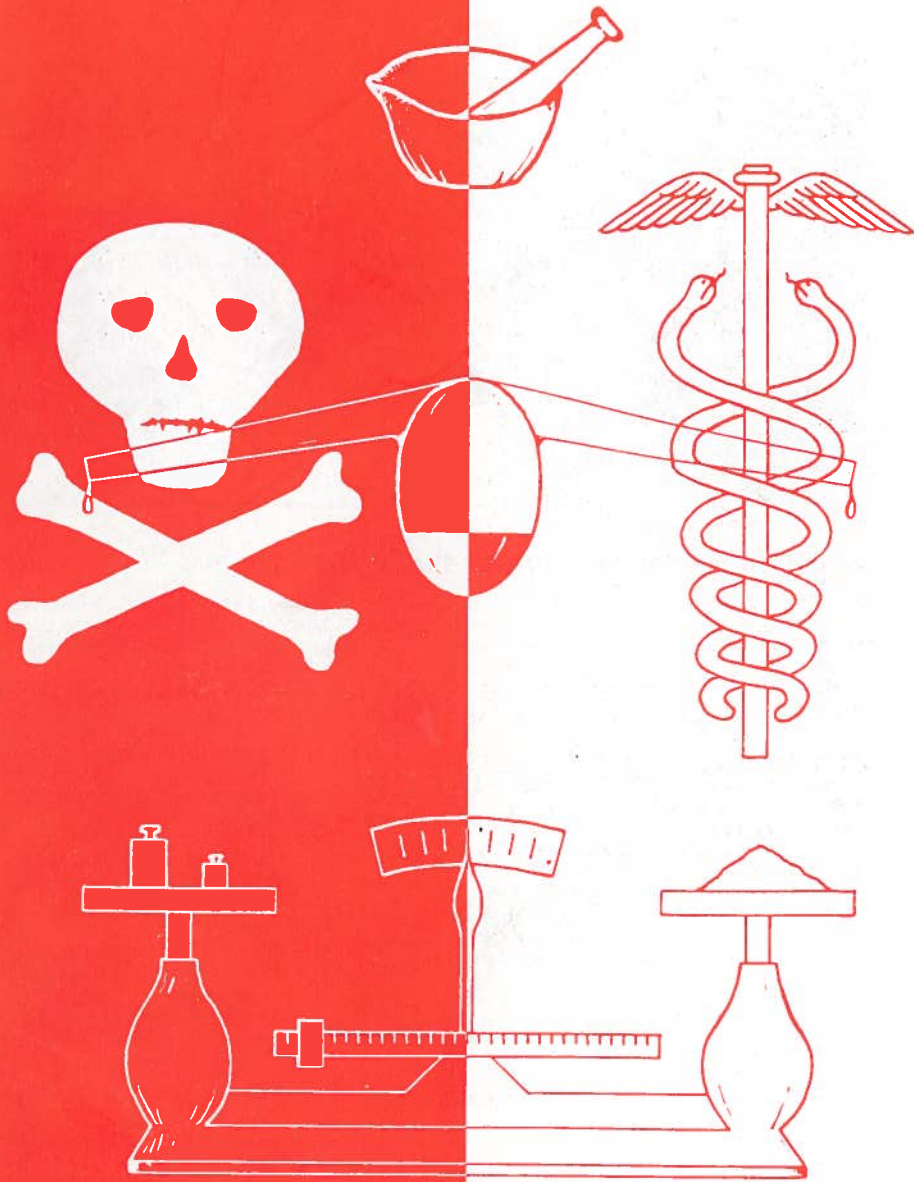


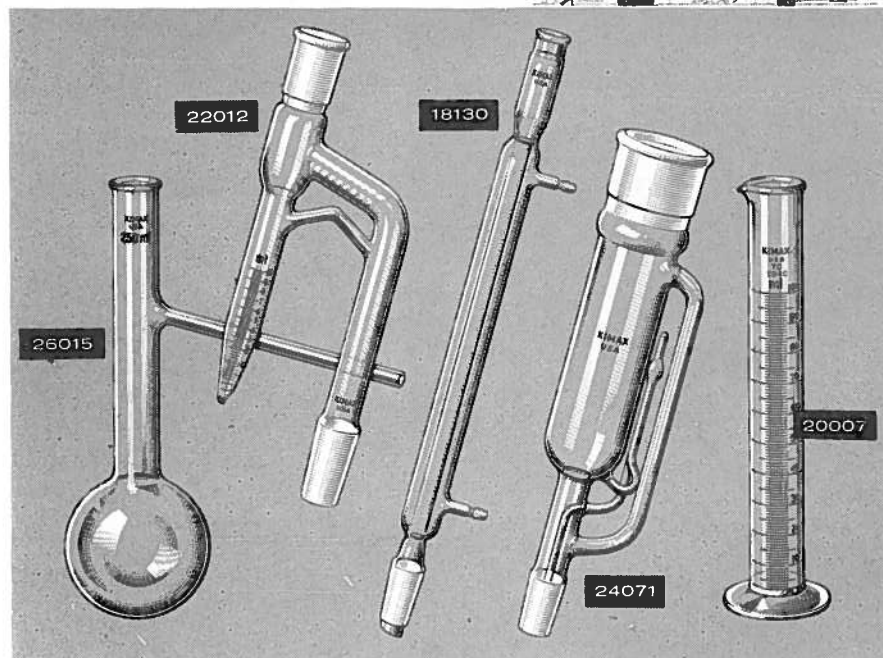


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December, 1958



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THE CHESAPEAKE CHEMIST

VOL. 14

DECEMBER, 1958

NUMBER 9

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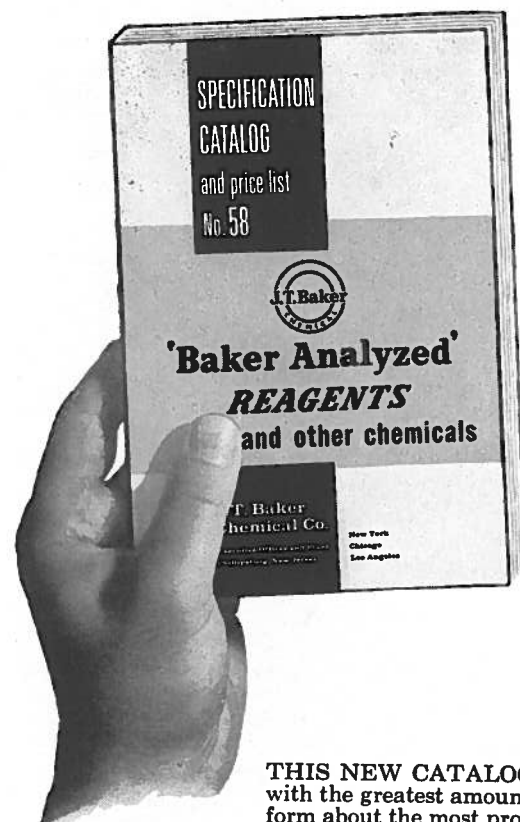
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COVER

The cover symbolizes the subject of this month's meeting (see page 5) which covers the fields of medicine, chemistry, and toxicology. It also symbolizes the ambivalence of most substances, which may be toxic or non-toxic, depending on dosage and conditions.



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DECEMBER MEETING



Subject:

Problems in Poisoning

Speaker:

Dr. Samuel P. Bessman
Associate Professor of Pediatrics
University of Maryland, School of
Medicine
Baltimore, Maryland.

Date:

Friday, December 19, 1958.

Time:

8:30 p.m.

Place:

Bennett Hall
Maryland State Department of Health
20 East 23rd Street
Baltimore, Maryland.

Dr. Samuel P. Bessman did his undergraduate work at William and Mary and received his medical degree at the Washington Medical School, St. Louis, Mo. After two years of Pediatric Residency training and research in biochemistry, he was Pathologist of the United States Marine Hospital in Norfolk where he spent two years with the United States Public Health Service, Biochemistry fellowship followed with Dr. Heinrich Waelsch at the Neuropsychiatric Institute in New York.

Dr. Bessman returned to the Children's Hospital in Washington as Research Director where he pursued studies on the metabolism of glutamic acid in brain. In 1951 he spent one year with Dr. Fritz Lippman studying the transfer of acetyl groups among aromatic amines. In 1954 Dr. Bessman joined the staff of the University of Maryland Medical School as Associate Professor of Pediatric Research.

He is a member of the Alpha Omega Alpha, Sigma XI, Theta Chi Delta, American Society of Biological Chemists, Pediatric Research Society, American Academy of Pediatrics, American Association of Clinical Chemists, and the American Chemical Society.

