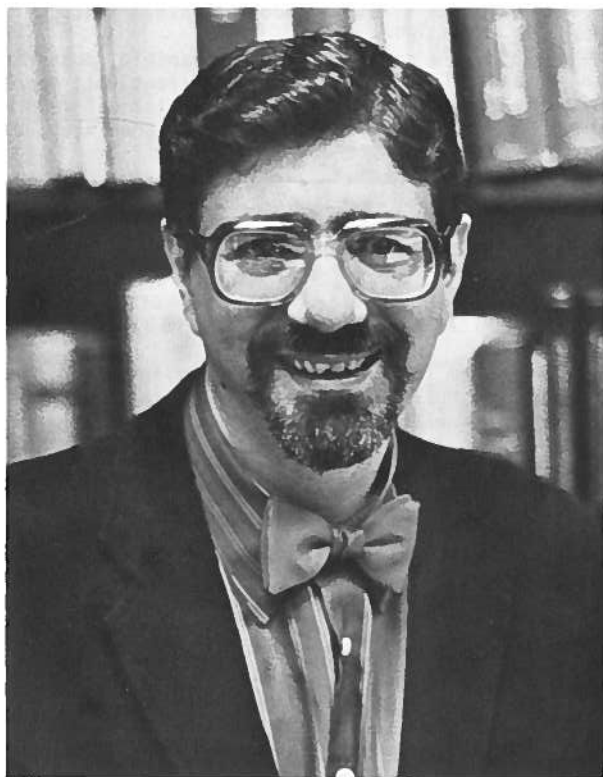
MARYLAND SECTION
AMERICAN CHEMICAL SOCIETY

VOL. XLI

MAY, 1985

NUMBER 5

1985 REMSEN AWARD



RICHARD N. ZARE

THE EDITOR NOTES

With the Remsen Lecture we conclude our current lecture series. The program responsibility now shifts from Chairman Harold Klapper to Chairman-elect Tom Bitterwolf. We thank Harold for an interesting series of lectures and look forward to Tom's offerings.

We wish everyone a good summer and look forward to seeing you all in September.

NATIONAL COMPUTER WORKSHOPS

The Seventh C. C. C. E. National Computer Workshops - East will be held July 28 - August 1, 1985 at Clarkson University in Potsdam, NY. These workshops are sponsored by the American Chemical Society Division of Chemical Education's Committee on Computers in Chemical Education and Project SERAPHIM. The workshops and their directors (indicated in parentheses) are:

- Getting Started (Paul Cauchon, Canterbury School)
- Design and Development of Computer Assisted Instruction Programs (Alfred J. Lata, University of Kansas)
- Introduction to Pascal (Kenneth Loach, SUNY at Plattsburgh)
- Microcomputer Interfacing (Chris Titus, The Blacksburg Group)
- Applications Software (Patricia Flath, Paul Smith's College and Donald Rosenthal, Clarkson University)
- Microcomputer Graphics (Victor Bendall, Eastern Kentucky University)

In addition to the above, a software and book exhibit, poster session and software exchange will be featured. Each registrant will enroll in one workshop. The advance registration fee is \$100. Additional information may be obtained from Dr. Donald Rosenthal, Department of Chemistry, Clarkson University, Potsdam, NY 13676. (315-268-6647)

CHEMICAL INFORMATION SYSTEMS

CIS, the online subscription service operated by CIS, Inc., announced the addition of two new chemical databases effective 18 February 1985.

ISHOW (Information System for Hazardous Organics in Water) contains six types of data (melting point, boiling point, partition coefficient, acid dissociation constant, water solubility, vapor pressure) for more than 5,000 chemical substances.

GENETOX contains mutagenicity information on more than 3,000 chemicals as tested against thirty-eight biological systems.

Both databases were produced by the Office of Toxic Substances of the Environmental Protection Agency. They are part of the SPHERE (Scientific Parameters for Health and the Environment, Retrieval and Estimation) component of The CIS.

The CIS is a commercial continuation of the former NIH/EPA CIS, which terminated operations on 1 November 1984 when EPA ended its managerial involvement with the system. It includes more than twenty databases, containing information on more than 350,000 chemical substances.

Information on The CIS can be obtained from CIS, Inc., 7215 York Road, Baltimore, MD 21212, 301-321-8440.



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THE CHESAPEAKE CHEMIST STAFF

- Raymond C. Petersen.....Editor
9329 Joey Drive
Ellicott City, MD 21043
465-8520
- Joseph Topping.....Associate Editor
Department of Chemistry
Towson State University
Towson, MD 21204
321-3056
- Alan Harmon.....Business Manager
McCormick & Co., Inc.
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667-7480

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THE 40th REMSEN LECTURER

RICHARD N. ZARE

Professor Richard N. Zare, Stanford University, is a leader in using lasers to investigate the dynamics of chemical reactions and to study molecular spectroscopy. His work spans a vast range, including gas phase reactions and spectroscopy, processes on surfaces, and applications of lasers to problems in chemical analysis.

