



THE

CHESAPEAKE CHEMIST

MARYLAND SECTION
AMERICAN CHEMICAL SOCIETY

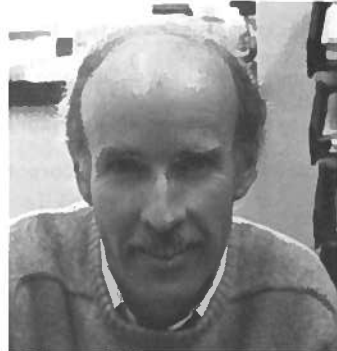
VOL. XLIV

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NUMBER 1-2



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MARYLAND SECTION — ACS
OFFICERS FOR 1988

NATIONAL CHEMISTRY DAY CELEBRATION

The Maryland Section celebrated National Chemistry Day on November 6, 1987 with a program in the Boyd Theatre at the Maryland Science Center followed by a fine reception, courtesy of McCormick & Company, at the McCormick Tea Room. A good crowd was on hand, but room could have been made for a few more.

Following opening remarks by Bill White, Mike Zapf described the Maryland Section's high school program and the 1987 Maryland Service Award was made to Merle Eiss. In the keynote address Nobel Laureate William N. Lipscomb of Harvard discussed the contributions of chemistry in a talk entitled "The Two Cultures and the Perception of Science".

The Maryland Section's committee for the Day comprised J. Paul Carter, Greg Erickson and Ron Erickson. The committee also thanks Ms. Mary Olenick for her help in upscaling the exhibit and thanks the staff of the Maryland Science Center for their help in preparing for National Chemistry Day.

The Maryland Section thanks the following organizations for their generous support of National Chemistry Day:

Beckman Instruments, Inc.	Curtin Matheson Scientific, Inc.
Hewlett Packard Company	Macalester Bicknell Company
Martin Marietta Laboratories	McCormick & Company
Nova Pharmaceutical Corporation	Quest International Flavors
SCM Corporation	VWR Scientific
Westinghouse Electric Corporation	W. R. Grace & Company

SERVICE AWARD TO MERLE EISS

The 1987 Maryland Section Service Award was presented on National Chemistry Day to Merle Eiss. Merle has been a member of the staff at McCormick & Company since 1970, following earlier service with American Cyanamid, Martin Marietta and Sinai Hospital.

Merle currently chairs the Maryland Section's Member Assistance Committee and is one of our national councilors, serving on a number of national committees. Previously she has been an alternate councilor, business manager of *The Chesapeake Chemist* and, in 1982, chairman of the Maryland Section. She is also a member of the MARM Steering Committee.

THE EDITOR NOTES

Many things have occurred since our last issue. A new year has begun (Happy New Year). New officers have been installed (see cover photos and page 3). Judy Pack has replaced John Corliss on our House Committee (thanks to John for his dedication and to Judy for taking the job). National Chemistry Day has been appropriately celebrated.

With the February meeting, scheduled early in the month to bridge the gap between January and February, the Maryland Section returns to UMBC after an absence of several years.



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Alvin Bober
Mike Zapf

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Maryland Service Award...Donald Jones

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Women Chemist.....Lena Ohannesian
698-1604

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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.

Dr. Catherine Fenselau was educated at Bryn Mawr College and Stanford University. After postdoctoral work at University of California, Berkeley, and NASA, she joined the faculty at the Johns Hopkins School of Medicine, advancing to professor in 1982. In July of 1987, she became Professor and Chair of the Chemistry Department of the University of Maryland, Baltimore County. She is Director of the NSF National Biological Instrumentation Center at UMBC, editor of the International Journal Biomedical and Environmental Mass Spectrometry, past president of the American Society for Mass Spectrometry and winner in 1985 of the Garvan Medal of the American Chemical Society

ANALYSIS OF MICROORGANISMS BY DESORPTION MASS SPECTROMETRY

Laser desorption, plasma desorption and fast atom bombardment have been used to obtain fingerprints characteristic of Gram-positive bacteria, Gram-negative bacteria, fungi, enveloped virus, and blue-green algae. Cells were examined intact and also after chaotropic treatment. Spectra will be shown to support our conclusion that the various desorption techniques readily provide mass spectral fingerprints and that these reflect the unique biochemical compositions of the various biological membranes. Phospholipids and glycolipids are desorbed intact. Desorption spectra are susceptible to computerized interrogation, including library searching and deconvolution of mixtures. Constant neutral loss scans permit the complex lipids to be recognized independent of variability in fatty acid composition and molecular weight.

