



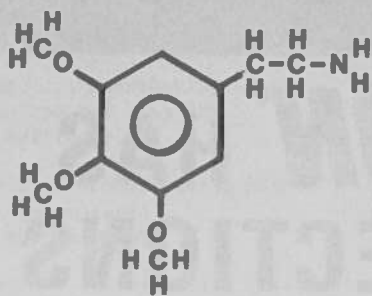
THE CHESAPEAKE CHEMIST

MARYLAND SECTION
AMERICAN CHEMICAL SOCIETY

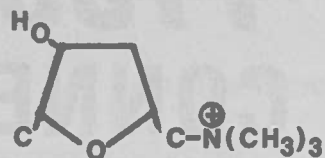
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NOVEMBER, 1972

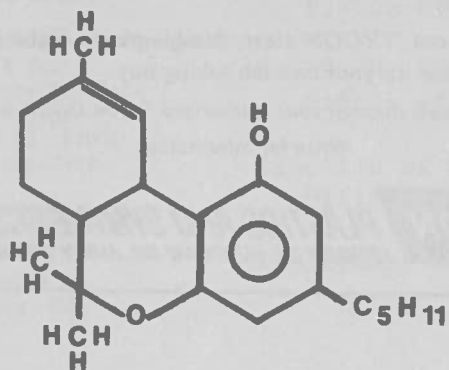
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NOVEMBER, 1972

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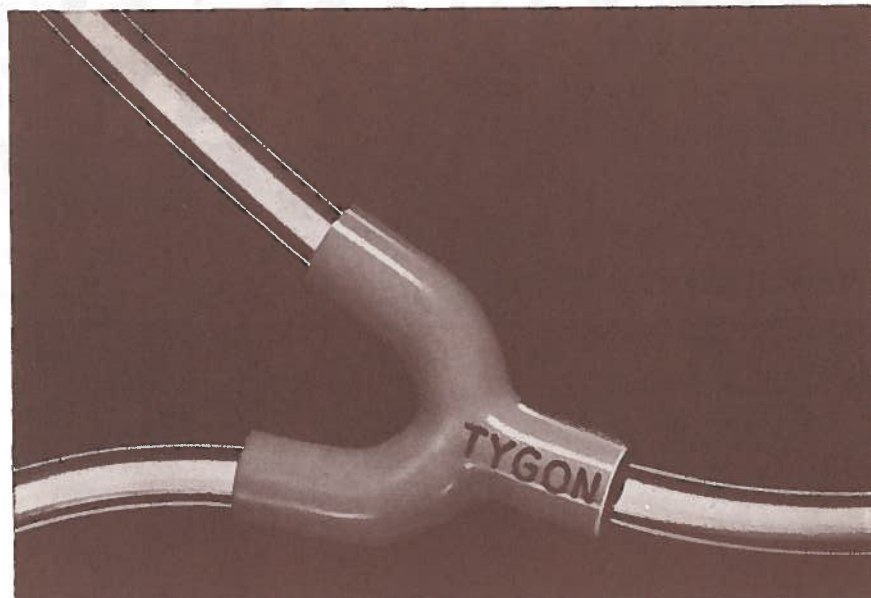
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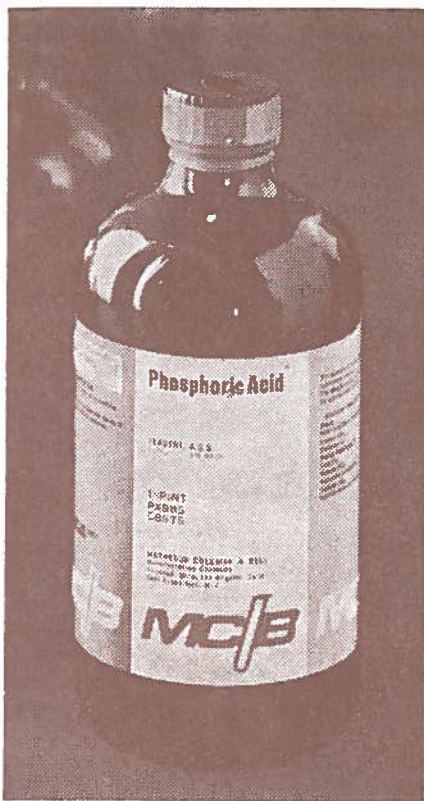
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NOVEMBER MEETING



Dr. Henry C. Freimuth

DATE:

WEDNESDAY, NOVEMBER 15, 1972

PLACE:

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

SPEAKERS AND TOPICS:

5:30 P.M. Dr. Henry C. Freimuth, Former Chief Toxicologist, Chief Med. Exam. Office, Md.

