



THE CHESAPEAKE CHEMIST

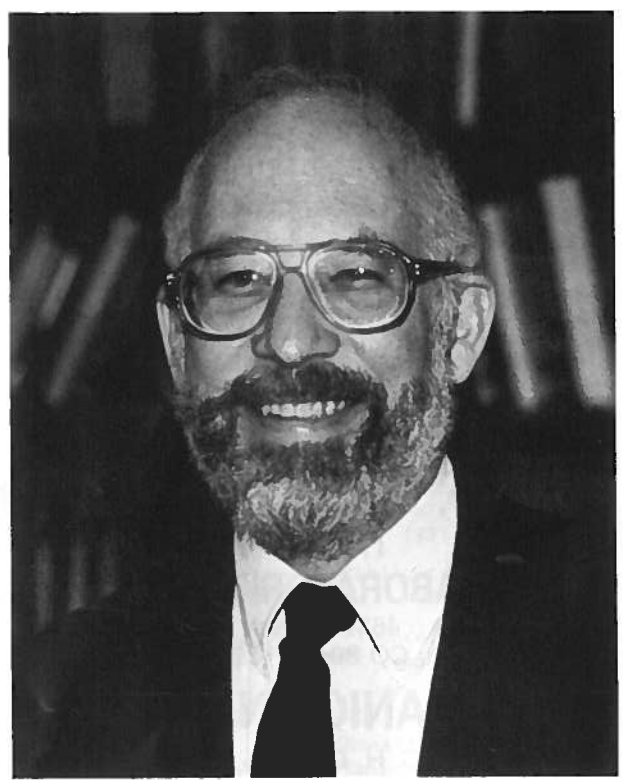
MARYLAND SECTION
AMERICAN CHEMICAL SOCIETY

VOL. XLVI

MAY, 1990

NUMBER 5

1990 REMSEN AWARD



ROBERT G. BERGMAN

MATERIALS BY DESIGN

"Frontiers of Chemistry: Materials by Design" will be the title of a conference sponsored by Chemical Abstracts Service in Columbus, Ohio from November 11-14, 1990. It is designed for persons conducting research in materials science or who are interested in using new materials technology.

Leading researchers in materials science will present invited papers on emerging materials designed for particular physical properties, interface effects, surface modifications, and mechanical behavior. Materials based on metals, ceramics, polymers and composites are included. A special session will focus on materials and the environment.

Metallurgists, ceramic engineers, materials scientists, polymer chemists, electrochemists, and structural engineers will find the conference of interest.

Meeting sessions will focus on design for mechanical behavior, design for physical properties, design for interface modification, and materials and the environment. During the open times of the conference, there will be opportunities to attend poster sessions, see video tapes, participate in software demonstrations and tour nearby science-related facilities.

Persons interested in presenting a poster session at the conference should send a 150-word abstract to Dr. Robert Stobaugh, Chemical Abstracts Service, 2540 Olentangy River Road, P.O. Box 3012, Columbus, Ohio 43210.

Registration materials are available from Chemical Abstracts Service, Department 05, 2540 Olentangy River Road, P.O. Box 3012, Columbus, Ohio 43210.

Questions should be addressed to Dr. Robert Stobaugh at (614) 447-3600, ext. 2915.

NEW ACS BUILDING NAMED

The American Chemical Society board of directors has named its new building in Washington, D.C., after a distinguished professor of chemical engineering and his wife.

The building at 1550 M Street, NW, which is adjacent to ACS headquarters, will be called the Donald F. and Mildred Topp Othmer ACS Building in recognition of a \$2.5 million donation from the couple.

The donation came from the Brooklyn, N.Y., couple during ACS's current fund-raising effort, Campaign for Chemistry. It is the largest contribution, either corporate or individual, received by the campaign so far.

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• ORGANIC ANALYSIS •

elements (C, H, O, N, S, X, ash, metals)
molecular weights, B.T.U., T.O.C
emission spectroscopy, chromatography