RITA R. COLWELL

Dr. Rita R. Colwell received a B.S. degree in Bacteriology and M.S. degree in Genetics from Purdue University. Her Ph.D. thesis research at the University of Washington was "Commensal Bacteria of Marine Animals. A Study of Their Distribution, Physiology, and Taxonomy." She also holds an honorary D.Sc. from Heriot-Watt University, Edinburgh, Scotland. Following several research positions she was an Assistant and Associate Professor of Biology at Georgetown University before moving to the University of Maryland to become Professor of Microbiology in 1972. In 1983 became Vice President for Academic Affairs at the University of Maryland while leading a vigorous research program. Recently she resigned this Vice President position in order to devote more time to her new role of Director of the Maryland Biotechnology Institute, University of Maryland. She is a Past President of the American Society for Microbiology and a member of Phi Beta Kappa, National Science Board, and numerous editorial boards and committees. She is the author or co-author of eleven books, one award winning film, *Invisible Seas* and 365 scientific papers and articles.

NEW DEVELOPMENTS IN MARINE BIOTECHNOLOGY

The biotechnology explosion which has occurred in recent years has seen the development of some entirely new areas of biotechnology emerge, unique of which is marine biotechnology. The ability to clone genes coding for growth hormone in finfish and shellfish, as well as those controlling synthesis of pharmacologically active compounds in marine animals and plants, including invertebrates, opens a new vista in biotechnology. Recent results, have shown the potential for application of biotechnology to aquaculture, providing rapid growth and larger animals in closed culture systems. Other exciting prospects include novel enzymes isolated from microorganisms isolated from the deep ocean. A more pragmatic, but equally important aspect of marine biotechnology is the engineering of strains of marine bacteria to degrade wastes released to the world oceans. Indeed, the future for marine biotechnology is extremely exciting. Some interesting surprises are probably in store for us from marine biotechnology applications.

FEBRUARY MEETING

DATE:

Wednesday, February 3, 1988

PLACE:

Faculty/Staff Dining Area
University of Maryland
Baltimore County

SPEAKERS AND TOPICS:

5:30 pm
Catherine Fenselau
UMBC
"Analysis of Microorganisms by Desorption Mass Spectrometry"

8:30 pm
Rita R. Colwell
University of Maryland
"New Developments in Marine Biotechnology"



CATHERINE FENSELAU

COCKTAILS AND DINNER:

Social Hour 6:30 pm
(Sponsored by Fisher Scientific)
Dinner 7:30 pm

Dinner price \$13.00 per person, but spouses, retired chemists and students may attend for \$11.00

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

Judy Pack
Nova Pharmaceutical Corp.
6200 Freeport Center
Baltimore, MD 21224

by January 28. Late reservations may be made by calling (24 hours a day)

Judy Pack at (301) 563-6161



RITA R. COLWELL

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

FUTURE MEETINGS

DATE AND LOCATION	SPEAKER AND AFFILIATION	SUBJECT
March 16, 1988 Linthicum	Tour of Facilities	Maritime Institute of Technology
April 20, 1988 Western Maryland College	Dr. Alan McClellan National Science Foundation	Chemical Careers in Industry

SECOND NOVA LECTURE

The Johns Hopkins University Department of Chemistry and the Nova Pharmaceutical Corporation announce the Second Nova Lecturer, Professor Samuel Danishefsky of the Yale University Department of Chemistry, will speak on "Adventures in the Synthesis of Natural Products" on Tuesday, February 23, 1988.

The lecture will be at 4:15 p.m. in Remsen Hall room 221 on the University's Homewood Campus. Refreshments will be served at 4:00 p.m.

