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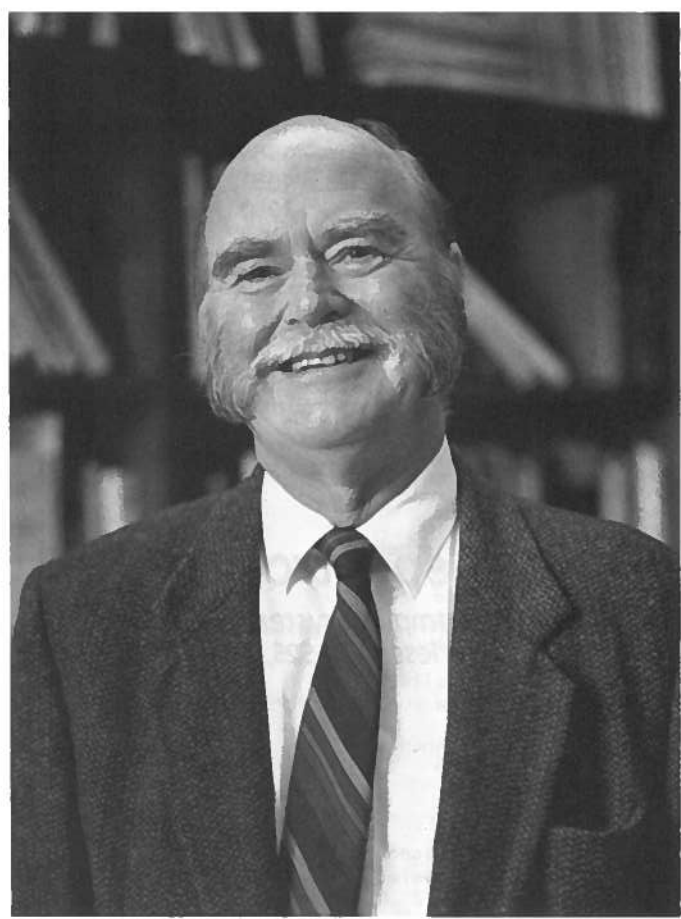
CHESAPEAKE CHEMIST

MARYLAND SECTION
AMERICAN CHEMICAL SOCIETY

VOL. XLVII

DECEMBER, 1991

NUMBER 9



THE MARYLAND CHEMIST OF THE YEAR

MARYLAND CHEMIST AWARD

The Maryland Chemist Award was established in 1962 to recognize and to honor, each year, a member of the Maryland Section for outstanding achievement in the field of chemistry. The achievement, as originally stated, may be in pure or applied chemistry, chemical engineering, or chemical education.

Recipients of the Maryland Chemist Award must have been members of the Section for a minimum of five years and have made outstanding contributions to chemistry as defined in Article II of the Constitution of the Society (Chemistry is defined in broad terms). The work on which the award is based should have been performed in Maryland.

Previous recipients have been:

1962 E. Emmet Reid	1977 Henry C. Freimuth
1963 W. Mansfield Clark	1978 Gunther L. Eichhorn
1964 Alsoph H. Corwin	1979 Emil H. White
1965 John C. Krantz, Jr.	1980 M. Gali Sanchez
1966 Belle O. Talbot	1981 Paul O. P. Ts'o
1967 Walter S. Koski	1982 Joseph L. Katz
1968 George L. Braude	1983 Shih-Yi Wang
1969 Leslie Helleman	1984 Nicolas Zenker
1970 Paul H. Emmett	1985 John Lambooy
1971 Giles B. Cooke	1986 David F. Roswell
1972 Arnold M. Seligman	1987 Gary H. Posner
1973 Lester P. Kuhn	1988 Edward J. Poziomek
1974 Joyce J. Kaufman	1989 Catherine Clarke Fenselau
1975 Benjamin Witten	1990 Alex Nickon
1976 Richard L. Hall	



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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.

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CECIL H. ROBINSON

Cecil H. Robinson is a professor in the department of pharmacology and molecular sciences at The Johns Hopkins University school of medicine.

Dr. Robinson is a synthetic organic chemist, who received the Ph.D. degree under Professor (now Sir) Derek H. R. Barton at the University of London and completed post-doctoral studies with Professor Carl Djerassi at Wayne State University. After several years in the pharmaceutical industry (at Glaxo in England and at Schering in the U.S.), he joined the faculty of The Johns Hopkins University school of medicine in 1963.

