



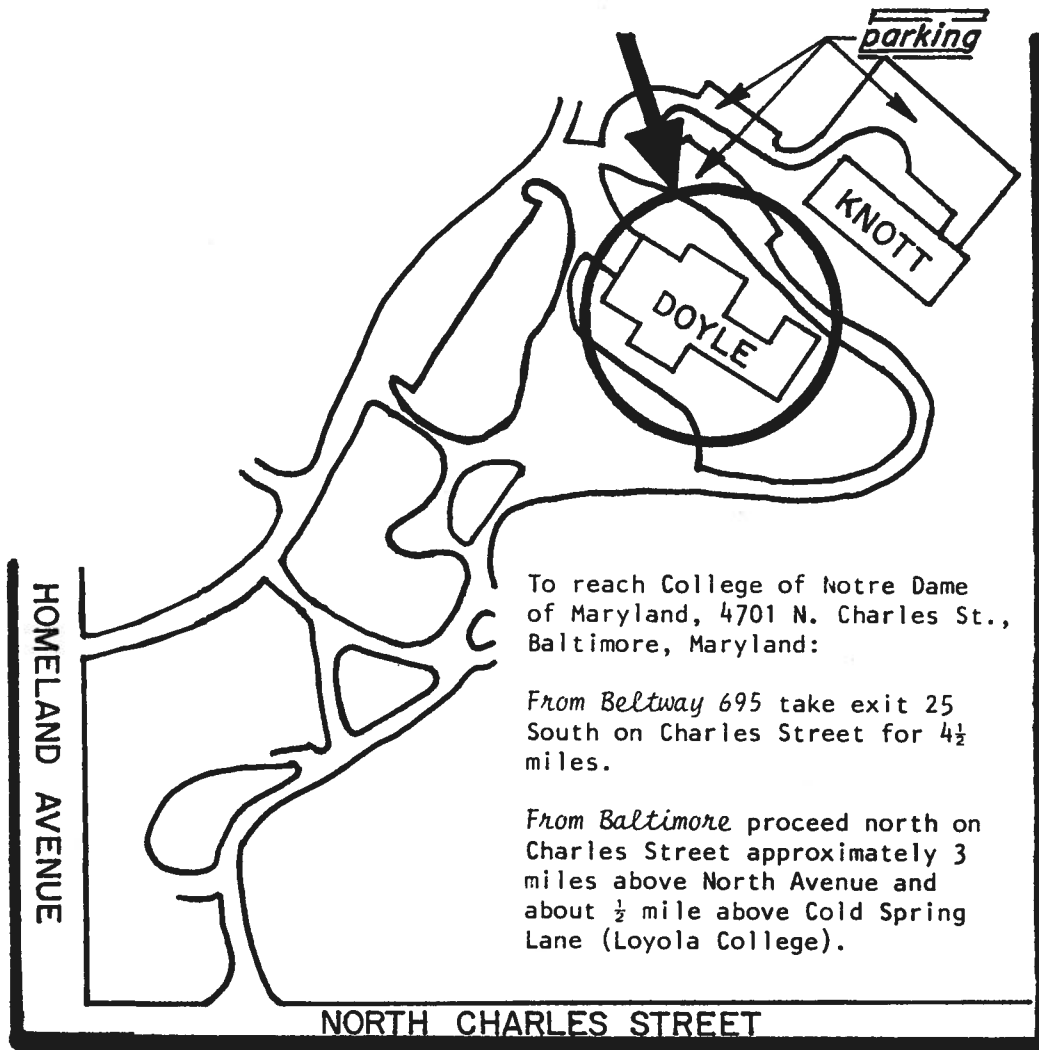
# THE CHESAPEAKE CHEMIST

MARYLAND SECTION  
AMERICAN CHEMICAL SOCIETY

VOL. XXXIX

MARCH, 1983

NUMBER 3



To reach College of Notre Dame of Maryland, 4701 N. Charles St., Baltimore, Maryland:

*From Beltway 695 take exit 25 South on Charles Street for 4½ miles.*

*From Baltimore proceed north on Charles Street approximately 3 miles above North Avenue and about ½ mile above Cold Spring Lane (Loyola College).*

