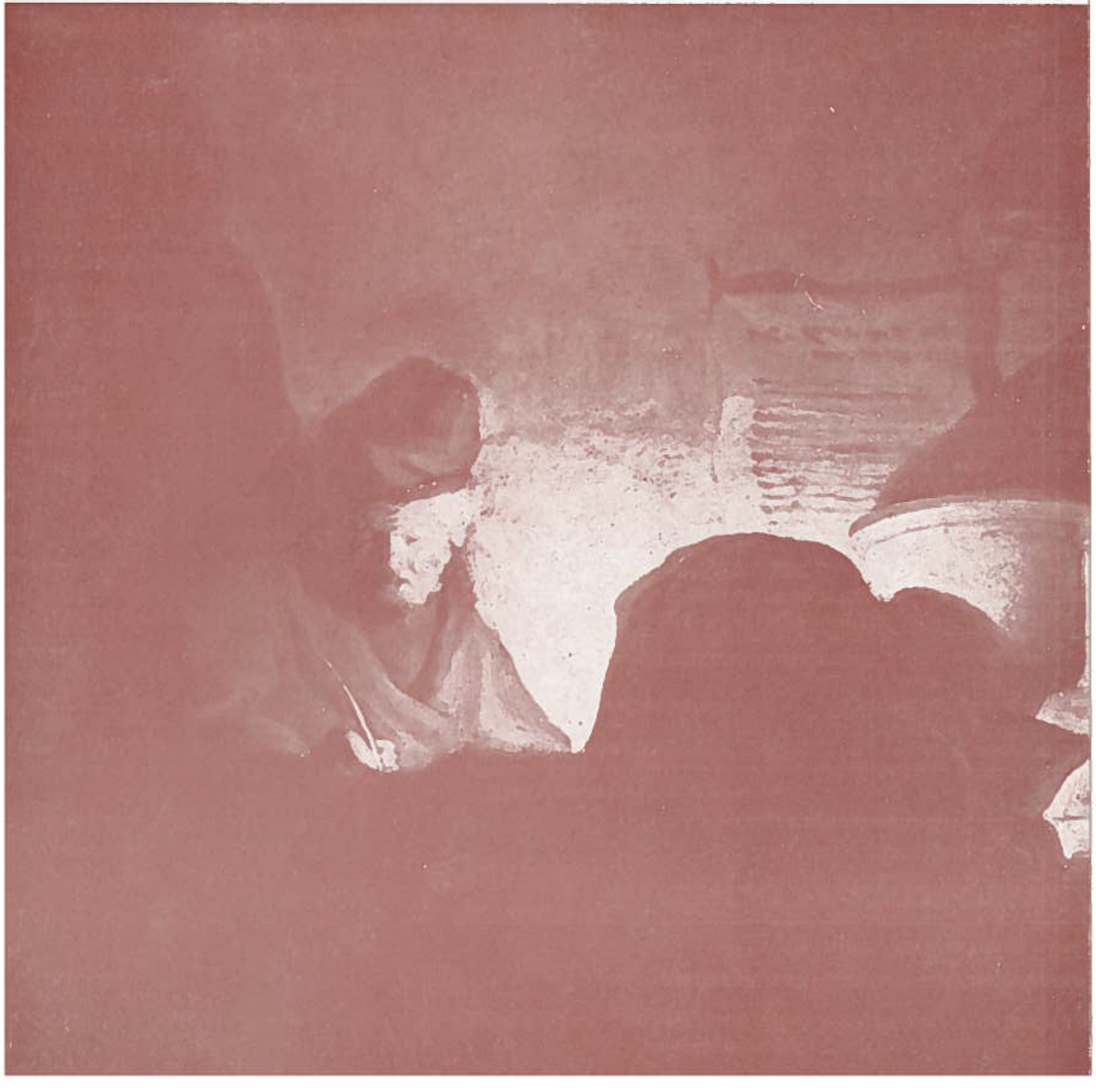
THE CHESAPEAKE CHEMIST

MARYLAND SECTION
AMERICAN CHEMICAL SOCIETY

VOL. XXV NOVEMBER, 1969 NUMBER 8



THE CHESAPEAKE CHEMIST

VOL. XXV NOVEMBER, 1969 NUMBER 8

IN THIS ISSUE

The Chesapeake Chemist is published monthly September through May by the Maryland Section of the American Chemical Society. Address editorial comments to Dr. James Leslie, University of Maryland, 636 W. Lombard St., Baltimore, Md., 21201. Address advertising inquiries and plates to Merle I. Eiss, Sinai Hospital of Baltimore, Inc., Belvedere Ave. at Greenspring Ave., Baltimore, Maryland 21215.

