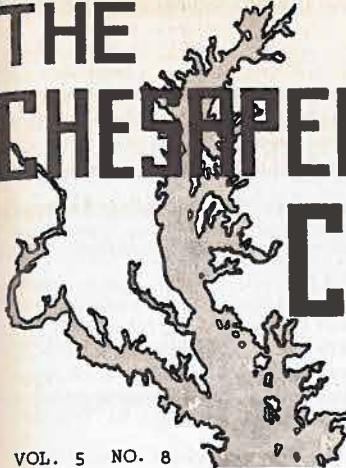


NOVEMBER 1949

# THE CHESAPEAKE CHEMIST



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## MARYLAND SECTION MEETINGS

The Section meeting for November will be held at Remsen Hall on the Johns Hopkins University campus at 8:30 on Friday evening, November 18. Election of Section officers for 1950 will take place at this meeting (see page 2). The speaker will be Dr. Curt Richter of the Johns Hopkins Medical School, who will talk about the chemistry of taste.

Dr. Richter is a native of Denver. After graduation from the East Denver High School he studied engineering for two years at the Technische Hochschule in Dresden, then returned to America to study at Harvard. He received a B.S. from Harvard, and in 1921 was awarded a Ph. D. by Hopkins. In that year he was appointed to Adolph Meyer's staff at the Phipps Psychiatric Clinic. He was Director of the Psychobiological Laboratory at the Phipps Clinic from 1922 to 1949, and is at present Associate Professor of Psychobiology at the Johns Hopkins Medical School.

Dr. Richter's extensive research has touched many fields. He has made studies on thirst, on alcohol, and on fatigue. He is well known for his investigations of the electrical resistance of the skin in animals and man,—studies which have been utilized in the diagnosis of peripheral nerve injuries and peripheral vascular diseases. His studies of self-selection in diet showed that rats are able to make beneficial selections from chemically pure substances, and that appetite is a reliable guide to the selection of food. These studies led to a study of the principles involved in the poisoning of animals, and the part played by the taste and solubility of the poisons.

It is this phase of his work which will form the basis of Dr. Richter's address to the Maryland Section. (to page 3)

## Section Officers

Chairman J. A. Herculson, 407 Murdock Road, Baltimore 42  
 Vice-Chairman A. H. Corwin, Department of Chemistry,  
 The Johns Hopkins University, Baltimore 18  
 Secretary-Treasurer H. H. Lloyd, Goucher College, Baltimore 18

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 Editor: Belle Otto, Goucher College, Baltimore 18, Maryland.

## ELECTIONS FOR 1950

Nominations for candidates for Section offices for 1950 have been submitted by the Nominating Committee, which consists of J. E. Ahlberg, Evans H. Reid, H. Huntley Lloyd, Walter H. Rueggeberg, and Channing W. Wilson, Chairman. The Committee wishes to express its appreciation of the suggestions received.

The proposed slate is as follows:

Chairman: Alsoph H. Corwin, Department of Chemistry, The Johns Hopkins University  
 Vice Chairman: Charles E. Brambel, Clinical Laboratory, Mercy Hospital  
 Members-at-large of the Executive Committee (five to be elected):  
 George P. Hager, School of Pharmacy, University of Maryland  
 Winslow H. Hartford, Mutual Chemical Company of America  
 Stephen S. Hubbard, Hilltop Laboratory, Davison Chemical Corp.  
 E. H. Metcalf, Department of Chemistry, The Johns Hopkins University  
 Walter H. Rueggeberg, Army Chemical Center, Edgewood, Maryland  
 Councillor for 1950-1952: Duncan MacRae, Army Chemical Center, Edgewood, Maryland  
 Alternate Councillor for 1950-1952: Leslie Hellerman, The Johns Hopkins Medical School

Each individual named has given the Committee his consent to be nominated, and has expressed his willingness to serve the Section if elected, thus conforming with the requirements of the By-laws of the Section. Further nominations for any office, made from the floor of the meeting, may be offered at the time of the election. Such nominations are valid, however, only if made with the explicit consent of the nominee. Satisfactory evidence of this consent should be presented if the nominee is not present at the meeting. Such provisions are incorporated in the By-laws of the Section.

The Executive Committee of the Section consists of those elected to the above offices, all resident past chairmen, and Councillors and Alternate-Councillors still in office. The latter group consists of Belle Otto and J. C. Krantz, Jr. as Councillors and C. W. Wilson and Giles B. Cooke as alternates.

\* \* \* The condition of your American Chemical Society -- \* \* \* its policies, its needs, its activities -- is reported in C&EN for October 31. All members of the Society should read those yellow pages carefully.

from page 1) Maryland Section Meetings

Dr. Richter received wide recognition for his discovery of ANTU (alpha naphthyl thiourea) which is such an effective rat poison and was so widely used in the war-time rat control programs and in the comparable project in Baltimore. He will discuss with us his work on ANTU and related poisons, and the influences which are associated with their effectiveness.