Robinson has devoted nearly his entire career to steroid chemistry and biochemistry and has become one of its notable and internationally-recognized contributors.

In addition to devising a number of interesting and ingenious synthetic routes to certain types of steroids, he discovered several novel and unconventional biological activities among steroid analogs. But perhaps his most noteworthy accomplishments have been in the design of completely original mechanism-based and highly selective inhibitors of several enzymes involved in the transformations and biosynthesis of steroids. These discoveries have also led to a better understanding of the mechanistic details of steroid metabolism and biosynthesis; most notable is the insight that he has provided into the mechanism of the aromatase (estrogen biosynthesis) reaction.

His distinguished scientific accomplishments notwithstanding, Dr. Robinson is a model of self-effacement, is gracious to everyone, and is uncommonly generous in his devotion to students, to colleagues, and to the betterment of science. He has been the catalyst and the prime mover for several innovative improvements in graduate chemistry courses and seminars for medical students.

Robinson's broad knowledge and classic British humor make him a popular lecturer in the classroom as well as at national and international conferences. He is in every respect a true scholar and a gentleman.

- from the nominating letter

TRACING THE PATH

Tracing the Path is an 18-minute video that traces selected scientific contributions made by pre-colonial Africans in Africa, by African Americans in the late 1800s and early to mid 1900s in the United States, and by modern African Americans to the field of chemistry as it relates to the life sciences. The purpose of this non-profit educational program is to help students realize that people of African heritage have had a long history of significant achievement in important scientific fields and that work in science is an exciting and realistic option in their future.

The video features: 1) An introductory overview of historic African science and technology with an emphasis on traditional African healing, 2) The ground-breaking biochemical research by Ernest Just, Percy Julian, and Charles Drew, 3) Contemporary African American scientists in microbiology and neurochemistry, 4) High school students working in a summer science internship program and on an in-school advanced science project, and 5) A closing segment reminding students of the great scientific achievements in their past and of the opportunities for them to contribute to the future.

Tracing the Path has been reviewed by teachers from elementary school through middle and high school and by educators involved in the development of multicultural curricula and has been enthusiastically received. The video comes with an extensive teacher's guide featuring hands-on activities for students, suggested discussion questions, and teacher demonstrations that relate to information in the video.

The price of the *Tracing the Path* video and teacher's guide package is \$10. To receive an order form, please call the ACS Prehigh School Science Office at (202) 872-6165, or write to: James Kessler, American Chemical Society, 1155 - 16th Street, N.W., Washington, DC 20036.

THE MARYLAND CHEMIST AWARD

DATE & PLACE:

Wednesday, December 18, 1991
University of Maryland
Baltimore County
Faculty/Staff Dining Area

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

Dr. Stephen M. Gregory
College of Notre Dame
4701 North Charles Street
Baltimore, MD 21210

SCHEDULE:

6:30 Social Hour

by December 11. Late reservations may be made by calling

7:30 Dinner

(301) 532-5714

8:30 The Maryland Chemist
Award Address
CECIL H. ROBINSON
Johns Hopkins University
"Cytochrome P-450 Aromatase:
A Chemist's View of a Versa-
tile Enzyme"

by December 13; answering machine is available at this number.

Dinner price is \$15.00 per person, but spouses and retired chemists may attend for \$13.00; students may attend for \$7.50.

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

MARYLAND CHEMIST AWARD

1991
Presented to

CECIL H. ROBINSON

In recognition of outstanding contributions to research in the synthetic organic chemistry of analogues of steroid hormones especially in the design of completely original mechanism-based and highly selective inhibitors of several enzymes involved in the transformations and biosynthesis of steroids and generation of insights into the mechanism of the aromatase (estrogen biosynthesis) reaction; furthermore, in recognition as an excellent leader, educator, and scholar; and in grateful acknowledgement of high standards evinced for all who aspire to excellence in science and in fulfillment in life.

Awarded this eleventh day of December, 1991, with the esteem of his fellow scientists and the affection of his colleagues and associates.