NOVEMBER MEETING

LADIES NIGHT

HAZEL BISHOP

DATE:

WEDNESDAY, NOVEMBER 19, 1969

PLACE:

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

SPEAKERS AND TOPICS:

5:30 P.M. **Dr. Alfred Bader,** Aldrich Chemical Company, Inc. "Chemistry and Art"
Dr. Bader has invited you to bring small, original works to the meeting for examination and discussion informally after the meeting.

8:30 P.M. **Hazel Bishop,** Evans and Company, "The Common Denominator of the Laboratory and the Markets"

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 buffet 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 Co., Inc., 204 Wight Ave., Cockeysville, Md. 21030, phone 666-3155, 666-3156 **no later than November** 17. 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 dinner and the meeting.

DR. ALFRED R. BADER

ACS AWARDS

The *Chemical and Engineering News* issue of September 15, 1969 announced the winners of ACS awards for 1970. Last spring a series of articles was published in the *Chesapeake Chemist* describing the procedures for selecting the recipients of the ACS awards. All members of the ACS are encouraged to submit nominations for the awards. A description of some of the individual awards is given in this article.

Roger Adams Award in Organic Chemistry.

Purpose. To recognize and encourage outstanding contributions to research in organic chemistry.

Nature. The award consists of a gold medal, a sterling silver replica of the medal, and $10,000. The award will be presented biennially. The recipient shall deliver a lecture at the Biennial National Organic Chemistry Symposium of the American Chemical Society at which time the award will be presented. His travel expenses to the Symposium will be paid.

Establishment and Support. The award was established in 1959 by Organic Syntheses, Inc. and Organic Reactions, Inc., and is sponsored by those organizations and the Division of Organic Chemistry of the American Chemical Society. The first award was made in 1959.

Rules of Eligibility. The award shall be granted to an individual without regard to nationality for outstanding contributions to research in organic chemistry.

ACS Award in Analytical Chemistry sponsored by Fisher Scientific Company.

Purpose. To recognize and encourage outstanding contributions to the science of analytical chemistry, pure or applied, carried out in the United States or Canada.

Nature. The award consists of $2,000 and an etching. The traveling expenses of the recipient incidental to the conferring of the award are paid.

Establishment and Support. The award was established in 1947 by the Fisher Scientific Company.

Rules of Eligibility. A nominee must be a resident of the United States or Canada and must have made an outstanding contribution to analytical chemistry. Special consideration will be given to the independence of thought and the originality shown, or to the importance of the work when applied to public welfare, economics, or the needs and desires of humanity.

The 1970 recipient of this award will be Charles V. Banks, Professor of Chemistry at Iowa State University.

ACS Award in Biological Chemistry Sponsored by Eli Lilly and Company.

Purpose. To stimulate fundamental research in biological chemistry (excepting therefrom immunology, clinical investigations, pharmacology, and experimental therapeutics) by young chemists working in the United States.

Nature. The award consists of $1,000 and a bronze medal. The traveling expenses incidental to the conferring of the award are paid.

Establishment and Support. The award was established in 1934 and has been supported since that time by Eli Lilly and Company.

Rules of Eligibility. A nominee must be a citizen of the United States who shall not have passed his 36th birthday on April 30 of the year in which the award is presented and have accomplished outstanding research in biological chemistry of unusual merit for an individual on the threshold of his career. Special consideration shall be given to the independence of thought and the originality shown. At the time of the nomination, the nominee must be actively engaged in the line of research for which the award is made. This award will not be voted to any person who previously has received another award sponsored by Eli Lilly and Company granted for the same technical accomplishment.

The 1970 recipient of this award will be Lubert Stryer, Professor of Molecular Biophysics and Biochemistry at Yale University.

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 to serve in 1970. The Nominating Committee with James F. Salmon S.J. as Chairman has presented the following slate of candidates. However, additional nominations may be received from the floor with the condition that any candidate must have given consent to such nomination.

Chairman-elect	**Richard Kokes**
Secretary	**Herbert S. Aaron**
Treasurer	**John I. Stevens**
Councilors	**Thomas C. Simmons** **George Braude**
Alternate Councilors	**Melvin P. Miller** **John L. Straughn**
Members-at-large	**Frederick S. Lee** **Theodor C. Berenthien** **Ernest F. Silversmith** **Edward J. Poziomek** **Joseph A. Scarlett**

NOTES FROM THE EDITOR

Are you receiving your *Chesapeake Chemist* in adequate time before the monthly meeting? If not, the main fault may lie with your local post office. We on the editorial staff try to deliver the magazine to the main post office in Baltimore no later than the first of each month. However, the last two issues were delayed for reasons beyond our control but were delivered at the post office at least twelve days before the meeting. We know that the magazine was actually delivered in such places as Columbia, Cockeysville, zone 1 in Baltimore City within a few days after mailing. Of financial necessity the *Chesapeake Chemist* is mailed third class, and since this is low priority mail it may be delayed at your local post office. Perhaps a note or call to your local postmaster will expedite delivery. In any case, we urge you to consult the meeting calendar published in September in order that you determine your interest in a particular topic. If your *Chesapeake Chemist* is delayed, information on the meeting may be obtained by calling the Editor, Dr. James Leslie, at 955-7616 or 730-5761.

