



THE

CHESAPEAKE CHEMIST

MARYLAND SECTION
AMERICAN CHEMICAL SOCIETY

VOL. XLI

OCTOBER, 1985

NUMBER 7



ELIZABETH K. WEISBURGER

1985 Finnigan MAT Seminar Series
On Mass Spectrometry

*Designs and Applications of
Tandem Mass Spectrometers:
New Solutions to Old Problems*

Program:

8:15-9:00 Registration / Continental Breakfast

9:00-12:00 Speakers

**T.Z. Chu, President, Finnigan Corporation,
San Jose, CA**

MS/MS: Risks and Rewards

**Donald Hunt, Professor of Chemistry,
University of Virginia, Charlottesville, VA**

Protein Sequencing by Tandem Mass Spectrometry

**Reinhold Pesch, Finnigan MAT, Bremen,
Federal Republic of Germany**

*Features and Applications of
Hybrid Sector/Quadrupole Mass Spectrometers*

Mark Johnston, Finnigan MAT, San Jose, CA

*Soft Ionization and MS/MS: Complementary
Techniques for Structural Analyses*

12:00 Complimentary Lunch

**Location: Washington, DC
Bethesda Marriott
5151 Pooks Hill Road
Bethesda, MD**

Date: October 11, 1985

To register contact: Erna Straw (301) 948-1067



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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.

Elizabeth K. Weisburger was born in Greenlane, Pennsylvania. She received a B.S. in chemistry from Lebanon Valley College and a Ph.D. in organic chemistry in 1947 from the University of Cincinnati. She has been a trustee of Lebanon Valley College since 1970. After two years as a research associate at Cincinnati she joined the National Cancer Institute where she is now assistant director for chemical carcinogenesis in the Division of Cancer Etiology. She has been a member of the U. S. Public Health Service since 1951.

Dr. Weisburger is a fellow of the AAAS and is a member of numerous professional organizations, including the American Society of Biological Chemists, the American Association for Cancer Research, the International Society of Xenobiotics, the Society of Toxicology, Sigma Xi, Alpha Chi Sigma, Sigma Delta Epsilon, Iota Sigma Pi, the Royal Society of Chemistry (London) and ACS. She has been a very active member of some of these organizations and has been president of the Washington Professional Chapter of Alpha Chi Sigma and of the Omicron Chapter of Sigma Delta Epsilon. She has served the Chemical Society of Washington in many capacities since 1952 and now represents that Section on the ACS Council.

She has been an abstractor for *Chemical Abstracts* and since 1971 has been assistant editor-in-chief of the *Journal of the National Cancer Institute*. She also serves or has served on a number of editorial boards and committees, including those of *Cancer Research*, *Excerpta Medica*, *Environmental Carcinogenesis Reviews* and the *Journal of Biochemical Toxicology*.

Dr. Weisburger's honors and awards include the 1981 ACS Garvan Medal.

Dr. Weisburger has served on many technical, coordinating and review committees and groups both inside and outside government and has presented over 100 invited lectures. She has more than 200 publications ranging from organic synthesis to biochemistry and carcinogenesis.

CHEMICAL CARCINOGENESIS

Many events are involved in the process of chemical carcinogenesis, or the initiation of a carcinoma or an abnormal growth by means of a given chemical. On an embryological and morphological basis tumors are classified into carcinomas, originating from epithelial cells, and sarcomas, arising from connective or similar tissue. Tumors also differ in characteristics. Benign tumors usually have relatively normal chromosomes, divide rarely, grow slowly, and are usually well encapsulated. Malignant tumors generally have abnormal chromosomes, frequent division and rapid growth, are invasive, and metastasize or spread to other organs through the blood or lymphatic system.

Although much progress has been made in treating neoplastic diseases through surgery, radiation, or chemotherapy, minimizing or preventing exposure to carcinogen remains the best means to prevent development of neoplasms. Occupationally, cancer in humans is associated with exposure to approximately 30 different chemicals or processes, many of which are now regulated to minimize exposure. However, occupational cancer is not a recent development for the first paper on association between exposure to soots and later development of cancer appeared in 1775. Even as early as 1531 there had been a report associating a disease (now recognized as lung cancer) with mining in certain regions of Germany where uranium and its decay products were present in ores.

In addition to synthetic chemicals background radiation, sunlight, certain personal habits, and some natural products may represent possible carcinogenic hazards which affect the general population.

OCTOBER MEETING

DATE:

Wednesday, October 23, 1985

PLACE:

Knott Science Center
(cocktails and dinner in the
Doyle Building dining room)
The College of Notre Dame
of Maryland
North Charles Street
Baltimore

SPEAKER AND TOPIC:

8:15 pm
Dr. Elizabeth K. Weisburger
National Cancer Institute
"Chemical Carcinogenesis"

COCKTAILS AND DINNER:

Social Hour 6:30 pm
Dinner 7:15 pm

Dinner price \$11.50 per person, but spouses, retired chemists and students may attend for \$9.50.

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 October 14. Late reservations may be made by calling John Corliss at (301) 235-6612 or Nolan Phillips at (301) 939-3500.

