



THE

CHESAPEAKE CHEMIST

MARYLAND SECTION
AMERICAN CHEMICAL SOCIETY

VOL. XXVI

FEBRUARY, 1970

NUMBER 2

CITIZEN SMITH

By Dave Gerard



"I try not to think of it as polluted air meeting polluted water!"



THE CHESAPEAKE CHEMIST

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FEBRUARY MEETING

AIR AND WATER POLLUTION



DR. JOSEPH HUNTER

DATE:

WEDNESDAY, FEBRUARY 18, 1970

PLACE:

Eudowood Gardens Lecture Room,
Eudowood Plaza, Joppa Road near
Goucher Boulevard.

SPEAKERS AND TOPICS:

5:30 P.M. Dr. Raymond Manganelli,
Rutgers State University. "Air Pol-
lution"

8:30 P.M. Dr. Joseph Hunter, Rutgers
State University. "Water Pollution"

SOCIAL HOUR:

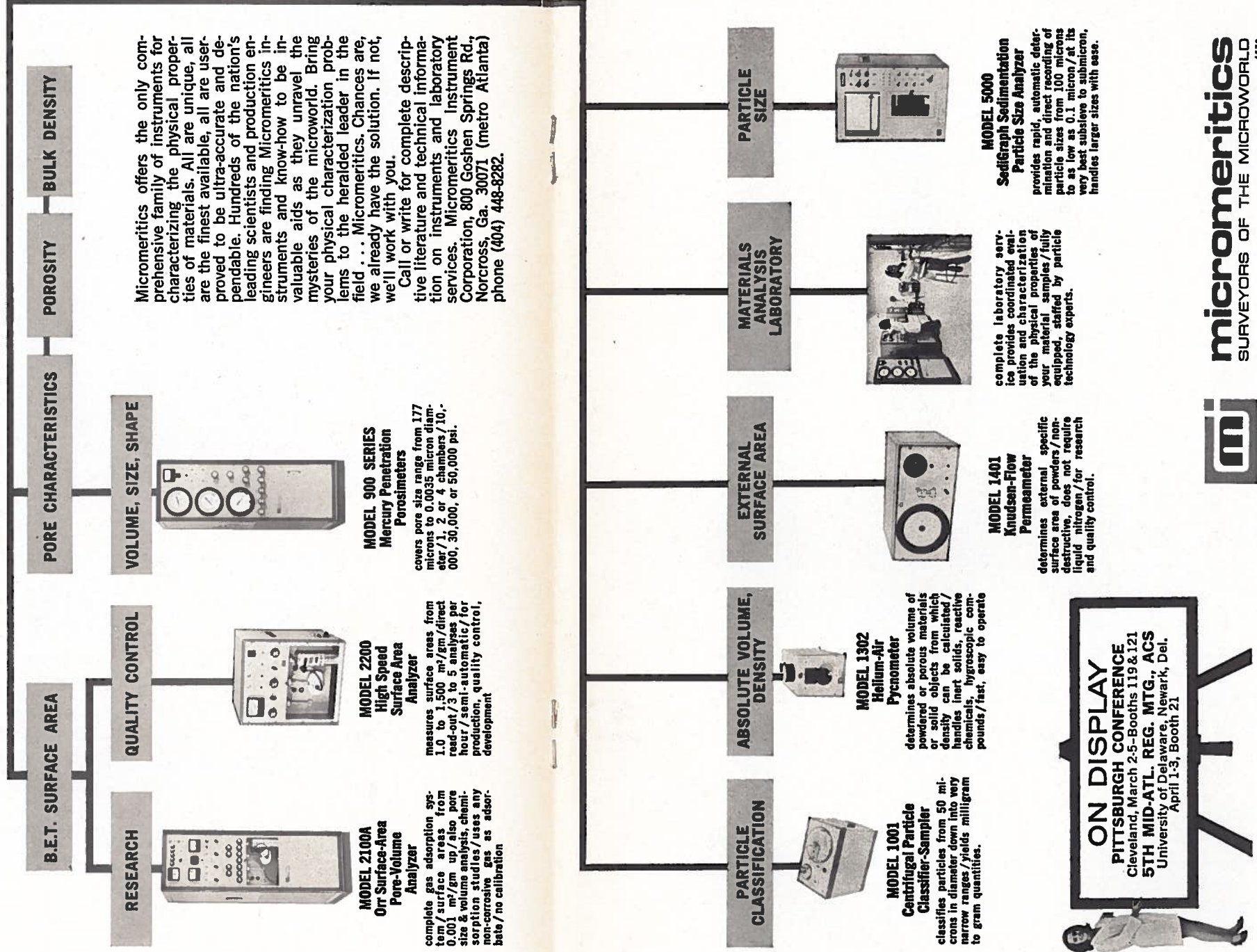
There will be a social hour after the
meeting. Refreshments will be served.