"Alcohol: Boon or Bane"

8:30 P.M. Prof. Ralph N. Blomster, Chrmn., Dept. of Pharmacognosy, U. of M. Baltimore.

"Hallucinogenic Substances from Plants"

COCKTAILS AND DINNER:

Eudowood Gardens Dining Room. Pay Bar (\$.50 ea.) (6:30). \$4.75 for hot buffet dinner (7:15). Students, Retired Chemists and their spouses may attend the dinner for \$3.00 each. Reservations are needed. Contact Mr. Allen Bednarczyk, McCormick & Co., Inc., 204 Wight Ave., Hunt Valley, Md. 21031, phone 666-3155. Non-ACS members may attend; the talks may be attended without attending dinner. Guests are welcome.

SOCIAL HOUR:

All are invited to refreshments during the Social Hour after the meeting.



Dr. Ralph N. Blomster

DR. HENRY C. FREIMUTH

Henry C. Freimuth was born in New York City on June 24, 1912. He received his B.S. from the College of the City of New York in 1932 and his M.S. (1933) and Ph.D. (1938) from New York University.

Dr. Freimuth began his professional career in 1934 as an Assistant to the Pathological Chemist at City Hospital in New York. In September of 1938, Dr. Freimuth became a Research Assistant in the Department of Therapeutics at the New York University College of Medicine, leaving in February, 1939 to become a Special Agent, Analytical Chemist, with the Federal Bureau of Investigation in Washington, D.C. In August of 1944, Dr. Freimuth left the FBI to become a Toxicologist in the Office of the Chief Medical Examiner, State of Maryland, a position he held until his retirement on October 1, of this year.

Dr. Freimuth has enjoyed a long and distinguished career as a teacher both in the field of forensic science as well as in chemistry beginning in 1941 (to date) with his appointment as Associate Instructor, Maryland State Police Training School. In 1942 (to date) he was made an Instructor in the Baltimore City Police Academy. In 1946, he began his Association with Loyola College (Baltimore) as an Adjunct Professor of Chemistry and this year was appointed Professor of Chemistry. In 1949, he became Assistant Professor of Legal Medicine at the University of Maryland School of Medicine, being promoted to Associate Professor of Forensic Pathology in 1957 (to date). In 1970, he was also Adjunct Associate Professor of Pharmacology and Toxicology at the University of Maryland School of Pharmacy. From 1949 to 1955, Dr. Freimuth was Guest Lecturer for the Department of Legal Medicine, Harvard University Medical School. In 1965, he was appointed Associate in Forensic Pathology, Johns Hopkins School of Hygiene and Public Health, a position he holds today.

Dr. Freimuth is a member of Sigma Xi, Phi Lambda Upsilon, a Fellow of the AAAS, a member of the Maryland Association of Public Health Labora-

tories, the American Academy of Forensic Sciences (Chairman, Toxicology Section, 1955, 1956 and 1957) and the International Association of Forensic Toxicologists. He is also a member of the American Chemical Society and past-chairman of the Maryland Section (1956).

Dr. Freimuth has published over forty articles dealing with forensic science and has been a contributor to "Toxicology, Mechanisms and Analytical Methods", (Academic Press 1960, 1961) and "Progress in Chemical Technology" (Academic Press, 1963).

ALCOHOL - BOON OR BANE

The discussion will include a presentation of data showing the role played by alcohol consumption in causing, or contributing to the cause of, death as a result of homicide, suicide or accident. The physiological effects of alcohol as related to blood alcohol concentrations will also be discussed as well as the various chemical methods used for the determination of blood alcohol concentrations. The indirect measure of blood alcohol concentration by analysis of breath will also be discussed.

DR. RALPH N. BLOMSTER

Ralph N. Blomster was born in Lynn, Massachusetts on May 18, 1931. He received his B.S. from the Massachusetts College of Pharmacy in 1953, his M.S. from the University of Pittsburgh in 1958 and his Ph.D. from the University of Connecticut in 1963. During his years in graduate school, he was a Fellow of the American Foundation for Pharmaceutical Education (1959-1961) and later, a Lederle Research Fellow (1961-1962).

After receiving his doctorate, he returned to the University of Pittsburgh as an Assistant Professor of Pharmacognosy (1963-1966), being promoted to Associate Professor in 1966, a position he held until 1969 when he left to become Professor and Chairman of the Department of Pharmacognosy at the University of Maryland.