# THE JOHNS HOPKINS UNIVERSITY

## DEPARTMENT OF CHEMISTRY

### Schedule for Spring 1983, Departmental Colloquia

- 1 March Prof. Steve Gould, Department of Chemistry  
Oregon State University  
"Bio-organic Studies using NMR Techniques"
- 7 March - SPECIAL JOINT SEMINAR WITH CHEMICAL ENGINEERING  
Prof. A. Welford Castleman, Department of Chemistry,  
Pennsylvania State University  
"The Aggregated State of Matter: On the Way to Being  
Condensed"
- 15 March Prof. Stewart Novick, Department of Chemistry  
Wesleyan University, Middletown Connecticut  
"Structural Studies of van der Waals Molecules via  
Molecular Beam Electric Resonance Spectroscopy"
- 12 April Dr. Bowen Liu  
IBM Research Laboratory  
San Jose, California  
Title to be announced

=====  
All colloquia are held at 4:15 pm in Remsen Hall 221 on the  
Homewood Campus of The Johns Hopkins University.

Refreshments are served before each colloquium at 4:00 pm.

### NEW SPECTROMETER INSTALLED AT UMAB

A state-of-the-art gas chromatograph/quadrupole mass spectrometer (GC/MS), first of its kind on the UMAB campus, was installed December 4 in the Medical Chemistry/Pharmacognosy department of the School of Pharmacy of the University of Maryland at Baltimore. Purchased from Extranuclear Laboratories of Pittsburgh, the instrument was chosen after an extensive evaluation and bidding process, according to Dr. Patrick S. Callery, laboratory director.

The instrument's enhanced functions, to determine more accurately the structure of unknown chemicals, and to measure more efficiently quantities of various drugs and chemicals in any given matrix, will spearhead the laboratory's efforts to increase analytical services on campus and support expanded research activities in the larger scientific community. For a demonstration or analysis, interested persons may call Dr. Callery at 528-2980.

Dr. Callery adds that the dedication of the GC/MS will take place on March 21, in conjunction with a regional symposium on mass spectrometry for approximately one hundred invited guests from Maryland, Delaware and the District of Columbia.



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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.

DORIT L. NOETHER

Before joining CHEMTECH, where she is Associate Editor, Dorit L. Noether helped formulate the New Jersey Masterplan for the Fine and Performing Arts as Special Consultant to the Department of Higher Education. At that time she was also involved in planning statewide policies for educational media, teacher education and environmental studies. Trained in chemistry (B.S. Radcliffe; M.A. Columbia; Ph.D. Rutgers), her concern with learning is reflected in her years on the chemistry faculties of C.W. Post, Rutgers and other colleges. She served ten years as abstractor for Chemical Abstracts covering organic and biochemical journals. In 1978 she co-chaired the newly formed N.J.-N.Y. Metro Women Chemists Committee. She is an alternate councillor of the North Jersey section of the ACS and chairman of the Lackawanna subsection.

### WATER - A 360° VIEW

Water is ...

What is water? they asked  
It's the noblest element, answered Pindar, the Greek.  
H<sub>2</sub>O, said the great Dalton.  
The Universal Mother, said the Indian sage.  
H<sub>2</sub>O, said Cannizzaro.  
Listen, said Beethoven.  
Let me show you, said Renoir.  
And the poet Hilda Conkling:  
*The world turns softly  
Not to spill its lakes and rivers  
The water is held in its arms  
And the sky is held in the water.  
What is water, that pours silver  
And can hold the sky?*

Using art, music, biology and chemistry, Dr. Noether examines the earth's most abundant liquid, water. As the title suggests, when you look all the way around it, water carries you everywhere.

Dr. V. Frank Boyd, our scheduled early speaker this month, is unable to be present.

### CALL FOR NOMINATIONS

The Awards Committee solicits nominations for the 1983 Maryland Chemist Award. Nominees should be members of the Maryland Section who have made outstanding contributions in research, teaching and/or administration. The award recipient will deliver a lecture at the annual Maryland Chemist Award meeting. Nominations should include the following:

- 1) a nominating letter explaining why the nominee is worthy of the award;
- 2) a supporting letter written by a second person; and
- 3) a curriculum vitae of the nominee, including a list of publications.