December Meeting The speaker for the December meeting will be Dr. Carl E. Barnes, Associate Director of Research for General Aniline and Film Corporation. He will discuss "Color Photography" at the meeting on Wednesday, December 14.

Other Future Meetings In January Dr. Frederick Y. Wiselogle will talk to the Section about the chemotherapy of experimental tuberculosis, and in February the speaker will be Dr. John R. Johnson of Cornell University.

September and October Meetings The meetings at the Army Chemical Center and at the Point Breeze Works of the Western Electric Company were both thoroughly interesting and worthwhile. The Section is indebted to Dr. Rueggeberg, of the Army Chemical Center, for the success of the first meeting, and to Mr. C. C. Randolph and Mr. L. J. Moeller for the second. The hearty thanks of Maryland chemists go to these men and the groups they represent.

\* \* \* \* \*

from page 4) Baltimore's Dry Cleaners

result in excessive use of cleaning soaps and in a finished product which might be streaked or lusterless. The stills have a capacity of 150 to 275 gallons per hour and are in frequent, but not continuous, operation. The air used in drying clothing after it is cleaned is also passed through a condenser to recover all solvent vapor. This is certainly chemical industry even if the quantities involved are smaller than those handled by Standard Oil in Highlandtown.

Spot removal constitutes one of the minor problems of the dry cleaner, and is far less troublesome to him than to the layman who does his own. Sugar and starch spots are easily dealt with, but more trouble arises with inks, blood, rust, and colored drinks such as "pops" and the colas. Chemical agents are used to restore the showerproof qualities of rain coats and such garments. The applied chemistry of dyeing is not the problem to the dry cleaner that might be supposed, for most of this work is "farmed out" to dye specialists.

As the chemist in the research laboratories continues to develop new fibers and new finishes, he sets new problems for the cleaners. The chemist in the dry cleaner's labs and the workmen in the plant must keep pace with these new developments, lest some day the old myth become a truth--"They put it into the dry cleaner bath and it disappeared; nothing left but the buttons!"



NEXT MEETING Friday, November 18 TIME 8:30 P. M.  
PLACE Room 404, Remsen Hall, Johns Hopkins, Charles & 34th Sts.  
BUSINESS Election of Section Officers for 1950  
SPEAKER Dr. Curt P. Richter SUBJECT The Chemistry of Taste  
DINNER Johns Hopkins Club, Hopkins Campus, at 6:30 P. M.  
Reservations must be made by Thursday Nov. 17, with Dr. Corwin,  
Johns Hopkins University, Baltimore 18; Hopkins 3300, Ext. 322.

## GETTING ACQUAINTED WITH CHESAPEAKE CHEMISTRY

## XXI. BALTIMORE'S DRY CLEANERS

(Courtesy of Arthur N. Neild)

Applied chemistry takes many forms, and many of the old platitudes come flocking to mind in this connection. All of us know them--"All good chemists make good cooks", "Every farmer is a soil chemist" and many more. Dr. Tenney Davis was fond of reminding his classes that applied chemistry was the sixth industry mentioned in the Bible. First came the tillers of the ground and the keepers of sheep, then "all such as handle the harp and the organ", the "artificer in brass and iron" and Noah the shipbuilder. But when Noah made wine (Genesis 9:20) he was engaging in applied chemistry.

One of the modern examples of applied chemistry is the dry cleaning industry. The research problems of the industry are studied at the National Institute of Cleaning and Dyeing at Silver Spring, Maryland. Here studies are made, not only of such fundamental materials as cleaning solvents and spot removers and the machinery and devices for their use, but also of the newer materials so rapidly appearing in the clothing and domestic furnishings of the day. The cleaner must clean, without altering color, luster, finish or size, fabrics made from fibers varying from orlon and fiberglass to asbestos and cellulose acetate-coated aluminum. Fabrics are moth-proofed, shower-proofed, wrinkle-proofed and coated with an amazing variety of finishes. Inner linings and shoulder pads may be made from vinyon, foam rubber or a dozen other oddities the chemist and manufacturer have devised. Sequins and polka dots, photographic prints and the most flamboyant hand-painted neckties must all emerge unscathed from the cleaning and pressing process. The cleaners who are members of the National Institute receive information as to the best methods of meeting these problems, and may also submit to the Institute any problems which they themselves encounter.

The largest retail dry cleaning establishment in Maryland is the plant and store of Arthur Neild at 2205 North Charles Street in Baltimore. Here best current practice of applied chemistry in dry cleaning is illustrated in the use of perchlorethylene and 140F petroleum solvent as the cleaning agents. After use, these solvents are filtered through filtering media similar to Fuller's earth, and distilled. The filtration process in Neild's plant commonly yields about four bushels of dirt a week--Baltimore is a sooty city! The stills are automatic in operation, and are used primarily to separate the solvents from fatty acids, soaps and suspended solids, usually colloidal in nature, which pass through the filter. The presence of these contaminants would (to page 3