Dr. Bessman will discuss the biochemical aspects of poisoning including the mechanism of poisoning and the chemical nature of therapy. He developed the use of the chelating agent, Ethylenediamine tetra acetic acid, for the treatment of lead poisoning.

Dinner:

Dinner will be at 6:15 p.m. at Love's Restaurant on 25th and Charles Street. No reservation required.

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CHEMISTRY RESOURCE COMMITTEE of the American Chemical Society- Maryland Section

The ACS is dedicated to the advancement of chemistry in all its branches, to the improvement of the qualifications and contributions of chemists, and to the dissemination of chemical knowledge. The Maryland Section of the ACS is attempting to fulfill these aims in our local area by offering a variety of services to high school chemistry teachers and their students. Some of these services are: career guidance in chemistry and experiments, assistance with science fairs and science projects, movies, arrangement for visits to laboratories and industrial plants, summer employment opportunities, scholarships and help in locating needed equipment.

The roster of the members of the Chemistry Resource Committee was sent to the secondary school chemistry teachers in the Baltimore area to serve as a source of assistance which is available at their request. The teachers select a person who can assist them and phones the contact person listed for each institution. The roster includes members of the faculties of Goucher College, the Johns Hopkins University (Departments of Biology and Chemistry and Schools of Hygiene and Public Health, and Medicine), Morgan State College, and the University of Maryland Schools of Medicine and Pharmacy.

For further information concerning the functioning of the committee, contact Dr. Arthur J. Emery, Jr., Chairman, Chemical Education Committee, PL 2-1100, Ext. 201. Department of Biochemistry, University of Maryland School of Medicine, Baltimore, Maryland.



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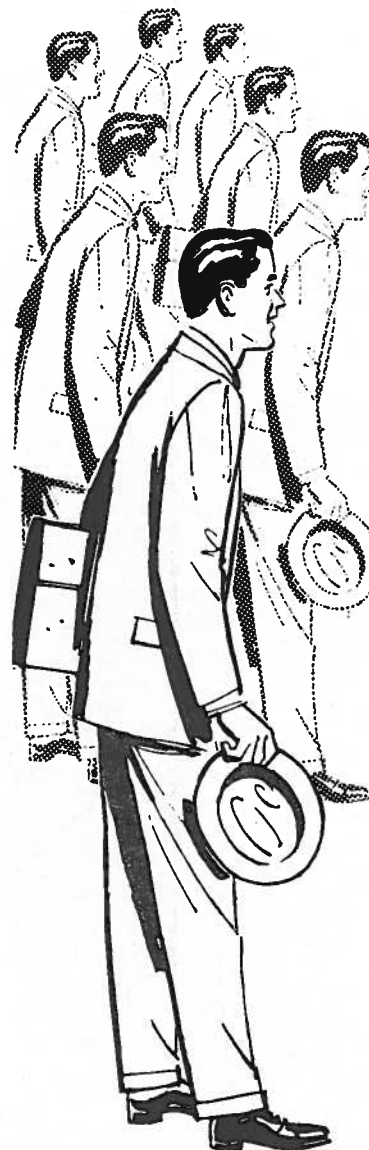
Meet George Nietzel, Will Representative with headquarters in our Supply and Service Center in Baltimore, Md. Graduating with a B.S. in Chemistry from Florida Southern College, George saw service with the Chemical Corps of the U.S. Army during World War II. He is now a member of the American Chemical Society and Society of American Bacteriologists. George and Mrs. Nietzel, both ardent golfers, make their home in Timonium.