This material must be received no later than May 15, 1983 by the Chairman of the Awards Committee: Ernest F. Silversmith, 2607 Taney Road, Baltimore, MD 21209.

## MARCH MEETING

### DATE:

Wednesday, March 30, 1983

### PLACE:

Knott Science Center  
The College of Notre Dame  
of Maryland  
North Charles Street  
Baltimore



DR. DORIT NOETHER

### SPEAKER AND TOPIC:

8:00 pm  
Dorit Noether  
CHEMTECH  
"Water - a 360° View"

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

Charles Rowell  
Chemistry Department  
U. S. Naval Academy  
Annapolis, MD 21401

### COCKTAILS AND DINNER:

Doyle Building Dining Room  
Social Hour 6:15  
Dinner 7:00

by March 21. Late reservations may be made by calling Linh Cheong (x 208) or Cheryl Manger (x 358) at

Dinner price \$10.50 per person, but retired chemists and students may attend the dinner for \$8.50

(301) 355-3600

by March 23.

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

For those who have not yet attended a meeting at the College of Notre Dame of Maryland, we have reprinted a map of the campus on our front cover this month.

When did YOU  
last attend a Maryland Section meeting?

### MARYLAND SECTION FUTURE PROGRAM

<u>Date</u>	<u>Location</u>	<u>Speakers</u>	<u>Topics</u>
April 20	U. S. Naval Academy	Nina Roscher American University	Why Study Chemistry?
		Charles Braun Dartmouth College	Colors in Nature
May 18	Johns Hopkins		Remsen Award

## ACS PUBLISHES LAB SURVEY RESULTS

Research laboratories using chemicals are multidisciplinary and diverse in function. Most lab employees are well educated. Labs work intermittently with small quantities of many chemicals, and work with regulated chemicals is done by trained personnel. It is difficult for a lab to predict what chemicals will be used even one month ahead. Proper disposal of chemical wastes is a current problem; safety training is conducted at about half of the country's labs; and chemical monitoring programs are expensive.

These are the major conclusions of an ACS survey conducted this spring on "Laboratory Practices and Policies for Employee Protection from Exposure to Chemicals."

The survey questionnaire was developed by the ACS Task Force on Occupational Health and Safety and the Department of Public Affairs in response to a notice published last April in the *Federal Register* by the Occupational Safety and Health Administration, which requested comments and information on occupational health hazards of toxic chemicals in laboratories. A series of statements were made in the OSHA notice regarding whether monitoring of chemical concentrations, or upgrading work practices of lab employees, would be the best way to insure employee safety. Before the Society could comment on this matter, empirical data was needed on what labs are currently doing to insure employee safety.

During April and May, the survey was distributed to 1439 research labs where chemical use plays a large part in work assignments. This is about 27% of the total number in the country. As of the end of June, over 40% of those labs surveyed had responded.

Based on the results of the survey, the Society recommended in a July 15th policy statement to Thorne Auchter, head of OSHA, that OSHA continue its efforts to develop a policy for toxic chemical use in laboratories that is different from a toxic chemicals policy appropriate for industrial workplaces.

As the letter to Auchter states: "...the use of toxic chemicals in laboratories tends to be 1) in very small quantities...2) for limited periods of time...and, 3) by professional and informed workers...prescribing the same personal monitoring requirements for laboratories that are required in a manufacturing environment, in most circumstances, will not be an effective safety measure because of the intermittent and widely diverse nature of chemical use within a laboratory setting. It would be far better for OSHA to devote its attention to encouraging safe work practices."

In an August 6th response to the Society, Mr. Auchter said that "the survey results will be of substantial assistance" in OSHA's efforts to come up with a proposal for revising health standards for laboratories. "I want you to know," he went on, "how much we appreciate the initiative of the American Chemical Society in deciding to undertake this survey and the work of the Task Force in completing it so expeditiously. I consider this to be an outstanding example of constructive private-sector participation in the cooperative approach to regulation which the Reagan administration is determined to promote."

Copies of the survey results, and the policy statement sent to Mr. Auchter in July, are available free by contacting Ms. Gloria Estes in the ACS Department of Public Affairs on (202) 872-4479.