CYTOCHROME P-450 AROMATASE: A CHEMIST'S VIEW OF A VERSATILE ENZYME

Human Cytochrome P-450 Aromatase is an oxygen-activating enzyme system which biosynthesizes the female sex hormones (estrogens) from male hormone precursors (androgens). Interest in this enzyme stems from the chemically intriguing carbon-carbon bond cleavage which it catalyzes, as well as from its biological and medical importance. Inhibitors of this enzyme could provide therapeutic agents useful in the treatment of breast cancer. Chemical and biochemical studies on the mechanism and inhibition of this enzyme will be discussed.

Season's Greetings

ACS ACTING TO AID LABORATORIES
IN SUPPORT OF FEDERAL POLICY AGENDA

The American Chemical Society has long been a leader in pursuing the development of hazardous waste regulations that are appropriate to the laboratory research environment. Pursuing this goal is listed in the ACS *Federal Policy Agenda* as one of the major objectives of the Society's government relations programs for 1991. The ACS White Paper on "Management of Laboratory Wastes: Recommendations for Regulatory Change", developed by the Society's CEI/CCS Task Force on Laboratory Waste Management (formerly, the Task Force on RCRA), serves as a guide for the Society's efforts in this area.

Attempts over the last few years to obtain appropriate regulations for laboratories primarily had been focused on the Environmental Protection Agency (EPA). After several discussions with the Agency, it became clear that while the EPA agreed that laboratories are not served well by the current regulations, other issues were more pressing. Without a congressional mandate, regulatory relief would not be forthcoming. As such, the ACS turned its attention to Congress and the scheduled reauthorization of the federal hazardous waste management and disposal law, the Resource Conservation and Recovery Act (RCRA).

The Task Force on Laboratory Waste Management took the initial step of drafting legislative language that would require EPA to develop regulations to allow laboratories to better minimize and manage their chemical wastes. The legislation is based on the ACS White Paper and relies on the precedent set by the 1990 Clean Air Act in calling for "equitable treatment" of research facilities. It borrows the definition of a laboratory from the OSHA Laboratory Standard--which most laboratories already are having to comply with. Task Force members working on the project represented industrial, academic, and consulting concerns.

Work is now under way to have this draft bill, "The Laboratory Equity and Waste Minimization Act," included in comprehensive RCRA reauthorization legislation. To aid the Society in these efforts, ACS Department of Government Relations and Science Policy (GRASP) staff established the Laboratory Waste Coalition, now numbering some forty member organizations. Efforts to add Coalition members have focused on organizations located in areas represented by the Representatives and Senators sitting on the congressional committees charged with RCRA reauthorization.

Founding Coalition members include the ACS, the American Council on Education, NACUBO, and the University of California. The membership has grown to include industrial representatives such as AT&T Bell Laboratories, Merck & Company, Proctor & Gamble, and Battelle Pacific Northwest Laboratories. Among the schools participating are the Universities of California, Illinois, Minnesota, Montana, Pennsylvania, Texas, Virginia, Washington, as well as Yale. A number of laboratory and education groups also have joined, such as the American Council of Independent Laboratories and the Campus Safety Association.

GRASP has involved ACS members in support of the Act through visits with key congressional staff, letters and phone calls to Capitol Hill, and efforts to get their employers to aid the work of the Coalition. One New Jersey Local Section Chair, for example, has been active both in contacting his Representative's office and in urging his employer to join the Coalition.

The ACS and other Coalition members are now discussing the Act with majority and minority staffs of the House and Senate committees handling RCRA reauthorization and the offices of individual Representatives and Senators on these committees. If you would like additional information on this project, you may contact David Schleicher, in GRASP at (202) 872-4384, or write to him at GRASP, American Chemical Society, 1155 Sixteenth St. NW, Washington, DC 20036.

When did YOU last attend
a Maryland Section meeting?

POLYMER CURRICULUM DEVELOPMENT AWARDS

The joint Polymer Education Committee of the Division of Polymer Chemistry and the Division of Polymeric Materials of the American Chemical Society, in cooperation with participating industrial companies, is sponsoring \$10,000 and \$2,500 Awards to improve the teaching of polymer chemistry and polymer engineering in existing curricula at U.S. colleges and universities. Our objective is also to introduce polymer science to educational institutions which now have no polymer program. The major goal is to provide industry and academia with graduates who will have a greater knowledge of polymers. Thus, information on the program created will be distributed throughout the country to enable educational institutions to establish similar programs. The main criteria for the awards are probable effectiveness of the proposed activities in increasing student interests in and knowledge of polymer chemistry and polymer engineering, and the mechanism of dissemination of the information generated by the proposed program.