The *Chesapeake Chemist* is produced, with minor exceptions, by a staff who donate their time to its publication. We are desperately in need of assistance. Since we have little time to go 'scouting' for material for publication in the magazine, we are dependent on ACS news services and section members for publishable material. Unfortunately, the contribution by section members has dropped close to zero, and so we are appealing to you members for support by submitting suitable items for publication.

EARLY DECEMBER MEETING DATE

The December meeting will be held on the second Wednesday *i.e.* on December 10 instead of the usual third Wednesday of the month. Dr. Andrew G. DeRocco of the University of Maryland will discuss "How Hard are Liquid Crystals" at 5:30 P.M., and at 8:30 P.M. Dr. Richard W. Hamming of the Bell Telephone Laboratories will discuss "You and Your Research".

HAZEL BISHOP

"After all, I am a woman. If you are an organic chemist and a woman, cosmetics attract you. Finding the answer to a problem like lipstick that smears is a game, a challenge — it's fun" said Hazel Bishop a year after her laboratory brought out the first new lipstick formula in forty years.

Hazel Bishop was born in Hoboken, New Jersey over fifty-five years ago, which it difficult to believe of this lively, blue-eyed chemist. She followed a pre-medical course at Barnard College and received a B.A. in chemistry in 1929. When the stock market crash occurred Miss Bishop gave up her hopes of being a doctor and went to work as a chemical technician at Columbia University, as well as being a night student in biochemistry there. After working with a dermatologist and with the Standard Oil Company of New Jersey she worked for Socony-Vacuum Oil Co. as an analyst on oil products. When the plant was cut to a forty-hour week Miss Bishop had time to work on her hobby of improving lipstick in the kitchen of her apartment. Three hundred and nine experiments later she found the solution to a feminine problem—a long-staying lipstick that did not smear. The product she developed was finally marketed in 1950 by Hazel Bishop, Inc. About ten years ago Miss Bishop sold the company that retains the lady chemist's famous name. She still experiments in cosmetics and other areas of chemistry in her kitchen laboratory. She has recently become affiliated with a New York brokerage house, a reflection of the interest in diverse fields of business she inherited from her father.

PETROLEUM RESEARCH FUND REPORT FOR 1968

The "13th Annual Report on Research Under Sponsorship of the Petroleum Research Fund Administered by the American Chemical Society" is now available from Robert E. Henze, Director, Research Grants and Fellowships Division, American Chemical Society, 1155 Sixteenth St., N.W., Washington, D. C.

THE COMMON DENOMINATOR OF THE LABORATORY AND THE MARKETS

A chemist, in my opinion, is one who has been trained to observe, to imagine and then to apply these techniques to achieve his objective. These techniques are the common denominator to all human activity. The well trained scientist has the basic equipment to be a doctor, lawyer, merchant or what have you. The degree of success will be determined by the acuity of his observations, vision or decisiveness.

EDUCATION COMMITTEE NOTICE

One of the best ways to capture the interest of students in chemistry is personal contact with chemists. The Education Committee of the Maryland Section will be pleased to serve as a clearing house for bringing together interested chemists and the schools who could use them as visitors. A brief note to the Co-chairman, Dr. M. J. Albinak at Essex Community College, Baltimore, Md. 21237 will bring further information without any commitment on your part.

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.

DR. ALFRED R. BADER

Alfred R. Bader was born in Vienna, Austria in 1924. However, his higher education was obtained in Canada and the United States. He has earned a B.Sc., B.A., and an M.Sc. from Queen's University in Canada, an M.A. and a Ph.D. from Harvard University. This last degree was awarded in 1950. Dr. Bader was a Research Chemist from 1950 to 1953 at the Pittsburgh Plate Glass Co., and for another year there was a Group Leader for organic research. Dr. Bader was Chief Chemist at Aldrich Chemical Co. in 1954 and became president of the company in 1955, a position he holds at the present time.

Although Dr. Bader's research interests lie in the areas of fatty acids, quinones, reaction mechanisms, alkenylphenols, and indoles he will be discussing a hobby "Chemistry and Art" at the November meeting. If you have any small, original pieces of art you wish Dr. Bader to examine, he has invited you to bring them along to the meeting for informal discussion after the meeting.