Peter Farnham  
ACS Member - Related Programs

## ACS SHORT COURSE

- TOPIC: TECHNICAL WRITING
- SPONSOR: Maryland Section of ACS.
- LEADER: Dorothy Blackwell, Towson State University
- DATES: March 19 and 26 at 9:30 am  
One three-hour session each day.
- PLACE: Chemistry - Physics Building, Room 108  
University of Maryland, Baltimore County.
- TEXT: A recommended text, *Effective Technical Communication*, may be ordered for \$18.00 when registering.
- COST: Members \$25, non-members \$30; a guide book is included; there will be a late registration fee of \$5.
- REGISTRATION: Register by March 15; check should be sent to:  
  
Alvin Bober, Chemistry Department, University of  
Maryland Baltimore County, Baltimore, MD 21228

## POLAROID WINNERS

Polaroid Corporation has announced the winners of its first worldwide instant photomicrography competition. The contest attracted nearly 300 entries from eleven countries. Prizes included cash awards and Polaroid photographic equipment.

Twenty-one prizes were awarded, with the three top cash awards of \$1,500 going to George Nyman of Vienna, Austria for color light microscopy, Karl Nettelstroth of Kelkheim, West Germany, winner of the black-and-white light microscopy category, and Arvid Lacin of Vancouver, Canada, first in electron microscopy.

Polaroid plans a touring exhibition of the prize-winning images, and will also announce details of the 1983 competition early in the year.

## FACSS ANNUAL MEETING

The tenth annual meeting of the Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) will be held September 25-30, 1983 at the Franklin Plaza Hotel in Philadelphia.

The sponsoring organizations for the meeting are: Association of Analytical Chemists, Inc.; Analysis Instrument Division, Instrument Society of America; ACS Division of Analytical Chemistry; Society for Applied Spectroscopy; Chromatography Forum of the Delaware Valley.

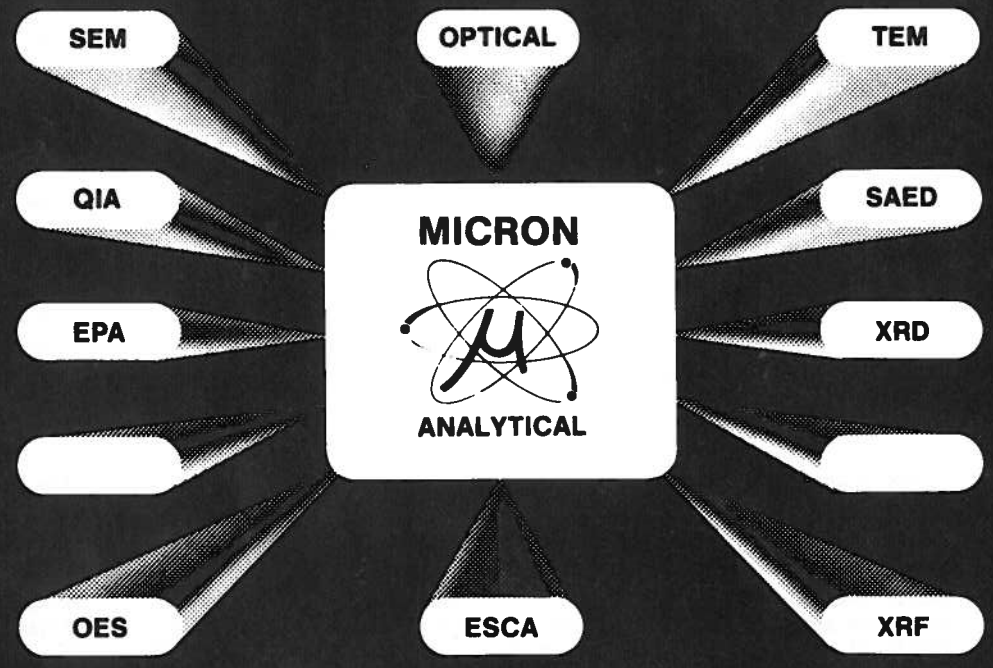
The meeting will feature about forty symposia with 350 papers covering all areas of analytical chemistry. Further information can be obtained from Publicity Chairman Richard J. Knauer, Armco, Inc., P. O. Box 1697 Baltimore, Maryland 21203.

Prospective authors must submit title and classification information before April 8 and abstracts of papers are required by June 10.

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