

THE CHESAPEAKE CHEMIST

MARCH 1948

VOL. 4 NO. 3

PUBLISHED BY THE
MARYLAND SECTION
AMERICAN CHEMICAL SOCIETY

THE "MARCH" MEETING

The next meeting of the Section will be held on Friday, April 2nd, a week later than the date originally announced at the February meeting. The change in date seems advisable, since the regular meeting night would have fallen on Good Friday and facilities for the meeting could not be readily arranged for that day.

The speaker will be Dr. Ralph K. Witt, a member of the Maryland Section, who will discuss "Recent Developments in Laminated Plastics." Dr. Witt hopes to supplement his discussion with motion pictures on this topic. Dr. Witt is actively engaged in research on plastics, and is serving as consultant to a number of companies which manufacture these materials, so that he is particularly qualified to give us a broad and up-to-date picture of developments in this very active field of chemical enterprise.

Dr. Witt received his undergraduate training in chemical engineering at the University of Virginia, and was granted the Ph. D. degree in physical chemistry by The Johns Hopkins University in 1931. His graduate work was followed by two years spent in research as a National Research Fellow and by another as Research Associate at the University of California. Dr. Witt then became Director of Research for the California Ink Company, and worked subsequently as an oil technologist with Shell Oil Company. In 1937 he returned to the academic field and joined the faculty of The Johns Hopkins University, where he is now Associate Professor of Chemical Engineering. His work there has been primarily in the field of plastics, particularly in the development of various types of laminates and the determination of their electrical and mechanical properties.

The dinner preceding the meeting will be held at the Johns Hopkins Club. Reservations must be made before noon, Thursday, April 1st, with Dr. A. H. Corwin, Department of Chemistry, The Johns Hopkins University, Baltimore 18 - telephone HOplkins 3300, Extension 58. The dinner is open to all members of the Section.

Section Officers

Chairman J. A. Herculson, 407 Murdock Road, Baltimore 12
 Vice-Chairman A. H. Corwin, Department of Chemistry,
 The Johns Hopkins University, Baltimore 18
 Secretary-Treasurer H. H. Lloyd, Goucher College, Baltimore 18

THE CHESAPEAKE CHEMIST is published each month from September through May by the Maryland Section, American Chemical Society.
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THE REMSEN LECTURE

The committee appointed to select the Remsen Memorial lecturer for 1948 has chosen Professor Emeritus of Biochemistry Elmer V. McCollum of the School of Hygiene and Public Health of The Johns Hopkins University. Professor McCollum is one of the very distinguished figures in the field of biochemistry. After receiving his A.B. and A.M. at the University of Kansas in the years 1903 and 1904, he continued graduate work at Yale University and was granted the doctor's degree in 1906. During the years 1907-1917 he was on the staff of the University of Wisconsin, rising from Instructor through the various grades to Professor of Agricultural Chemistry. In 1917 he came to the School of Hygiene and Public Health of The Johns Hopkins University and remained as Professor of Biochemistry until his retirement in 1945. Professor McCollum's work has been concerned with many fundamental problems dealing with the metabolism of the animal body. He discovered the first of the fat-soluble vitamins--Vitamin A--in 1913, pointed out the existence of Vitamin B in 1915, and demonstrated the existence of the vitamin now known as D in 1922. He has made extensive studies of the effect of the deprivation of minerals and trace elements on animals. Dr. McCollum is the author of four textbooks in the fields of organic chemistry and nutrition. He is a member of eleven learned societies, including the National Academy of Sciences and the American Philosophical Society, and has received eight medals and awards in recognition of the importance of his work. He has served on numerous committees, including the Committee on Foods and Nutrition of the National Research Council.

Genial and friendly, and possessing a wealth of human understanding, Dr. McCollum has attained to a position, both in his chosen field and in the estimation of his fellow men, which is given to few to reach.

The title of the Remsen lecture is to be "Vitamins and the Public Health." The time is Friday, May 28th, at 8:15 P.M., and the place is Remsen Hall.