Professor Zare is a member of the National Academy of Sciences and the American Academy of Arts and Sciences. He has received numerous awards, most recently the 1985 National Medal of Science Award with the citation: "For his seminal contributions to molecular spectroscopy, photochemistry, and chemical reaction dynamics, especially for his incisive theoretical methods and the development of the experimental technique of laser induced fluorescence." He has also received the 1985 Langmuir Prize in Chemical Physics with the citation: "For his seminal innovations in developing many experimental and theoretical methods for study of molecular structure and collision processes." In 1983, he received the Spectroscopy Society of Pittsburgh Award, and in 1981, the Earle K. Plyler Prize of the American Physical Society with the citation: "For seminal contributions to molecular spectroscopy by incisive theoretical methods and development of the elegant, powerful, experimental technique of laser-induced fluorescence." In 1979, he was the first recipient of the Michael Polanyi Medal, presented at the Faraday Discussions of the Chemical Society at Birmingham, England. He is currently the Shell Distinguished Professor of Chemistry at Stanford University.

LASERS: THE CHEMIST'S PRIVATE EYE

Selected applications of laser methods to chemical analysis are reviewed. It may be possible to attain in some cases the ultimate limit of single-atom or single-molecule detection using multiphoton ionization or laser fluorescence excitation. In other cases the real challenge is to quantitate trace species found in complex matrices of interest, such as biomedically active species in human serum. Laser-based detection combined with other powerful separation techniques shows promise of allowing chemists to peer at molecular behavior in situations of great practical importance.

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ENVIRONMENTAL

SOLVENTS

THE 40th REMSEN LECTURE

DATE & TIME:

Monday, May 13, 1985
8:00 pm

PLACE:

Remsen Hall, Room 101
Homewood Campus of
The Johns Hopkins University

SPEAKER:

Dr. Richard N. Zare
Stanford University
"Lasers: The Chemist's
Private Eye"

Dinner reservations are necessary and should be made by mailing checks to

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

COCKTAILS & DINNER:

The Johns Hopkins University
Glass Pavilion

by May 4. Checks should be payable to Maryland Section of ACS. Late reservations may be made by calling

Cocktails: 6:00 pm
Dinner: 6:30 pm

John Corliss at (301) 235-6612 or
Nolan Phillips at (301) 939-3500

The Social Hour is sponsored
by Fisher Scientific

Dinner price \$10.00 per person, but spouses, retired chemists and students may attend for \$8.00

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

THE REMSEN AWARD

The annual Remsen Memorial Lectures were inaugurated in May, 1946 by the Maryland Section of the ACS to honor Ira Remsen, first Professor of Chemistry and second President of the Johns Hopkins University. The Remsen Memorial Lecturers are chemists of outstanding achievement, in keeping with Ira Remsen's long and devoted career as an exponent of the highest standards in teaching and research in chemistry.

Previous Remsen Award winners were:

1984 Earl L. Muetterties	1964 Paul D. Bartlett
1983 George M. Whitesides	1963 Harold C. Urey
1982 Harden McConnell	1962 George Porter
1981 Koji Nakanishi	1961 Herbert C. Brown
1980 Roald Hoffman	1960 Henry Eyring
1979 Harry B. Gray	1959 Edward Teller
1978 John Charles Polanyi	1958 Robert B. Woodward
1977 Ronald Breslow	1957 Melvin Calvin
1976 William N. Lipscomb, Jr.	1956 Farrington Daniels
1975 Henry Taube	1955 Willard F. Libby
1974 Elias J. Corey	1954 Vincent du Vigneaud
1973 Frank H. Westheimer	1953 Edward L. Tatum
1972 Charles H. Townes	1952 W. Mansfield Clark
1971 George C. Pimentel	1951 Hugh S. Taylor
1970 George S. Hammond	1950 Edward C. Kendall
1969 Albert L. Lehninger	1949 Joel H. Hildebrand
1968 Har G. Khorana	1948 Elmer V. McCollum
1967 Marshall W. Nirenberg	1947 Samuel C. Lind
1966 Paul H. Emmett	1946 Roger Adams
1965 James R. Arnold	

NINETEENTH MARM

The 19th Middle Atlantic Regional Meeting will be held May 21 - 23, 1985 at Monmouth College, West Long Branch, New Jersey. Twenty-six special symposium sessions and seventeen general technical sessions are planned.

The twenty-six special symposia will include sessions on atmospheric chemistry, biotechnology, environmental chemistry, flavors and fragrances, polymer chemistry and public affairs, among others.

1985 CAROTHERS' LECTURE AWARDEE

The Delaware Section of the ACS announces that Professor Paul J. Flory will be the recipient of the 1985 Carothers Award presented at a special meeting of the Delaware Section on March 13, 1985. The purpose of the Lecture Award is to honor scientific innovators who have made outstanding contributions and advances that have paved the way in industrial applications of chemistry. The Lecture Award was established in 1976 in memory of Wallace Carothers, who was one of the founders of modern polymer chemistry.