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THE 45th REMSEN AWARD

ROBERT G. BERGMAN

Robert G. Bergman was born in Chicago, Illinois, in 1942. He married Wendy L. Street in 1965; their son David was born in 1971 and Michael in 1972. Dr. Bergman completed his undergraduate studies in chemistry, Phi Beta Kappa, at Carleton College in 1963, and received his Ph.D. as a National Institutes of Health Predoctoral Fellow at the University of Wisconsin in 1966 under the direction of Jerome A. Berson. He spent 1966-67 as a North Atlantic Treaty Organization Fellow in Ronald Breslow's laboratories at Columbia, and following that went to the California Institute of Technology as a Noyes Research Instructor. He was promoted to assistant professor in 1969, associate professor in 1971, and full professor in 1973. He accepted an appointment as Professor of Chemistry at the University of California, Berkeley, in July 1977, and moved his research group to Berkeley about a year later. A former Alfred P. Sloan Foundation Fellow, Camille and Henry Dreyfus Foundation Teacher-Scholar, Sherman Fairchild Distinguished Scholar at the California Institute of Technology and Adolph C. and Mary Sprague Miller Research Professor at the University of California, Berkeley, Bergman is a member of the National Academy of Sciences and a fellow of the American Academy of Arts and Sciences. He has received the American Chemical Society Award in Organometallic Chemistry, the American Chemical Society Arthur C. Cope Scholar Award, the Edgar Fahs Smith Award (Philadelphia Section, American Chemical Society), the Distinguished Achievement Award (Carleton College Alumni Association), and the California Institute of Technology Student Government Award for Excellence in Teaching.

Dr. Bergman was trained as an organic chemist; in the mid-1970s he extended his research into the area of organotransition metal chemistry. He has contributed over 180 articles to scientific journals and publications in these areas. He has received numerous invited lectureships and is currently chairman of the Gordon Conference on Organometallic Chemistry. Professor Bergman's many outstanding contributions are in the fields of synthesis, catalysis, and reaction mechanisms of organic and transition metal organometallic compounds.

TRANSFORMATIONS OF ORGANIC COMPOUNDS MEDIATED BY TRANSITION METAL COMPLEXES

Many stoichiometric and catalytic reactions are now known in which organotransition metal complexes mediate the interconversion of organic compounds. These processes have been used in both industrial and academic chemistry to convert simple organic compounds into more complex functionalized materials, in some cases with high degrees of stereoselection. A small number of fundamental bond-breaking and bond-cleavage steps form the mechanistic "building blocks" for the more complicated transformations that result in the conversion of one organic molecule to another. Dr. Bergman's research has focused on the search for new examples of such fundamental primary organometallic reactions, and on studies of the mechanisms of these processes. The content of this lecture will be chosen from exploratory and mechanistic studies that have been carried out most recently in Dr. Bergman's laboratory. This research is currently focused on insertion of metals into carbon-hydrogen bonds in simple alkanes, the chemistry of heterodinuclear organometallic complexes, and the chemistry of complexes containing bonds between metals and heteroatoms such as oxygen, nitrogen and sulfur.

FACSS XVII

The seventeenth annual meeting of the Federation of Analytical Chemistry and Spectroscopy Societies will be held from October 7-12, 1990 at the Cleveland Convention Center in Cleveland, Ohio.

DATE:

Wednesday, May 16, 1990

PLACE:

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

SPEAKER AND TOPIC:

8:00 pm
THE REMSEN LECTURE
Robert G. Bergman
Univ. of California, Berkeley
"Transformations of Organic
Compounds Mediated by Trans-
ition Metal Complexes"

Dinner price \$14.00 per person,
but spouses, retired chemists and
students may attend for \$11.00

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

ACS AND AICHE TO COPUBLISH

The ACS and American Institute of Chemical Engineers (AIChE) will copublish "Biotechnology Progress". Under the new arrangement the journal, which has been a quarterly since AIChE launched it in 1985, will be expanded and issued bimonthly. Annual subscription prices are \$25 to members of either organization and \$250 to nonmembers and institutions. Editorial content will serve chemists as well as chemical engineers in biotechnology and is intended to be beneficial to both societies, their memberships and the general public.

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COCKTAILS AND DINNER:

The Johns Hopkins University
Glass Pavilion

Social Hour 6:00 pm
sponsored by
Macalaster Bicknell
Dinner 7:00 pm

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

Ms. Menyan Cheng
Nova Pharmaceutical Corp.
6200 Freeport Center
Baltimore, MD 21224

by May 9. Late reservations may
be made by calling (301) 563-6183
by May 11. An answering machine
is available at this number.

DON HOSTER AND STUDENT AWARDS

We usually rely on our astute readers to take note of changes in committee responsibilities by carefully reading page 3. This month, however, we want to take special note of Don Hoster's retirement from the chairmanship of the Student Awards Committee after more than ten years of service.

This Editor especially appreciated the way he always met our deadlines without need for reminders, providing names, spelled correctly, and photographs of the student awardees. Our thanks to Don for a stellar job.

The torch passes to Steve Gregory.