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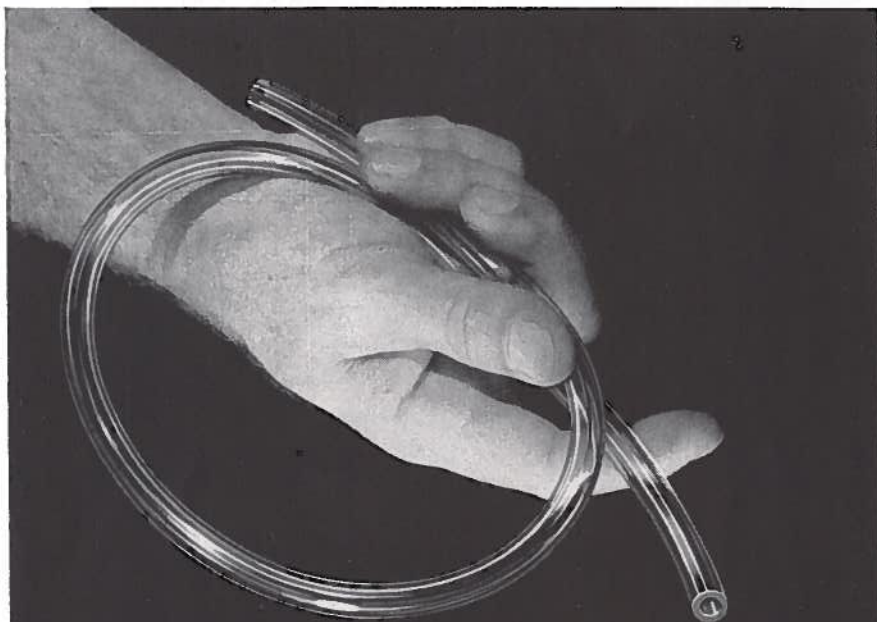
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MARYLAND SECTION NEWS



ACADEMIC

University of Maryland

Dr. Guilford G. Rudolph, Biochemistry Department, and Dr. Ennis C. Layne Pediatrics Department, University of Maryland School of Medicine, attended a "Symposium on Advances in Tracer Applications of Tritium" at the Hotel Statler, New York City on October 31.

Dr. Edward J. Herbst, Biochemistry Department, University of Maryland School of Medicine, received a grant of \$4212 from the American Cancer Society—Maryland Division Incorporated to conduct research on "Spermine Metabolism" during the period September 1, 1958 to August 31, 1959.

Dr. Guilford G. Rudolph, Biochemistry Department, University of Maryland School of Medicine, was the recipient of a Public Health Service grant in the amount of \$25,500 to initiate a research project on the "Metabolism of myoinositol by secondary sex glands" for the period September 1, 1958 to August 31, 1960.

Dr. Arthur J. Emery, Jr., Biochemistry Department, University of Maryland School of Medicine, was recently awarded a Public Health Service grant of \$15,000 to conduct research on "Fundamental properties of nucleoprotein complexes" during the period September 1, 1958 to August 31, 1960.

Drs. Robert G. Grenell and Leopold May, the Psychiatric Institute, University of Maryland School of Medicine received a grant of \$5,000 from the National Science Foundation to study "the Effect of Excitant and Depressant Molecules on the Structure of Brain Lipide-Protein Complexes."

Dr. Francis M. Miller, Associate Professor, Chemistry, School of Pharmacy, University of Maryland, is on sabbatical leave at the University of Heidelberg. He will be conducting research on indole compound in the Chemical Institute for the next year. Dr. Miller and his family may be contacted at the following address—Heidelberg, Neuenheimer Landstrasse 64, Germany.

Recently Dr. Norman J. Doorenbos, Associate Professor, Pharmaceutical Chemistry, School of Pharmacy, attended a three day retreat on cancer chemotherapy. Twenty-five scientists from all

over the United States were invited to this retreat as guests of the National Service Center for Cancer Chemotherapy.

Mr. Robert Gavranek has been awarded a \$1600 fellowship by the Noxema Foundation, Inc. Mr. Gavranek received his B. S. in Pharmacy at Columbia University and M. S. in Pharmaceutical chemistry at the University of Maryland. He is currently studying for his Ph. D. in pharmaceutical chemistry.

Mr. Venkatraya B. Gopal Shenoy has been awarded a \$1000 fellowship by the Hudnuts Sales Company. Mr. Shenoy holds degrees in pharmacy and chemistry and has a perfect academic record. He is from India and has worked three years for British drug house in India after graduation. He is currently working towards a Ph. D. in pharmaceutical chemistry.

The Pharmaceutical Chemistry Dept. School of Pharmacy, University of Maryland, has recently purchased the Welsbach T-24 Ozone Generator. The Ozone generator is being used by Dr. Norman J. Doorenbos and his graduate students in their steroid research program.



GOVERNMENT

Army Chemical Center. A Baltimore scientist at the Army Chemical Center was honored in ceremonies recently for his work in organizing and directing the delicate research operations in the Army's Chemical Warfare Laboratories.

