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CHEMIST**

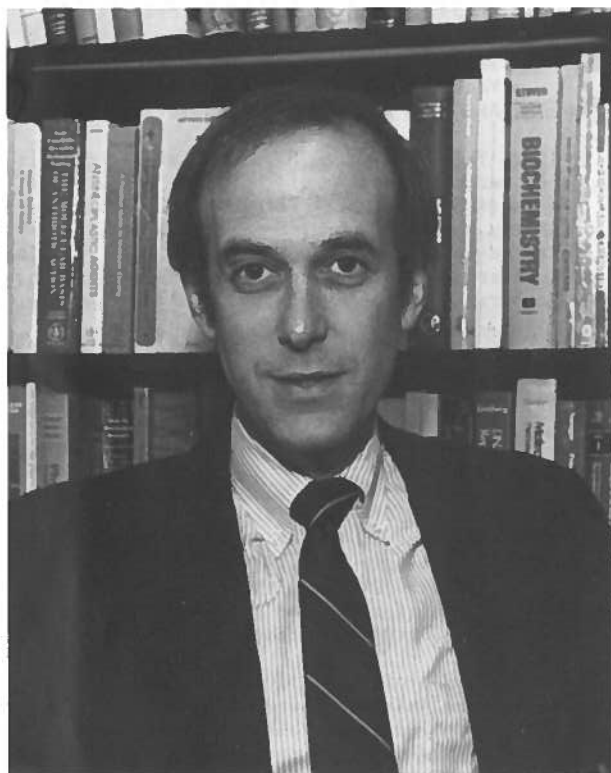
MARYLAND SECTION
AMERICAN CHEMICAL SOCIETY

VOL. XLIII

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NUMBER 5

1987 REMSEN AWARD



STEPHEN J. LIPPARD

THE EDITOR NOTES

With this month's Remsen Award Lecture our current lecture series comes to an end. We thank Al Bober for his efforts and look forward to the offerings of new program chairman Bill White.

This usually means that we take a vacation until the September meeting, but this year we are planning a joint picnic with the Chemical Society of Washington (ACS Capital Section). This is scheduled for July 19 at the ACS's Belmont resort conference center in Elkridge.

We applaud the presentation of the 1986 Maryland Section Distinguished Service Award to Elwin Penski. We hope to be able to publish more about this in the near future.

MARYLAND CHEMIST AWARD

Nominations for the 1987 Maryland Chemist Award should be sent to Harold Klapper, 3313 Terrapin Road, Baltimore, MD 21208 by June 1.

This award was established in 1962 to recognize and to honor a member of the Maryland Section for outstanding achievement in pure or applied chemistry, chemical engineering or chemical education.

When did YOU last attend a Maryland Section meeting?

YALE CAPLAN ASSUMES PRESIDENCY OF THE AMERICAN ACADEMY OF FORENSIC SCIENCES

On February 21, 1987, Yale H. Caplan, Ph.D., Chief Toxicologist for the Office of the Chief Medical Examiner of the State of Maryland, assumed the presidency of the American Academy of Forensic Sciences. The Academy is an organization of nearly three thousand forensic scientists representing a wide variety of technical disciplines including toxicology, pathology, odontology, psychiatry, criminalistics, engineering, document examination, physical anthropology and others including attorneys.

Dr. Caplan was born in Baltimore and received his Bachelor of Science in Pharmacy and Ph.D. degrees from the University of Maryland at Baltimore. He presently continues his association with the University holding concurrent positions of Professor and Director of Forensic Toxicology (School of Medicine) and Adjunct Professor of Pharmacology and Toxicology and Medicinal Chemistry (School of Pharmacy).

His duties include acting as Scientific Director of the State Alcohol Testing Program. He serves as advisor to State's attorneys regarding alcohol and drug testing issues and regularly testifies as an expert witness in court. He was a recipient of the 1986 Distinguished Service Award of the Maryland State Alcohol Control Administration and is a member of the Governor's Commission To Study Deaths Resulting From Building Fires.

Dr. Caplan has been active professionally. He is a diplomate, director and secretary-treasurer of the American Board of Forensic Toxicology, past president of the Society of Forensic Toxicologists, past chairman of the Maryland Section of the American Chemical Society and a member of the National Safety Council's Committee on Alcohol and Other Drugs. He has served as a consultant to attorneys and laboratories. Author of a number of scientific publications, he is a member of the Editorial Advisory Board of the Journal of Forensic Sciences and the Journal of Analytical Toxicology.