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Recent additions to the books at Pratt Library include:
 Doree -- The Methods of Cellulose Chemistry. 2nd ed. (1947)
 Fox -- Vat Dyestuffs and Vat Dyeing (1947)
 Hougen and Watson -- Chemical Process Principles, part 2 (1947)
 Northey -- The Sulphonamides and Allied Compounds (1948)

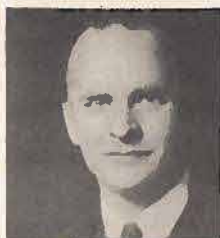
from page 4) Gas, Electric Light and Power Company

Problems of a general and often comprehensive nature are usually taken over by the Research Department of the Company. An example is the correction of difficulties or improvement of practices in the Company's current operations relating to electricity, gas or steam. Studies of this nature have included evaluation of by-products and development of analytical methods. Extensive investigations have been conducted on some phases of gas manufacturing and purification practices, on corrosion of heat-transfer equipment and other structures, on methods of measurement and on properties of gases. The Research Department attempts to maintain a somewhat detached point of view and directs a considerable part of its effort toward recognizing and filling needs not previously met, and toward accumulating general technical data pertinent to further development of the industry. For example, the Company developed through the Research Department certain safety devices now widely used on gas-burning equipment. The Department has been broadly interested in overall considerations involved in the use of primary fuels to supply gas and electricity. At the present time it is assisting in a critical study of the feasibility of widespread use of electric energy for space heating by means of the heat pump. The Research Department has as one of its objectives the maintenance of a suitable balance between studies directed toward immediate problems and those having a long-range interest.

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 THE EDITOR'S CORNER

From time to time THE CHESAPEAKE CHEMIST has carried short articles on the general subject "Wartime Chemistry in the Chesapeake Area." As the months since V-E and V-J Day have passed, this topic has remained important and interesting, but is less timely than it was. In the next issue or two, the Editor would like to print a series of short paragraphs to fill out somewhat the picture of what Maryland chemists and chemical industries did in furtherance of the war effort. There will be far too little space to tell the whole story of Chesapeake chemistry and the war, and much of the story is still classified as "secret," but members of the Section are interested in knowing more about individual and group contributions. If you have suggestions or material for these paragraphs, please report them to the Editor. A phone call to Belmont 3861 or a penny postcard to the Editor at the address at the top of page 2 will be most welcome. Likewise, the Editor will be pleased to receive suggestions about organizations to be included in the series on "Getting Acquainted with Chesapeake Chemistry," and will lend an attentive ear to any other ideas you may have about this newsletter.

Did you read the Official Reports of the American Chemical Society for the year 1947 which appeared in the February 23 issue of Chemical and Engineering News? These reports, and in particular the report of the Executive Secretary, tell what is happening in Your Society, and should be read by every chemist who is concerned for the welfare of himself, his fellow chemists and his profession.



Dr. Witt

NEXT MEETING 8:30 P.M., Friday, April 2
PLACE Room 404, Remsen Hall, Johns Hopkins
Charles & 34th Streets
SPEAKER Dr. Ralph K. Witt
SUBJECT Recent Developments in
Laminated Plastics
DINNER 6:30 P.M., Johns Hopkins Club
The meeting is open to any who are interested.
Save Friday, April 30th, for the next meeting.
Bring another chemist.

GETTING ACQUAINTED WITH CHESAPEAKE CHEMISTRY

XVI. The Consolidated Gas, Electric Light and Power Company

(Courtesy of Ernest W. Guernsey, Director of Research)

With a view to maintaining at all times the best possible service to users of electricity, gas and district steam, the Consolidated Gas, Electric Light and Power Company of Baltimore requires the assistance of a large group of technically trained men, many of them chemists, chemical engineers and metallurgists.

The applications of chemistry and chemical engineering which arise in connection with the maintenance of these services are quite diverse. Some have to do with selecting raw materials, controlling manufacturing operations and overcoming problems that arise in the production, distribution and utilization of electricity, gas and district steam for both domestic and industrial purposes. Others are related to the usefulness of new materials, new methods and new processes. Chemists, chemical engineers and others are developing new fields of application of the utilities services, and are engaged in continuous study of the fundamental phenomena which form the basis of present operations and determine the nature of future improvements.

Laboratories associated with the respective production departments for gas, and for electricity and steam, are concerned directly with problems of plant operation. Typical tasks of these laboratories comprise analyses of coal and coke, oils and other raw materials, and by-products; determination of calorific value, specific gravity and combustion characteristics of manufactured gas; and maintenance of safe water conditions in boilers. One laboratory is engaged in metallographic studies bearing on selection of metals and fabrication and maintenance of plant equipment.

Other laboratories associated with the distribution departments of the Gas Division and the Electric Division, respectively, are concerned primarily with testing and approving materials and equipment designed for consumer use, but are also responsible for maintenance of distribution and utilization of facilities for gas and electricity. The rigorous standards adhered to with the help of these laboratories contribute largely to safety and satisfaction in the use of the services. (to page 3