Dr. Blomster is a Charter Member of the American Society of Pharmacognosy (Vice-President 1971-1972, Pre-

sident 1972-1973); the American Association of Colleges of Pharmacy, Section of Teachers of Biological Sciences (Secretary-Treasurer, 1966-present); the American Pharmaceutical Association; the Academy of Pharmaceutical Sciences, Section on Pharmacognosy and Natural Products; the American Chemical Society; AAAS; and the American Institute of Biological Sciences. Dr. Blomster is also a member of Sigma Xi, Rho Chi, Kappa Psi, a Fellow of the New York Academy of Sciences and a member of the Phytochemical Society of North America.

Dr. Blomster's areas of research interest include phytochemistry, medicinal folklore evaluation, thin layer chromatography, collection and extraction of native plants for biological testing and indexing, storage and retrieval of phytochemical literature. Dr. Blomster has also been active in the areas of phytochemical screening and drug plant exploration in primitive geographic areas.

Among Dr. Blomster's other activities are included membership on the Speaker's Bureau of Western Pennsylvania Conservancy, Consultant to the Amazon Natural Drug Company, Associate Editor of the Lynn Index (a Bibliography of Phytochemistry) and Editor of the American Society of Pharmacognosy Newsletter.

HALLUCINOGENIC SUBSTANCES FROM PLANTS

Humans have always regarded the plant kingdom as their main source of the necessities as well as the amenities of life. After early man filled his basic needs for food, by chasing wild game and harvesting wild plant material, or as he sat exhausted after an unsuccessful hunt, he probably dreamed of that far off land, that paradise that was euphoria, where animals waited to be caught and fruit grew luxuriantly on low branches. Through the years primitive man, in his search for food, undoubtedly poisoned himself through his trial and error testing of plant material as foods. However, some of these, although not outright poisons, induced physical and mental states that were not at all unpleasant, sometimes enjoyable and often of startling unreality. With this discovery of hallucinogenic materials man was able to

satisfy two of his powerful needs; needs that are at opposite ends of the spectrum; to keep things the same but at the same time have something new happen. Man wants to feel secure, not to the point of monotony, but he also likes to be surprised, but not to the point where this leads to anxiety. This discovery of hallucinogenic materials allowed man to alter his ego, change his heart and change his mind; in other words to fill the popular prescription for getting out of a rut.

Virtually all of the hallucinogens are derived from plants or are related to naturally occurring chemical compounds. Most hallucinogenic drugs have evolved, historically, from plants through primitive man's use of extracts of plants and mushrooms in his customs, rituals and religious ceremonies and he often ascribed magical or mystical relevance to these plants since they often allowed them to commune with their gods.

A great number of terms have been applied to these substances, phantastica, psychomimetics, hallucinogens, psychotica, psychotogens, schizogens, psychedelics (mind-magnifying) and psychelytic (mind-releasing). They all have in common, the induction of visual and/or other hallucinations and placement of the subject into a state of non-reality. They are widely diversified as chemical compounds; they can be conveniently divided into nitrogenous or non-nitrogenous principles. The major representative of the non-nitrogenous class, that will be discussed, is marihuana, while those of the nitrogenous group include the alkaloids, mescaline, muscarine and LSD. In addition, the chemistry and native uses of selected groups of plants will be discussed. Plants that have both received widespread publicity (nutmeg, Datura, morning glory) as well as those that are less widely known (Soma, Sinicuichi and Devils Foot Root) will also be discussed.

COPY DEADLINE

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

NOMINATIONS FOR SECTION OFFICERS

Prior to the talk at 8:30 P.M. the election will be held for officers, councilors and members-at-large of the executive committee to serve the Maryland Section in 1973. The Nominating Committee, consisting of Dr. George Steinberg, Dr. Dave Roswell, Dr. Joe Cogliano, Mr. Allen Bednarczyk and Mr. Tim Parr, Chairman, has presented the following slate of candidates. Additional nominations may be received from the floor with the understanding that any candidate must have given consent to such nomination.