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THE 42nd REMSEN LECTURER

STEPHEN J. LIPPARD

Stephen J. Lippard, professor of chemistry at Massachusetts Institute of Technology, has made outstanding contributions to inorganic chemistry related to the preparation and function of bioinorganic substances, and the synthesis, structure, and reactivity of organometallic complexes. His scientific investigations include the study of the mechanism of action of platinum anticancer drugs, the binding and activation of organic molecules using polymetallic and high coordinate transition metal centers, and the preparation and chemistry of models for polynuclear iron centers in biology.

Professor Lippard is an elected fellow of the American Academy of Arts and Sciences and the American Association for the Advancement of Science. His outstanding achievements have been recognized with the 1987 ACS Award in Inorganic Chemistry and the 1985 Henry J. Albert Award of the International Precious Metals Institute. He has been a fellow of the John E. Fogarty International Center, the John Simon Guggenheim Foundation, the Alfred P. Sloan Foundation, and a Camille and Henry Dreyfus Teacher-Scholar Awardee.

PLATINUM ANTICANCER DRUGS: HOW MIGHT THEY WORK?

Principles that govern the binding of platinum anticancer drugs to DNA, and strategies devised to reveal the regio- and stereoselectivity of these interactions, will be described. Covalent binding characterizes the DNA interactions of platinum anticancer drugs, such as *cis*-[Pt(NH₃)₂Cl₂] (*cis*-DDP), which forms intrastrand crosslinks between adjacent guanosine nucleotides. The structures of this principal binding mode have been elucidated by X-ray crystallographic and NMR studies of *cis*-DDP bound to oligonucleotides of defined sequence in DNA. The chemotherapeutically inactive trans isomer makes adducts between non-adjacent nucleotides in the DNA double helix. These differences in the fundamental coordination chemistry of the two molecules with DNA, the putative target of *cis*-DDP in tumor cells, provides a rationale for the greater antitumor activity of the *cis* isomer that is currently being tested with site-specifically platinated DNAs.

NOMINATIONS FOR 1988 REMSEN AWARD

Please send nominations for the 1988 Remsen Award to any of the members of the Remsen Award Selection Committee.

The nomination should be accompanied by a curriculum vitae and publication list of the nominee, as well as any other information that will help the Selection Committee.

REMSSEN AWARD SELECTION COMMITTEE

Timothy J. McNeese, Chairman
Department of Chemistry
Loyola College
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Baltimore, MD 21210
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(276-5003)

Harold Klapper
SMCCR-RSC-P
Chemical Division, CRDC
Aberdeen Proving Ground, MD 21010
(671-2265)

THE 42nd REMSEN AWARD

DATE AND TIME:

Wednesday, May 20, 1987
8:15 pm

PLACE:

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

SPEAKER AND TOPIC:

THE REMSEN AWARD ADDRESS
Dr. Stephen J. Lippard
Mass. Inst. of Technology
'Platinum Anticancer Drugs:
How Might They Work?'

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

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

COCKTAILS AND DINNER:

The Johns Hopkins University
Glass Pavilion
Social Hour 6:30 pm
Dinner 7:00 pm

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

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

by May 11. Late reservations may be made by calling

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

by May 18.

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.

Last year's recipient was Gilbert Stork of Columbia University. Previous winners were:

1985	Richard N. Zare	1965	James R. Arnold
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

The Chemical Society of Washington and the
Maryland Section of ACS Present
THE ACS SUMMER PICNIC - SUNDAY JULY 19, 1987
Belmont Conference Center

The National Conference Center of the American Chemical Society
6555 Belmont Woods Road, ElkrIDGE, Maryland 21227

- * Swimming - Tennis - Volleyball
- * 11:00 am to 5:00 pm
- * Beer, soft drinks, hot dogs and hamburgers will be provided
- * \$4.00 per person, maximum of \$10.00 per family
- * Please bring a covered dish - salad, side dish or dessert
- * Bring your swim suit, tennis gear, blankets, lawn chairs, frisbees
- * Let's challenge the Capital Section to a friendly (competitive) softball game
- * If you are interested in attending, please call
Hope Bober (301) 792-0970 or
Alvin Bober (301) 655-5254
so we can get a head count
- * See you July 19