COCKTAILS AND DINNER:

Eudowood Gardens Dining Room. Price
is \$4.25 per person for cocktails (6:30-
7:15, unlimited quantity) and hot buf-
fet dinner (7:15). Students and their
spouses may attend the dinner for
\$2.50. Reservations are necessary for
the dinner, and should be made with
Mr. Allen Bednarczyk, McCormick and
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no later than February 16. It is not
necessary to be a member of the
American Chemical Society to attend
the dinner or the talks, and the talks
may be attended without attending
the dinner. You are invited to bring
your wife and friends to both the din-
ner and the meeting.

*(No photograph of
Dr. Manganelli was available)*

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MARYLAND SECTION NEWS

THE JOHNS HOPKINS UNIVERSITY

Dr. J. D. H. Donnay gave a lecture entitled "The Morphology of Crystals and Twins" on December 5, 1969 at Georgia Institute of Technology, Atlanta, Georgia. Dr. Alsoph H. Corwin gave a lecture entitled "Heme as a Probe for the Investigation of Hemoglobin" on December 11, 1969 at the National Cash Register Company, Dayton, Ohio.

FORT DETRICK

The Scientific Research Society of America presented the lecture "Digging into 18-Million Years of Maryland's Past," by Dr. Frank C. Whitmore, Jr., Research Geologist, U. S. Geological Survey, Research Associate, Smithsonian Institution, on November 18, 1969. Dr. Malcolm H. McGavran, Department of Pathology, Washington University, St. Louis, Mo., presented the seminar "Aflatoxin Carcinogenesis" on December 4, 1969. Dr. Takashi Kurimura, Research Associate, Research Institute for Microbial Diseases, Osaka University, Japan, presented the seminar "SV-40, an Oncogenic Virus," to the Biochemistry Study Group, on December 8, 1969. Dr. William F. Daniels and Mr. John F. Lemp, Jr. each presented papers at the 62nd Annual Meeting of the American Institute of Chemical Engineers in Washington, D.C., on November 19, 1969. Dan-

iels presented "The Importance of Oxidation-Reduction Potentials Levels in Growth of Tissue Culture Lines"; Lemp, "Electrophoresis of Colloidal Biological Particles."

The U. S. Army Medical Research Institute of Infectious Diseases presented guest lecturer, Dr. Herbert L. Dupont, University of Maryland School of Medicine, on 18 December 1969. Dr. Dupont spoke on "Study of Shigella Vaccine in Man." The Biochemistry Study Group heard Dr. Shmuel Razin, Associate Professor of Microbiology, Hadassah Medical School, Hebrew University, Jerusalem, lecture on "Organization of Protein and Lipid in Mycoplasma Membranes" on 5 January 1970.

Due to the major reduction in personnel at Fort Detrick, within the next several months, a number of the Maryland Section members of the ACS will locate in other positions. We will attempt to list the new addresses of Maryland Section members in the April issue of *Chesapeake Chemist*.

MARCH MEETING

The March meeting will be held at Eudowood Gardens on March 18, 1970. Dr. Jerome Kruger of the National Bureau of Standards will talk at 5:30 P.M. on "Passivity of Iron", and at the 8:30 P.M. meeting Dr. G. M. Kosalopoff of Auburn University will talk about "Steric Effects in Phosphorus Chemistry."