Dr. William H. Summerson, of 501 West University Parkway, was awarded an Army Certificate of Achievement.

A veteran of eleven years' service, Dr. Summerson is director of research for the laboratories. He was cited for "establishing research programs of paramount importance to the Chemical Corps for the discovery of new toxicological agents, novel dissemination methods, and for vigorously directing these programs to accomplish vital projectives of the Chemical Corps."



INDUSTRIAL

(Continued on page 10)

(Continued from page 9)

Food Machinery and Chemical Corporation

A new Applications-Technical Service Laboratory has been established at Baltimore under the control of the Development Department of the Chemicals and Plastics Division. This laboratory which is located in the Chemicals and Plastics Research building will function primarily in the areas of plasticizers and resins of interest to the Corporation.

The A-TS Laboratory is managed by Paul E. Willard. Mr. Willard was formerly located at the Ohio-Apex Division laboratory at Nitro, West Virginia. Members of Mr. Willard's staff who have transferred from Nitro include James L. Thomas, John N. Jessup, Charles C. Fellows, Charles Clark, and Lois Fraser. John J. Rizzo from the Becco Division has also joined Mr. Willard's group. Transfers to the A-TS Laboratory from other assignments in Baltimore include Arthur Ault, Melvin Harman, Virginia Kemp, Ronnie Pierce and Stewart Pope.

Seymour M. Linder recently transferred from the Becco Division in Buffalo to the Organic Section of the Chemicals and Plastics Division. Dr. Linder has the title of Project Leader and reports to Dr. John Garman.

Crippen & Erlich Labs., Inc.

Raymond C. Crippen was co-author of a paper presented before the Federation of Paint & Varnish Production Clubs in Cleveland in October, entitled "Use of the Gas Phase Chromatograph in Solvent Studies." The paper was presented by Dr. Mark Westgate and won first prize in presentation. John Emmerling, of Lenmar Lacquers, Inc. was the other author. The paper was sponsored by the Baltimore Paint and Varnish Production Club.

The Crippen & Erlich Labs., Inc. Subsidiary of Foster D. Snell, Inc. have purchased a building at 1500 North Guilford Avenue. It is presently being remodeled and equipped for laboratories. The new quarters are expected to be ready sometime after the first of the year. This building will allow substantial expansion for some time to come.

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You know him as an authority on complex compounds and chelation chemistry but, in addition to hearing his technical address on this topic, you will have the opportunity to learn his views on our Society. Meet him. Hear him. Talk with him. Question him.

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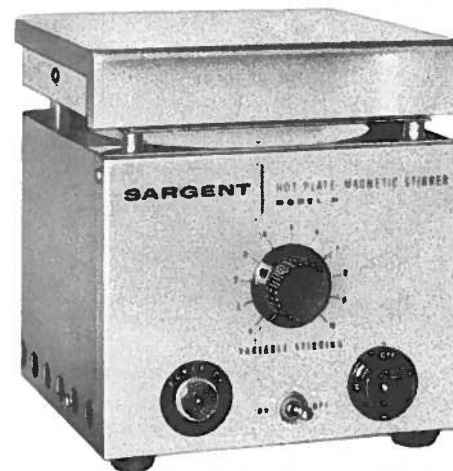
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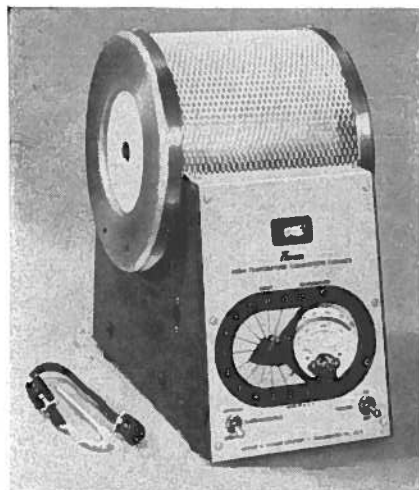
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The long-life heating element is of new design, providing a heating chamber approximately 280 mm long × 19 mm inside diameter, with a groove on bottom to accommodate the internal thermocouple. Special Kanthal resistance wire is wound in coils arranged to provide uniform heating over a 100 mm zone.

Control panel contains on-off power switch, selector switch for the two thermocouples, mounted pyrometer, pilot light and adjustment knob for the built-in

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