Professor Flory's association with Delaware goes back to the 1930's when he and Carothers worked together at the Du Pont Experimental Station. Over the last fifty years, Professor Flory has continued to be a pioneer in the field of polymer science. His research has influenced every aspect of polymer science and, indeed, forms the basis of much of the field as we know it today. Professor Flory is best known for his work on the theory of polymerization mechanisms, the configurational statistics of long chain molecules, the physical and thermodynamic properties of high polymers, rubber elasticity theory, and the theory of polymer solutions.

Professor Flory has been the recipient of many distinguished awards. In 1974, he won the Nobel Prize in chemistry for his pioneering research on polymers. Other awards include the Nichols Medal, Debye Award, Kirkwood Medal, Gibbs Medal, Priestley Medal and the National Medal of Science. He is currently Emeritus Professor of Chemistry at Stanford University.

FACSS ANNUAL MEETING

The twelfth annual meeting of the Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) will be held September 29 through October 4, 1985 at the Philadelphia Marriott Hotel in Philadelphia.

The sponsoring organizations for the meeting are: the Society for Applied Spectroscopy; the Analysis Instrumentation Division of the Instrument Society of America; the Association of Analytical Chemists, Inc. (Anachem); the ACS Division of Analytical Chemistry; and the Chromatography Forum of the Delaware Valley.

The meeting will feature about forty symposia with 450 papers covering all areas of analytical chemistry. Further information can be obtained from Publicity Chairman Richard J. Knauer, Armco, Inc., PO Box 1697, Baltimore, Maryland 21203.

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.

MARYLAND SECTION 1984 FINANCIAL REPORT

Revenues:	
Annual ACS Allotment	\$ 6,150.00
New Member Commissions	15.00
Local Section Dues	3,661.50
Publications	6,272.96
Meals	11,415.00
Interest, Dividends	1,788.27
Return from 17th MARM	445.05
Total Revenues	\$29,747.78

Expenses:	
Administrative Expenses	\$ 1,137.54
Education Activities	1,150.00
Local Meetings (Speakers and Related Expenses)	4,385.56
Meals	12,018.79
Publications	6,475.25
Announcements	269.93
Awards	1,561.51
Project SEED	100.00
Subsidy to Publication Account	4,883.03
Total Expenses	\$31,981.61

Capital Changes:	
Capital Balance January 1, 1984	\$22,369.68
Net Loss in 1984	\$ 2,233.83
Capital Balance January 1, 1985	\$20,135.85

CHESAPEAKE CHEMIST 1984 FINANCIAL REPORT

Revenues:	
Advertising	\$ 1,353.50
Local Section Subsidy	4,883.03
Interest	36.43
Total Revenues	\$ 6,272.96

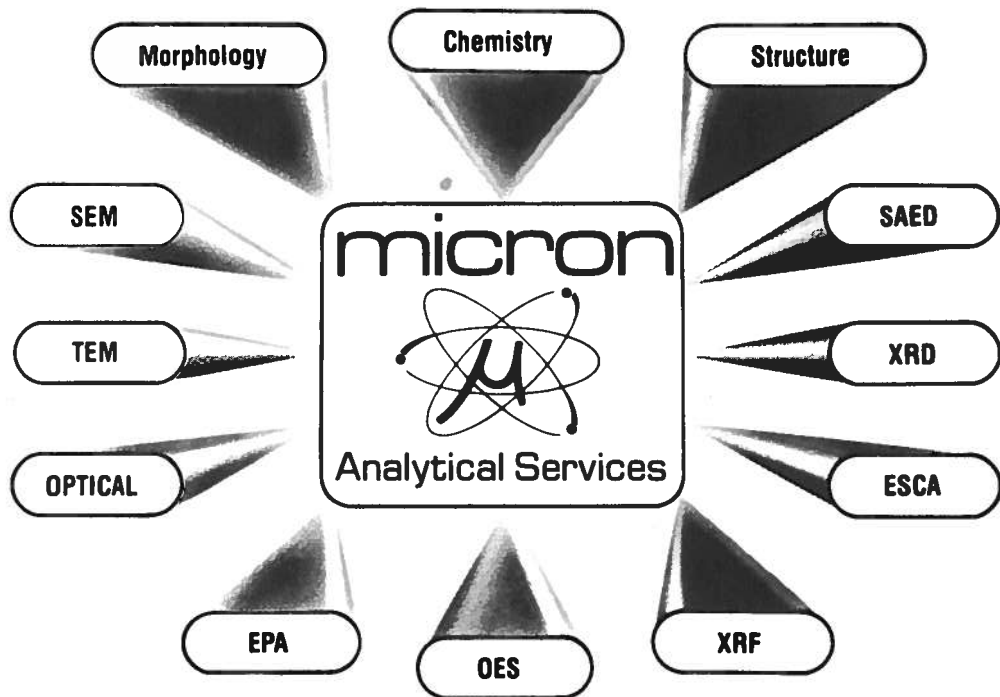
Expenses:	
Printing	\$ 4,312.45
Addressing	595.00
Postage	1,106.95
Typing	428.84
Miscellaneous	32.01
Total Expenses	\$ 6,475.25

Cash Balance January 1, 1984	\$ 833.02
Cash Balance January 1, 1985	\$ 630.73

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