Chairman-elect.....Donald E. Jones
 Secretary.....Ernest F. Silversmith
 Treasurer.....Allen Bednarczyk
 Councilors.....Thomas C. Simmons, '73-'75
 Frederick Gornick, '73-'75

Alternate
 Councilors.....David Roswell, '73-'75
 Edward Poziomek, '73-'75

Members-at-large:
 Theodor Berenthien
 Robert Ellin
 Edward Koubek
 Ronald Kassel
 Robert Schneider

Dr. Donald E. Jones

Donald E. Jones was born in South Bend, Indiana on August 1, 1934. He graduated from Manchester College with a B.A. in Chemistry in 1957 and received his Ph.D. in Analytical Chemistry from Purdue University in 1963 under Professor Warren Brandt. After receiving his doctorate, Dr. Jones accepted a position as Assistant Professor at Western Maryland College and, in 1967, was promoted to his present position of Associate Professor. During the period 1971-1972, he was Visiting Associate Professor at Purdue University. For six years Dr. Jones taught in the National Science Foundation Institutes at Western Maryland College. He has also served as Director of the N.S.F. Summer Institute at Western Maryland College.

Dr. Jones is a member of Sigma Xi, Phi Lambda Upsilon and Omicron Delta Kappa. He has been cited as an Outstanding Educator of America in 1971 and has received the Special Award for Service from the Maryland Section of the American Chemical Society. Dr. Jones is a member of the A.C.S., the American Association of University Professors and is Founder and first President of the Middle Atlantic Association of Liberal Arts Chemistry Teachers. He has served the Maryland Section of the A.C.S. for many years in various capacities including General Chairman of the Middle Atlantic Regional Meeting (M.A.R.M.), 1971 and

is presently Chairman Elect of the Steering Committee for the 1973 Middle Atlantic Regional Meeting.

Dr. Ernest Silversmith

Dr. Ernest Silversmith was born in Nuremberg, Germany. He received his early education in Takoma, Washington. He received his undergraduate training at Harvard University, receiving his A.B. in Chemistry in 1952. In 1955, Dr. Silversmith received his Ph.D. in Organic Chemistry from the University of Wisconsin after which he spent one year of Post-Doctoral research at the California Institute of Technology under Professor John D. Roberts. From 1956-1958, he was an Assistant Professor of Chemistry at Mount Holyoke College. In 1958, Dr. Silversmith became a research chemist with E. I. duPont de Nemours Company. In 1967, he left duPont to assume his present position as Professor of Chemistry and Chairman of the Chemistry Department of Morgan State College.

Mr. A. Allen Bednarczyk

A. Allen Bednarczyk was born in Baltimore in 1942. He received his B.S. in Chemistry from Loyola College (Baltimore) in 1964. After graduation, he was employed as a Research Chemist by McCormick & Co., Inc. in their Corporate Research and Development Laboratories. While working at McCormick, he received his M.S. degree in Food Science from the Univer-

sity of Maryland, College Park (1971) and is presently a Ph.D. candidate in Food Science from the same institution. His work at McCormick is involved mainly with food flavor research.

He is a member of the A.C.S., the Society for Applied Spectroscopy and the Institute of Food Technologists. He has served the Maryland Section of the A.C.S. for several years, serving as Member of the Executive Committee, Chairman of the House Committee and Assistant Editor of the *Chesapeake Chemist*.

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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EMPLOYMENT SERVICES AVAILABLE

We are pleased to announce that starting August 1, the Society will inaugurate a toll-free telephone service to the ACS Employment Aids Office. The free telephone service may be used by any ACS member in the continental United States (except Alaska) to obtain Employment Aids Office application forms, information on jobs available, suggestions on preparation of resumes, and other employment-related information and guidance. Design to provide more rapid and effective service to ACS members, particularly to those who are unemployed, the telephone line will be open from 8:30 a.m. to 5:00 p.m., E.D.T., Monday through Friday (except holidays).

THE NUMBER IS 800-424-8539.

Also starting August 1, the ACS Employment Aids Office will provide a free resume copying service for unemployed members. On request, up to 50 copies of a resume (not more than 2 pages in length) will be printed and duplicated and provided to an unemployed member.

These new services are part of the ACS Professional Enhancement Program (PEP) and are financed from funds authorized by the ACS Board of Directors to enable the PEP Steering Committee to initiate certain worthwhile PEP programs until funds to support them could be obtained in a Society-wide fund drive scheduled later this year. (These funds will be repaid as PEP contributions are received.)

During the past few months, we have also instituted a new data input system for candidates for employment in the ACS Employment Aids Office. This system will enable us to aid both candidate and potential employer by doing a better job matching qualified personnel to meet specific job specifications. Employment candidates are now using a new form which requests them to indicate all fields of chemical science in which they are qualified. The new application form calls for the candidate to list his major fields of specialization and the principal work functions for which he is qualified (for example, research production, or technical service). In addition, each candidate may designate any number of chemical specialities, from a list of more than 400, in which he has significant training and experience. (A copy of the new data input form is enclosed for your information.) Each job candidate may now also include a personal resume. This will be reproduced and provided to interested employers along with the applicant's standard application form.

