



THE

# CHESAPEAKE CHEMIST

MARYLAND SECTION  
AMERICAN CHEMICAL SOCIETY

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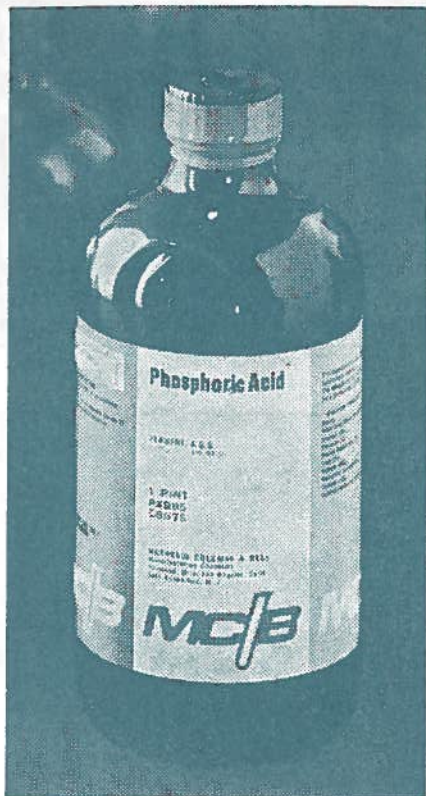
NUMBER 1



## 8TH MARM

January 14-17, 1973

Washington, D.C.



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NUMBER 1

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The 1973 Middle Atlantic Regional Meeting of ACS will be held at the Sheraton-Park Hotel in Washington, D.C., Jan. 14-17. More than 300 papers are scheduled, covering a full range of chemical interest. Symposia on Technicians' Affairs and Undergraduate Research are also scheduled.

The special feature of the meeting is a series of Plenary Lectures to be held daily at 11:30. Dr. Robert West will speak Monday on Cyclic and Cage Polysilanes; Dr. Gilbert Stork, Tuesday, on  $\alpha$ -Aminonitriles and  $\alpha$ -Alkoxy nitriles in Organic Synthesis; and Dr. George C. Pimentel, Wednesday, on Vibrational Excitation in Chemical Reactions Studied by Chemical Lasers. No other sessions will be held concurrently with the Plenary Lectures.

Dr. Alfred R. Bader, president of Aldrich Chemical Co., will speak at the Tuesday banquet on Chemistry and Art. His talk will be illustrated with slides of works of art from his own collection.

Dr. Robert F. Cozzens of George Mason University is general chairman of the meeting; Dr. Robert F. Brady, Jr., Bureau of Customs, program chairman; Dr. Albert B. Harvey, Naval Research Laboratory, arrangements chairman; and Charles L. Gordon, publicity and abstracts chairman. A feature of the meeting will be a chemical exposition, organized by Dr. William C. Pfefferle and Dr. Edward O. Cohen. Immediately preceding the meeting, on Jan. 13-14, there will be an ACS Short Course on Chromatographic Analysis of Drugs, to be given at the Sheraton-Park Hotel. Further information is available from the Education Department, ACS, 1155-16th St., N.W., Washington, D.C. 20036 (202-872-4508).

## ACS Short Course—Chromatographic Analysis of Drugs,

January 13-14, 1973

Register through the Education Office, ACS,

1155 16th St., N.W., Washington, D. C. 20036

---

Next Monthly Meeting  
Feb. 21, 1973

CHEMISTRY AND SPACE SCIENCE

Dr. Ceril Ponnampuram

"THE CHEMICAL ORIGIN OF LIFE"

# EIGHTH MIDDLE ATLANTIC REGIONAL MEETING

SUNDAY, MONDAY, TUESDAY AND  
WEDNESDAY, JANUARY 14-17, 1973

SHERATON-PARK HOTEL

CONNECTICUT AVENUE AT WOODLEY ROAD, WASHINGTON

## PROGRAM

Over 300 papers will be presented in the thirteen divisions which include twenty-eight symposia. A social hour and dinner are scheduled for Tuesday evening. The after dinner speaker will be Dr. Alfred Bader, of the Aldrich Chemical Co., who will speak on "Chemistry and Art."

Three special plenary sessions will be held. Monday 11:30 a.m., Prof. Robert West, U. Wisconsin, "Cyclic and Cage Polysilanes." Tuesday 11:30 a.m., Prof. Gilbert Stork, Columbia U., " $\alpha$ -Aminonitriles and  $\alpha$ -Alkoxy nitriles in Organic Synthesis"; and Wednesday 11:30 a.m., Prof. George C. Pimentel, U. California (Berkeley), "Vibrational Excitation in Chemical Reactions Studied by Chemical Lasers."