..... Tear-Out Dinner Reservation Form

There is enclosed \$..... (\$4.25 per person)* for cocktails and dinner at Eudowood Caterers, Eudowood Plaza, on Wednesday, February 18, 1970 for the following persons.**

<u>Name</u>	(Please Print or Typewrite.)	<u>Affiliation</u>
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*Please make checks payable to Maryland Section, ACS and mail together with reservation form to Mr. Allen Bednarczyk, McCormick and Co., Inc., 204 Wight Ave., Cockeysville, Md. 21030, or phone 666-3155, 666-3156.

**Return by February 16.

DR. JOSEPH V. HUNTER

Dr. Joseph V. Hunter was born in Brooklyn, New York in 1925. In 1947, he received his B.S. (*cum laude*) in Chemistry from St. Johns University in Brooklyn, New York. He continued his education at St. Johns, receiving his M.S. in Organic Chemistry in 1949. During his graduate years at St. Johns, he served as a teaching assistant. Between the years 1949-1951 he worked as a research and teaching assistant at Brooklyn Polytechnic Institute in New York. During the period of 1951-1955, he was employed as a research and development chemist at the Nopco Chemical Company in Harrison, New Jersey. In 1955, he returned to academic life as a graduate student at Rutgers University where in 1962 he received his Ph.D. in Environmental Science. After receiving his degree, he was added to the faculty of Rutgers University as an Assistant Professor and in 1964 was promoted to Associate Professor.

Dr. Hunter is a member of the Analytical Methods Committee of the Water Pollution Control Federation and the Water Resources Council of Rutgers University. He is also a member of numerous professional societies among which are included the American Public Health Association, the Water Pollution Control Federation, the Royal Society of Health and the American Chemical Society.

Dr. Hunter is the author and co-author of numerous publications including the book "Principles and Applications of Aquatic Chemistry", published by the John Wiley Co.

DR. RAYMOND M. MANGANELLI

Dr. Raymond Manganelli, a native of Elizabeth, New Jersey, received the Ph.D. degree in environmental sciences from Rutgers State University in 1953. At the present time he is Professor of Environmental Sciences at Rutgers, and his interests lie in the chemistry, physics, and biology of air and water pollution. He is a member of the Industrial Hygiene Association, the Water Pollution Control Federation, the Air Pollution Control Association, and the American Chemical Society.

WATER POLLUTION

Organic matter has a pronounced effect on the aquatic environment. In addition to natural sources, a large amount of organic constituents originate in domestic and industrial waste waters. The general effect of these organic compounds is to lower the dissolved oxygen level of receiving waters. Specific problems due to organic contaminants include foaming, color, toxicity and taste and odor.

The traditional method of waste water treatment is biological treatment. That is, the use of a biological population to oxidize organic waste water constituents before waste waters are discharged into streams. Increases and changes in population distribution has caused increasing interest in additional waste water treatment processes. Many of these are physical or physico-chemical in nature.

Treatment processes, however, cannot alone cope with the increases in domestic and industrial wastes. As treatment costs rise due to the use of additional treatment procedures, such techniques as reuse, process changes to eliminate waste, product changes to assist disposal, better housekeeping, etc. will approach feasibility as solutions to pollutional problems.

AIR POLLUTION

(No abstract of this talk was available by the time *Chesapeake Chemist* went to press).

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Copy for the *Chesapeake Chemist* should be forwarded to the Editor not later than the tenth of the month preceding publication.

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John Garth Huntington, Edgewood Arsenal.

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Ronald Edward Joyce, Kramer Court, Glen Burnie.

David Nathan Kramer, Wiltonwood Road, Stevenson.

David Reginald Lightfoot, Brook Way, Columbia.

Charles Frederic Mead, E. Reider Ct., Edgewood.

William Andrew Nichols, Bainbridge.

Irving Jacob Ostrich, Fort Dertick, Frederick.

Virgil Scarth, West Friendship.

Robert A. Sharp, Jr., Edgewood Arsenal.

MASS SPECTROSCOPY

The Spring session of the Professional Development Program for Scientists, sponsored by the Baltimore-Washington Section of the Society for Applied Spectroscopy in collaboration with the Maryland and Washington Sections of the American Chemical Society, will consist of five lectures in Mass Spectroscopy. Topics include Theory, Instrumentation and Applications. The Technical Coordinator for the session is Dr. Catherine Senslau, Johns Hopkins University.