NOVA RECRUITING

Nova Pharmaceutical Corporation has recently been recruiting B.S. organic and analytical chemists and Ph.D. organic and medicinal chemists. Applicants may send a letter including a resume and names of references to Human Resources Department, Nova Pharmaceutical Corporation, 6200 Freeport Center, Baltimore, Maryland 21224-2788.

SCIENCE POLICY SABBATICAL

The ACS announces a Science Policy Sabbatical to begin in the fall of 1988. The sabbatical provides an opportunity for a scientist to join the ACS staff and work on selected science policy projects matching the individual's talents and interests with the needs of the ACS, and to interact with Washington decisionmakers and become knowledgeable about the federal R&D process.

Applications are due March 1. For more information contact Mary L. Tichava, Department of Government Relations and Science Policy, American Chemical Society, 1155 Sixteenth Street, N.W., Washington, D.C. 20036; telephone (202) 872-4384.

BLACK CHEMISTS CONFERENCE

The National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) announces that its 15th Annual National Conference will be held April 4-8, 1988 at the Wyndham Franklin Plaza Hotel in Philadelphia. Technical sessions will include major areas of chemistry and chemical engineering. Special topics symposia will include Materials Science, Heterogeneous Catalysis, Chemical Marketing, Organic Synthesis and Emerging Chemical Engineering Topics.

For more information contact Dr. Denise M. Barnes, AT&T Bell Labs, 555 Union Blvd., Allentown, PA 18103; telephone (215) 439-5680.

PITTSBURGH CONFERENCE COLLEGE GRANTS

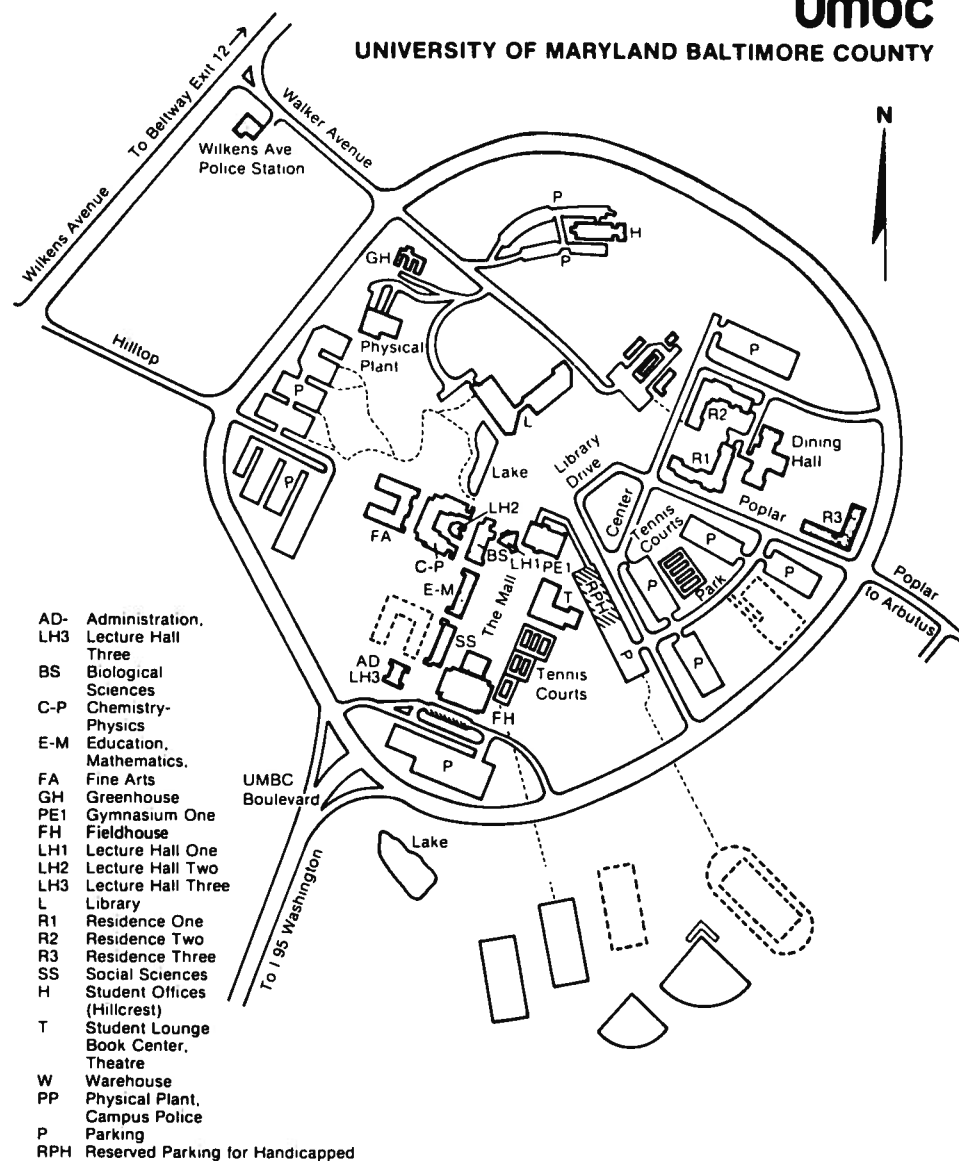
The Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, Inc., and its sponsoring societies, the Spectroscopy Society of Pittsburgh and the Society for Analytical Chemists of Pittsburgh, announce the fifteenth year of funding for The Pittsburgh Conference Memorial National College Grants Award Program. At least eight colleges will be selected to receive awards (\$2,500 maximum) based on their submitted proposals for the purchase of equipment or other aids for use in teaching science at the undergraduate level.