A Symposium Wednesday afternoon will honor the 50th Anniversary of the Naval Research Laboratory.

## CHEMICAL EXHIBITION

Cotillion Room, Sheraton-Park Hotel

Monday, January 15, 10-6 P.M.

Tuesday, January 16, 10-6 P.M.

Wednesday, January 17, 9-2 P.M.

## MARYLAND SECTION 1973 PROGRAM

<u>Date</u>	<u>Subject and Speaker</u>	<u>Time P.M.</u>
February 21, 1973	Chemistry and Space Science	
	Dr. Thomas Wilkerson Institute for Fluid Dynamics University of Maryland, College Park "Composition of Interplanetary Plasmas"	5:30
	Professor Cyril Ponnampuram Director, Laboratory of Chemical Evolution, University of Maryland, College Park "The Chemical Origin of Life"	8:30
March 21, 1973	Bio-organic Night	
	Professor Benjamin Weiss The Medical College of Pennsylvania "Neurochemical Aspects of Cyclic 3',5'-AMP"	5:30
	Professor Robert Bruce Merrifield The Rockefeller University "The Chemical Synthesis of Peptides and Proteins"	8:30
April 25, 1973	Chemical Manpower	
	"Supply and Demand for Chemical Manpower: Present Realities and Future Prospects" Panel Discussion Mrs. Betty Vetter, Executive Director, Scientific Manpower Commission Dr. Robert Henze, ACS Division of Research Grants and Fellowships Dr. Alfred Brown, President, Celanese Research Company Dr. Fred Gornick, UMBC, Moderator	5:30
	Dr. Milton Harris, Consultant "Science and Technology in the '70's: Resuscitation or Renaissance"	8:30
May 23, 1973	REMSEN LECTURE Homewood Campus, The Johns Hopkins University	6:00

All monthly meetings except May will be held at Eudowood Gardens.  
The May 1973 meeting will be held at The Johns Hopkins University.

## CHAIRMAN'S MESSAGE

Greetings and best wishes for a successful new year!

The chemical profession enters the new year with the hope that the employment difficulties of its members and cutbacks in research funding have crested. These problems have been sufficiently discussed in the past and their impact will be with us for years to come. The Maryland Section has made a commitment to render what service it can to members with problems and to provide the general membership with the information and programs it needs to keep abreast of the times. Three of our committees have programs planned for 1973 which reflect on these needs.

The Member Assistance Committee headed by Joe Cogliano has nearly completed preparation of a composite of information designed to assist any member who becomes unemployed. Being prepared in written booklet form it will list specific governmental programs and agencies, telling what is available and how to make contact. It will contain aids for seeking employment and a myriad of other information which along with personal contact with our Section will save the troubled chemist valuable time by giving positive direction.

The Chemical Education Committee is planning a program of continuing education and professional self enhancement. Mel Miller, Chairman of the committee, has scheduled as the first program a course on modern theory of acids and bases. The course will be given very soon and should be timely and pertinent to the unemployed and all other chemists. If this course meets with the success we anticipate, it will be followed by others on a regular basis.

Our April monthly dinner meeting will reflect on trends in science and technology and the supply and demand for chemical manpower. A panel comprised of representatives from government, industry, and the national ACS will concentrate their viewpoints on present and future prospects for chemists. Such programs should allow members to better understand the state of the profession that they may better control their destinies.

As you can see the Maryland Section is making a concerted effort to serve its members. What we, the officers and committee chairmen need most, is you, your help, and your presence at our activities. Our other recent and future dinner meetings have been designed so as to be of pertinent interest to all chemists rather than to favor certain fields of chemistry, so I urge all of you to make yourselves known at these meetings. Let us know your views and help us make this a better society for you.



DR. YALE H. CAPLAN

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IF YOU CHANGE YOUR ADDRESS . . . Please do not notify the Editor of the *Chesapeake Chemist*, but send your new and old addresses to: The American Chemical Society, 1155 Sixteenth Street, N. W., Washington, D. C. 20036. The Maryland Section will then be notified.



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"MODERN THEORY OF ACIDS & BASES"

The Maryland Section will present Prof. Ralph G. Pearson's course "Modern Theory of Acids and Bases" on SATURDAY MORNING, FEBRUARY 17, 1973, 9:00 A.M. in Ruzicka Hall at Loyola College. The course will be approximately 3 hours long.