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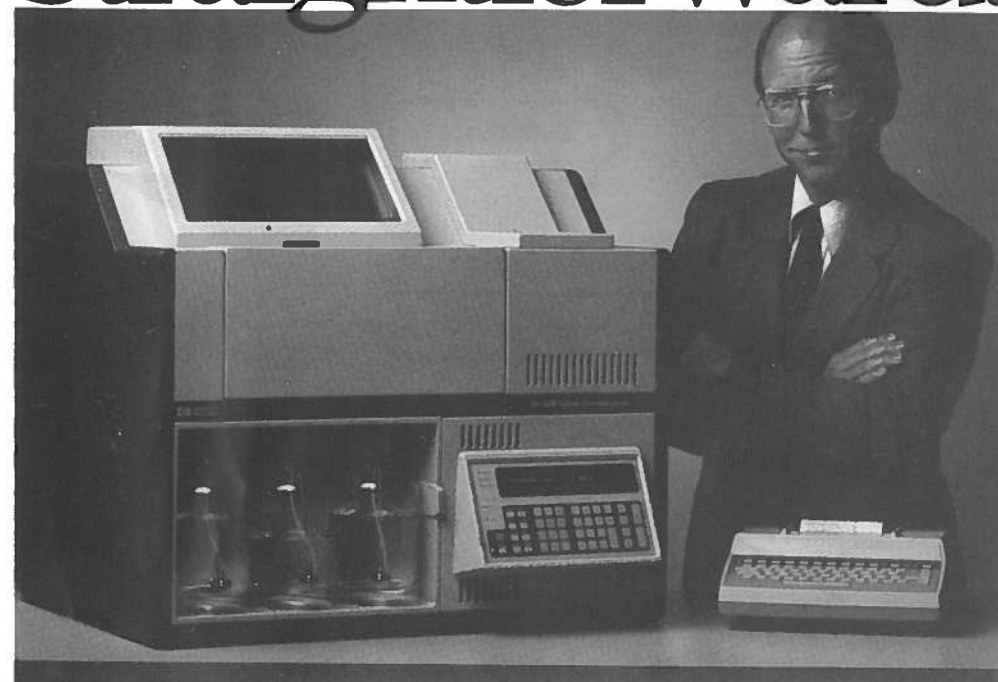
DISTINGUISHED SERVICE AWARD

The ACS Maryland Section annually recognizes one of its members for outstanding service to the Section. Eligibility is limited to members of the Maryland Section. Nominations should be sent to Dr. Donald E. Jones, Chemistry Department, Western Maryland College, Westminster, MD 21157; phone (301) 876-2055.

CONSULTING SYMPOSIUM

Ned Heindel has asked us to call special attention to a symposium at the 21st MARM on the subject of consulting and other non-traditional employment for chemists. The symposium will occupy the whole day of May 19, and the meeting is at Stockton State College, Pomona, New Jersey.

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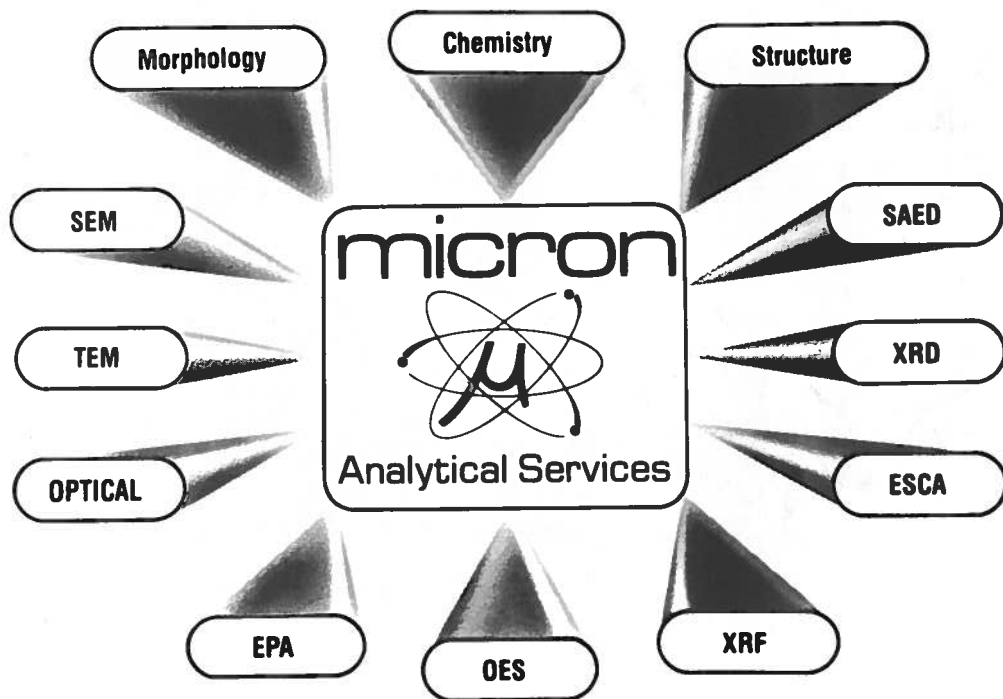


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