Interested faculty members should submit an application with a proposal by April 1 to Richard S. Danchik, The Pittsburgh Conference, Inc., 12 Federal Drive, Suite 322, Pittsburgh, PA 15235. Application and proposal information can be obtained from the same address.

The 1988 Pittsburgh Conference and Exposition will be held in New Orleans on February 22-26.

umbc

UNIVERSITY OF MARYLAND BALTIMORE COUNTY

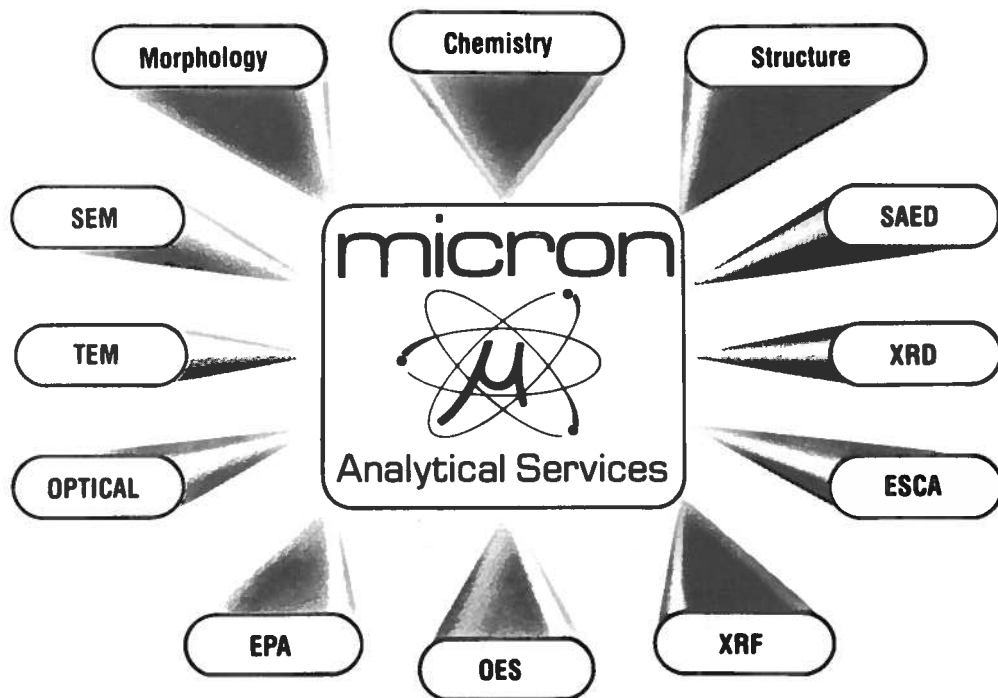


This map of the UMBC campus is a decade old and lacks many of the newer buildings, but the location of the dining hall is clear (right upper center).

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