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

1989 K. Barry Sharpless	1967 Marshall W. Nirenberg
1988 Mildred Cohn	1966 Paul H. Emmett
1987 Stephen J. Lippard	1965 James R. Arnold
1986 Gilbert Stork	1964 Paul D. Bartlett
1985 Richard N. Zare	1963 Harold C. Urey
1984 Earl L. Muetterties	1962 George Porter
1983 George M. Whitesides	1961 Herbert C. Brown
1982 Harden McConnell	1960 Henry Eyring
1981 Koji Nakanishi	1959 Edward Teller
1980 Roald Hoffmann	1958 Robert B. Woodward
1979 Harry B. Gray	1957 Melvin Calvin
1978 John Charles Polanyi	1956 Farrington Daniels
1977 Ronald Breslow	1955 Willard F. Libby
1976 William N. Lipsomb, Jr.	1954 Vincent du Vigneaud
1975 Henry Taube	1953 Edward L. Tatum
1974 Elias J. Corey	1952 W. Mansfield Clark
1973 Frank H. Westheimer	1951 Hugh S. Taylor
1972 Charles H. Townes	1950 Edward C. Kendall
1971 George C. Pimentel	1949 Joel H. Hildebrand
1970 George S. Hammond	1948 Elmer V. McCollum
1969 Albert L. Lehninger	1947 Samuel C. Lind
1968 Har G. Khorana	1946 Roger Adams

REMSEN AWARD NOMINATIONS

With the 1990 Remsen Award fresh in our minds, it is a good time to think about nominations for the 1991 award. A nomination should be accompanied by a curriculum vita and a list of the nominee's publications as well as any other information which would be helpful. Nominations should be sent to a member of the Selection Committee.

REMSEN AWARD SELECTION COMMITTEE

Timothy J. McNeese, Chairman Department of Chemistry Loyola College in Maryland 4501 North Charles Street Baltimore, MD 21210 (323-1010, ext. 2237)	Gary H. Posner Department of Chemistry Johns Hopkins University Charlest and 34th Streets Baltimore, MD 21218 (338-7443)
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TWENTY-FOURTH MARM

The 24th Middle Atlantic Regional Meeting of the ACS will be held from May 23-25, 1990 at the Florham Park - Madison Campus of Fairleigh Dickinson University on Route 24 in Madison, New Jersey.

THE SUMMER PICNIC

ON	SUNDAY AUGUST 12, 1990, 11 AM TO 5 PM
AT	BELMONT MANOR, THE NATIONAL CONFERENCE CENTER OF THE AMERICAN CHEMICAL SOCIETY, 6665 BELMONT WOODS ROAD, ELKRIDGE, MARYLAND
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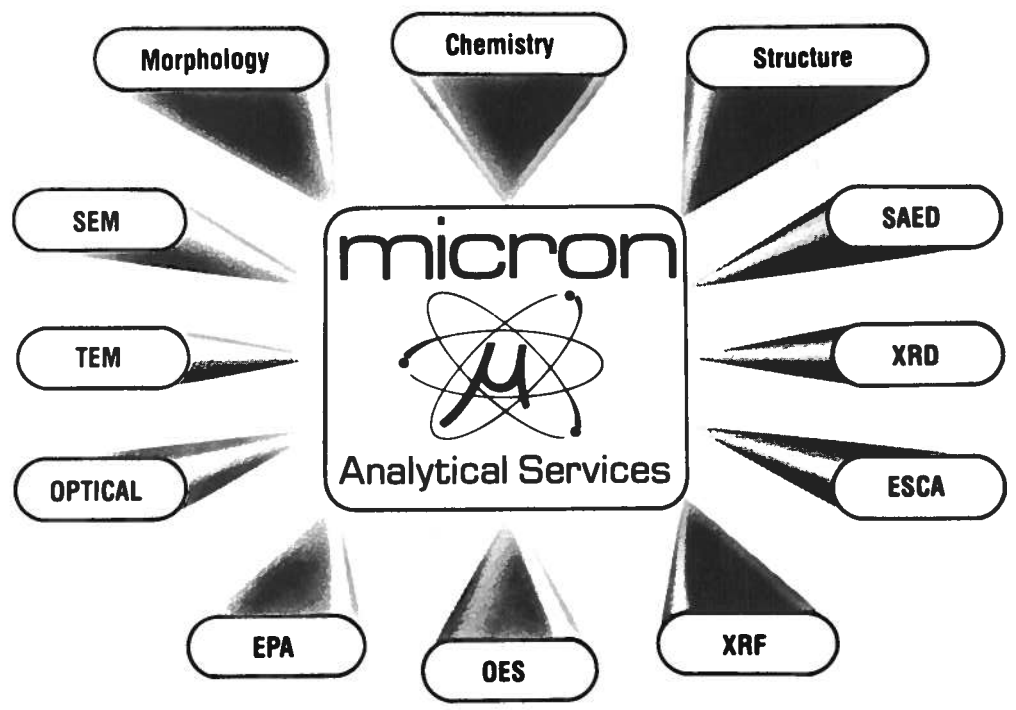
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