COVER

The Scholar by Candlelight, a painting done by Rembrandt when in his early twenties. Dr. Bader is planning to discuss this painting in his talk.

CHEMISTRY AND ART

As a collector of old master paintings I look every year at several hundred old paintings—in junk and antique stores and at auctions all over the world—and have to decide, usually within minutes, whether a painting is worth buying. The first criterion is, of course, the general artistic merit of the work—often hard to discern in paintings covered with centuries of dirt. Secondly, is the painting really what I think it is? I am offered a painting said to be by a Dutch 17th century artist—are the pigments those used by 17th century artists? Are the wood or canvas and the ground those used by the 17th century Dutch artists? Once I have acquired an old painting, the surface dirt is usually easily removed with mild solvents, and the decision has to be made how much restoration to do. Is the painting an original, a workshop production or a later copy? Is the painting in its original size? What is the condition of the support—be it canvas, wood, metal or slate? How much old restoration is there and should it be removed? Almost every old painting has some overpaint—was this added to hide losses or subjects considered undesirable by previous owners? If the painting is signed, is the signature original? The last questions can generally be answered by a combination of physical and chemical means, chiefly examination with ultraviolet light and under a magnifying glass, and tests with various solvents.

Tear-Out Dinner Reservation Form

There is enclosed $.....($4.25 per person)* for cocktails and dinner at Eudowood Caterers, Eudowood Plaza, on Wednesday, November 19, 1969 for the following persons.**

Name (Please Print or Typewrite.) Affiliation

*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 November 17.

CHEMICAL SOCIETY OF WASHINGTON—FALL PROGRAM

Members of the Maryland Section are invited to attend the meetings of the Chemical Society of Washington (Washington Section of the American Chemical Society). The details of their November and December meetings which are available to date are given below. Further information may be obtained from Mrs. Lee Goodall, 737-3305 (toll call to Washington, D.C.) between 9:30 A.M. and 3:30 P.M., Monday through Thursday.

NOVEMBER 13, 1969—Georgetown University
Topical Groups—5:00 P.M.

Analytical—To be announced

Chemical Education — Jay A. Young, Professor, Kings College, Wilkes-Barre, Pa. Title to be announced.

Inorganic — Professor Lauri Vaska, Clarkson College of Technology, Potsdam, N.Y. "Oxygen Carrying Metal Complexes".

Organic—Professor Jerome A. Berson, Department of Chemistry, Yale University, New Haven, Conn. "The Geometry of Transition States".

Physical—To be announced.

Lecture—8:30 P.M.

J. P. Collman, Professor, Department of Chemistry, Stanford University, Stanford, Calif. "Complexes Containing Molecular Nitrogen and Oxygen" (tentative title).

DECEMBER 11 — National Bureau of Standards, Gaithersburg, Md.
Topical Groups—5:00 P.M.

Food and Agricultural Chemistry—Martin Jacobson, ARS, USDA, Beltsville, Md. "Recent Progress in the Chemistry of Insect Sex Pheromones".

Inorganic — Professor R. Bruce King, University of Georgia, Athens, Ga. "Polydentate Tertiary Phosphines and their Metal Complexes".

Medicinal and Biochemical — Philip A. Khairallah, Research Division, The Cleveland Clinic, Cleveland, Ohio. "Role of Rennin and Angiotensin in Experimental Hypertension".

Polymers—Professor William Graessley, Department of Chemical Engineering, Northwestern University, Evanston, Ill. "Molecular Entanglements and Flow Behavior in Amorphous Polymers".

Lecture—8:30 P.M.

Daniel Banes, Director, Division of Pharmaceutical Sciences, Food and Drug Administration, CPEHS, HEW, Washing, D.C. Title to be announced.

NEW MARYLAND SECTION MEMBERS

The following people have recently joined the American Chemical Society or transferred into the Maryland Section from some other state. We welcome them to the Maryland Section and invite them to attend the monthly meetings and participate in the other activities of the Maryland Section.

Pvt. Carroll Dwight Arnett, Edgewood Arsenal.
Ronald Lee Baker, Kramer Ct., Glen Burie.
Donna Lou Berglund, Goucher College, Towson.
Richard Alton Farr, E. Elpin Drive, Catonsville.
Allan C. Hamilton, Bedford Rd., Bel Air.
Christopher Peter Johnson, III, Edgewood Arsenal.
Arthur D. Ketley, W. R. Grace & Co., Clarksville.
John Alfred Kilgour, Seversky Court, Essex.
Dennis Alan Wentz, Johns Hopkins Univ., Baltimore.

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PLEASE DO NOT DELAY — DATED NOTICE INSIDE