The course is an Audio recording of the regular ACS Short Course on the same subject. In place of Prof. Pearson there will be a local expert who will serve as a discussion leader.

The \$3.00 fee covers the cost of the textbook (\$2.50 value), registration and refreshments; however, unemployed chemists who are ACS members may register and receive the textbook free of charge. Full-time students may also register free of charge, but the number of free textbooks available for students will be limited.

Information about the content of the course is available in ACS literature, but additional information may be obtained by contacting Dr. Melvin P. Miller, Department of Chemistry, Loyola College, Baltimore, Maryland 21210. Phone: 323-1010.

If you wish to register, please complete the form below and mail it with your check (payable to Maryland Section, ACS) to Dr. Miller at the above address.

---

To: Dr. Melvin P. Miller  
Dept. of Chemistry  
Loyola College  
Baltimore, Md. 21210

From: Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Phone: \_\_\_\_\_

I wish to enroll in the ACS Audio Course on "Modern Theory of Acids and Bases". I enclose my check in the proper amount to cover the fee for the course.

Check one:

Employed ACS member \$3.00

Unemployed ACS member ----

Full-time student ----

THE UNITED STATES CUSTOMS LABORATORY

In 1936, one hundred and forty-seven years after the signing of the United States Tariff Act, a division of laboratories was created in the Bureau of Customs. Since that time, ten general purpose laboratories were established (at this time there are nine general purpose laboratories and two special purpose laboratories (narcotics)) to carry out the physical and chemical examination of imports for tariff purposes and to render assistance to other Federal agencies.

The examinations have involved every kind of raw material and manufactured product of international trade, including crude ores, drugs, petroleum, jewelry, clothing, food products, perfumery, etc.

The expertise of the Customs chemist is unique since, in addition to his required training in analytical chemistry, he must become familiar with the provisions of the Tariff Act and related legislation in order to insure the informed communication of the results of his examinations to those charged with the responsibility for duty assessment. Since there are, literally, thousands upon thousands of items classified in the "Tariff Schedule of the United States Annotated", this "familiarity" requires broad understanding and, due to the changes brought about by legislation or the introduction of new products, the chemist must continuously update his understanding.

In the past and to varying degrees, at present, the Customs Laboratory in Baltimore has engaged in many inter-agency cooperative efforts in such areas as water pollution (Coast Guard and Army Corps of Engineers), restricted and prohibited imports and exports (Departments of State, Commerce, Agriculture, and HEW), forensic science (BNDD, U.S. Post Office, city, county, and state crime labs), etc., in addition to performing its usual function, analyses for the tariff classification of imported commodities.

The United States Customs Laboratory is located at the corner of Lombard and Gay Streets in downtown Baltimore. This Federal laboratory is equipped to provide the information Customs officials need for the appraisal of merchandise and the collection of customs duties. In addition, the laboratory assists Customs officers in performing various investigations connected with smuggling, fraud, etc. The laboratory occupies about 7,000 square feet divided physically into offices, specialized laboratories, work shops, and a library. The staff is divided, administratively into three branches, namely Organic Branch, Inorganic/Physical Branch, and Plastics, Fibers, and Miscellaneous Branch, each headed by a Branch Chief, under the general supervision of the Regional Director, Chemical Laboratory Division. The present authorized staff includes ten chemists at the bench, a physical aide, a laboratory worker, and five administrative personnel.

The basic discipline of the professional staff is, of course, analytical chemistry. To accomplish its objectives, the laboratory contains several small laboratories for infrared, mass, emission, x-ray, and atomic absorption spectrometry. These instrumental laboratories support two larger general purpose laboratories: one devoted principally to organic analyses, both qualitative and quantitative, on such material as natural gums, paints, foods, whiskey, pharmaceuticals, etc. In the space of one year, this laboratory may analyze upwards of a thousand different types of organic materials, both natural and manufactured. The second larger laboratory is devoted principally to inorganic analyses, which include the analysis of metals, ores, and other allied materials.

The individual Customs chemist is expected, in so far as possible, to follow through on the analysis of a submitted sample, performing all of the "wet" chemistry and instrumental methods required for the proper identification and classification of the sample. This approach may be somewhat unique among analytical laboratories, generally, since most of these divide the effort required for analysis among several "specialists". The net result of the Customs chemist becomes an exceptionally well-rounded and knowledgeable analytical chemist in a rather short period of time.

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