Additional information and applications can be obtained from Mr. Andrew F. Rekus, Professional Development Program, Baltimore Gas and Electric Company, Westport Chemical Laboratory, Baltimore, Maryland 21203. Registration is limited and applications must be received by March 1, 1970.

ACS SHORT COURSES

To register or obtain complete information on the courses, convenient lodging, and student discounts, please write to Education Office, American Chemical Society, 1155—16th St., N.W., Washington, D.C. 20036. During the two-week period prior to a course, registration should be made by telephone: area code 202, 737-3337 ext. 258.

Philadelphia, Pa.—“Modern Organic Synthesis”, March 6-7, Dr. Barry M. Trost and Dr. Edwin Vedejs; fee \$70.

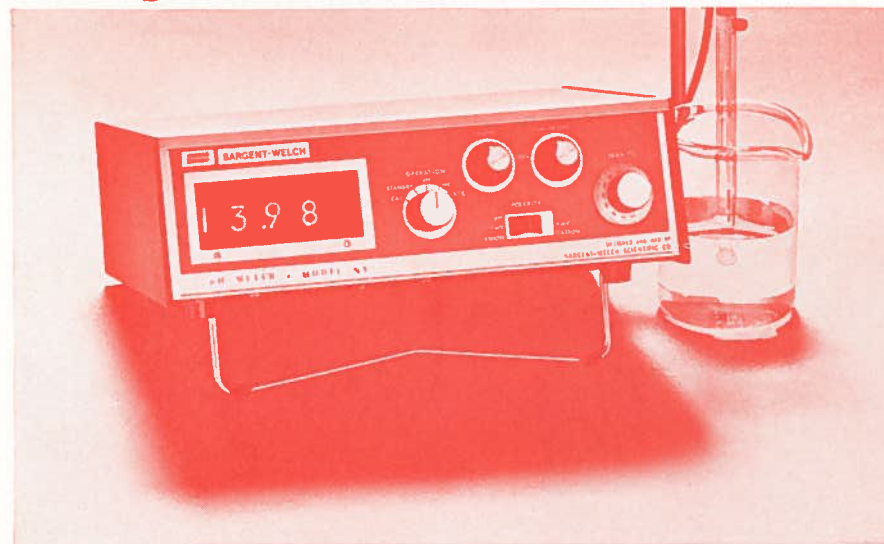
Newark, Del.—“Crystalline High Polymers: Molecular Structure and Thermodynamics”, March 30-31, in conjunction with Middle Atlantic Regional Meeting, Dr. Bernhard Wunderlich; fee \$80.

New York, N.Y.—“Optical Rotary Dispersion and Circular Dichroism in Coordination Compounds”, March 13-14, Dr. Stanley Kirschner and Dr. Bodie E. Douglas; fee \$90.

Hoboken, N. J.—“Acids, Bases, and Non-aqueous Solvents”, March 22-23, Dr. Russell S. Drago; fee \$80.

Washington, D. C.—“Organic Photochemistry”, March 20-21, Dr. Howard E. Zimmerman and Dr. John S. Swenton; fee \$75.

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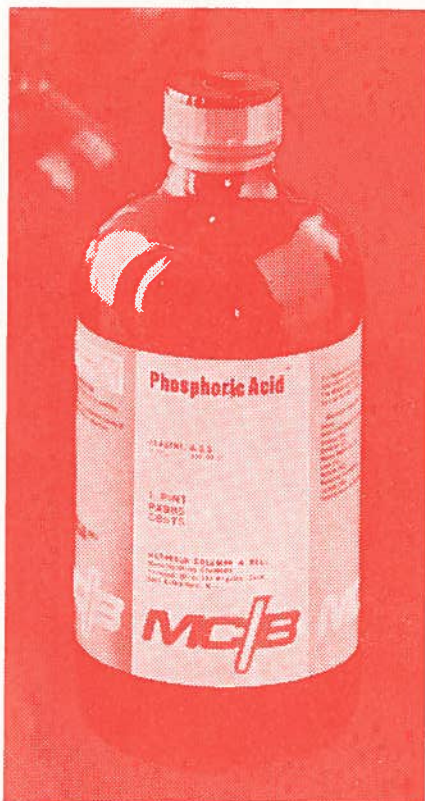
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