Until the employment environment improves, job opportunities for chemists and chemical engineers may continue to be limited. However, we believe that the new data system in the Employment Aids Office will enable the ACS member seeking employment to put his best foot forward and likely improve his opportunity for contact with potential employers.

We hope you will call these new programs to the attention of your section members and encourage them to contact the ACS Employment Aids Office to take advantage of these services.

Halley A. Merrell, Manager
Office of Member Services

ELECTION OF OFFICERS - PRIOR TO 8:30 TALK

MARYLAND CHEMIST AWARDEE AND 50 YEAR MEMBERS



Left to right: Mrs. John Krantz, Jr., Dr. John Krantz, Jr., Dr. Yale Caplan, Dr. Joyce Kaufman, Dr. Arnold Seligman, Mrs. Arnold Seligman, Mr. Aaron Eisenberg, Mrs. Aaron Eisenberg.



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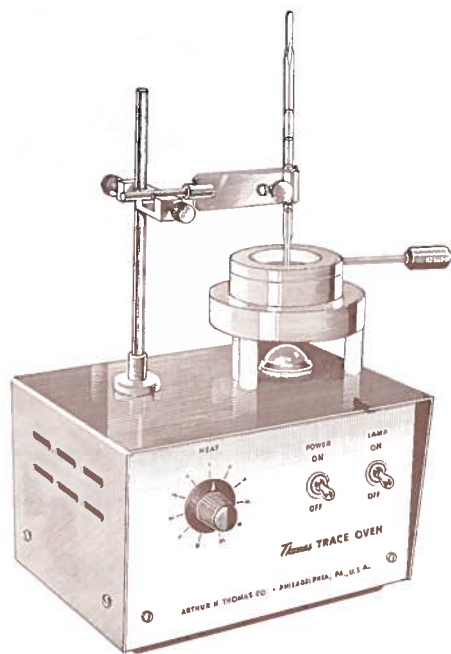
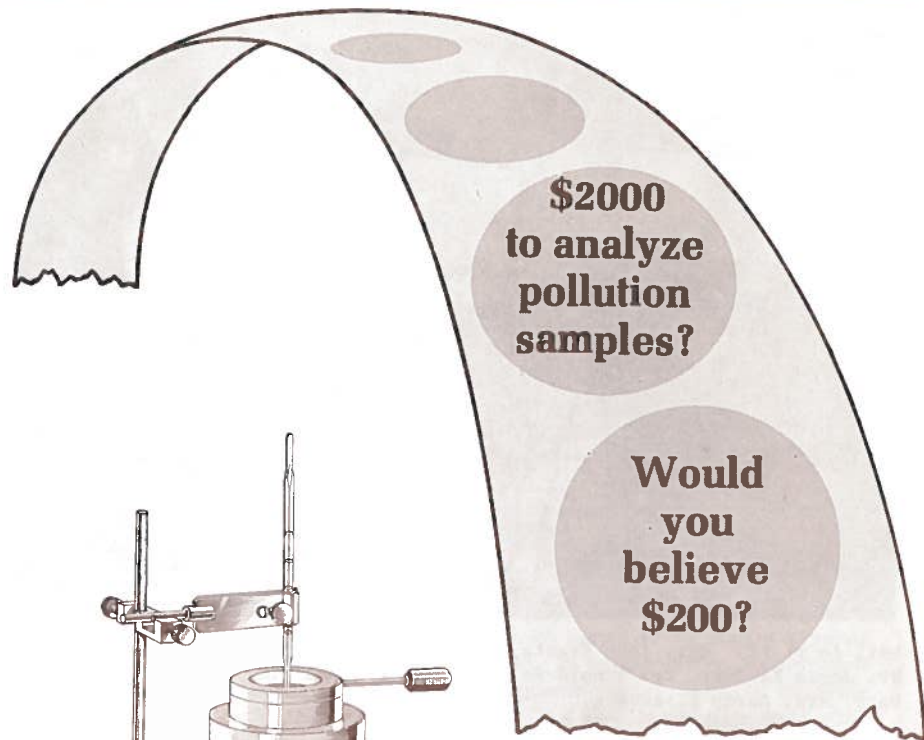
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