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

ARTHUR EMERY

It is with deep regret that we announce the death of Dr. Arthur Emery. In 1964 he was Chairman of the Maryland Section of the American Chemical Society and its Vice Chairman in 1963. He had a distinguished career in biological chemistry as a faculty member in biological chemistry at the University of Maryland School of Medicine, 1957-1967, and in senior positions for the Life Science Army Research Office, 1967-1970, and Office of Naval Research, 1970-1981.

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ACS DEPARTMENT OF GOVERNMENT RELATIONS AND SCIENCE POLICY HAS SEVERAL NEW INFORMATION BROCHURES AVAILABLE

The ACS Department of Government Relations and Science Policy has added several new publications to its list of available resources, which provide information on regulatory, government, and science policy matters.

The Office of Federal Regulatory Programs (OFRP) has recently completed the fourth and fifth in its series of information pamphlets. Developed under the auspices of the ACS Committee on Environmental Improvement, the first of the new pamphlets entitled "Hazardous Waste Management" describes the controversial and complex issues of hazardous waste management from the point at which the waste is generated through its disposal. The pamphlet also discusses the amounts and types of waste and the federal regulations which control them. The primary focus of the second pamphlet is on the scientific issues involved in determining the health risks arising from exposure to chemicals. Entitled "Chemical Risk: A Primer," the pamphlet also focuses on public perceptions of risk and the use of risk assessment in public policy decisions.

In addition, OFRP has published a bulletin "Less is Better," which discusses alternatives to landfilling for the disposal of laboratory chemical wastes. The bulletin, developed by the ACS Task Force on RCRA, discusses the "less is better" approach and ways in which identification of potential waste generation can be used to ensure practical management of chemicals in the laboratory.

Single copies of the above publications are free; there is a nominal charge for multiple copies. For more information, write to the Office of Federal Regulatory Programs, ACS Department of Government Relations and Science Policy, 1155 16th Street, N.W., Washington, D.C. 20036, or call (202) 872-8725.

The Department's Office of Science Policy Analysis has recently composed a fact sheet containing information on federal government grant programs which have been established to provide funding for the acquisition of instrumentation. There are currently twelve programs providing grants for scientific instrumentation at the Department of Defense, the Department of Energy, the National Institutes of Health, and the National Science Foundation. The fact sheet provides grant levels and contacts within these agencies.

To obtain free copies of the "Instrumentation Fact Sheet," contact the Office of Science Policy Analysis, ACS Department of Government Relations and Science Policy, 1155 16th Street, N.W., Washington, D.C. 20036, or call (202) 872-4384.

Michele M. Boisse

ELECTION OF SECTION OFFICERS

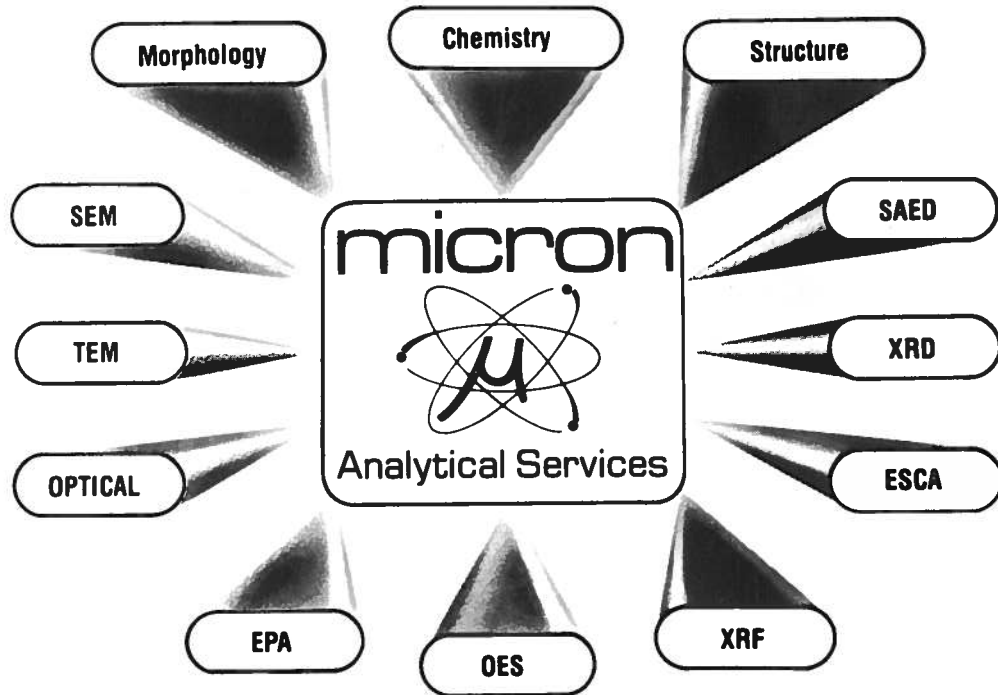
Please complete the following ballot for the election of the 1986 officers, councilors and members-at-large of the Maryland Section, and mail it to Kris Kirk, 4000 Mayberry Avenue, Baltimore, MD 21206. Please sign the envelope, but not the ballot itself, so that membership can be verified.

Chairman-elect	Alvin Bober	_____
Secretary	Kris Kirk	_____
Treasurer	Bill White	_____
Alternate Councilor	Alvin Bober	_____
Members-at-large	Donald Hoster	_____
(vote for five)	Sr. Denise Eby	_____
	James King	_____
	Ted Stockus	_____
	Joseph DeFrank	_____

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