The award will be made over three years. The budget cannot exceed a total of \$10,000 in the first category. Matching funds from submitting institutions are encouraged. Awardees will be required to provide annual reports describing activities during each academic year and are expected to provide publishable information which can be used by other institutions. \$2,500 awards are limited to institutions which have not yet established a polymer program or have started it less than three years ago.

Proposals should be limited to 10 pages, in which the objectives should be clearly stated together with the timelines of the intermediate goals. The means of dissemination of information should be also proposed. The following areas may be addressed:

1. Innovative approaches to the curriculum to increase the emphasis on and student interest in polymer science.
2. Introduction of new polymer courses, especially laboratory courses.
3. Incorporation of polymer science in existing chemistry courses.
4. Establishment of an ongoing effort in polymers by faculty involvement and permanent incorporation of polymer science in the curriculum.

Interested institutions should submit five copies of the proposal to the Award Committee by March 15, 1992. The Polymer Education Committee may provide limited guidance for the preparation of proposal by institutions which have little experience in polymers. The award winners will be announced on May 15, 1992. Proposals and further inquiries should be addressed to: Professor Ed Vandenberg, 16223 Inca Avenue, Fountain Hills Arizona 85268, telephone: (602) 837-9559.

ELECTION OF OFFICERS

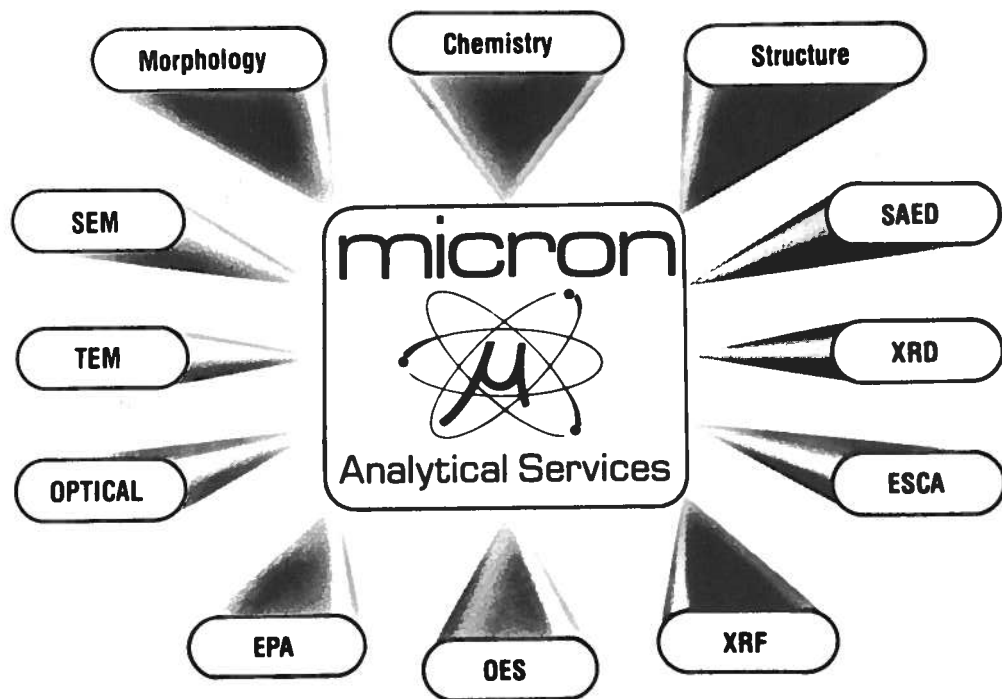
Please complete the following ballot for the election of the 1992 officers, alternate councilor and members-at-large of the Executive Committee of the Maryland Section and mail it to Alice Zeiger, Center for Indoor Air Research, 1099 Winterson Road, Suite 280, Linthicum, MD 21090. Please sign the envelope, but not the ballot itself, so that membership can be verified.

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Secretary	Alice Zeiger	_____
Treasurer	Mike Zapf	_____
Alternate Councilor	Linda Sweeting	_____
Members-at-large	Donald Hoster	_____
(vote for five)	Hope Corrigan	_____
	Dale L. Whalen	_____
	Jeanette S. Hamilton	_____
	T. Stephen Everett	_____

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