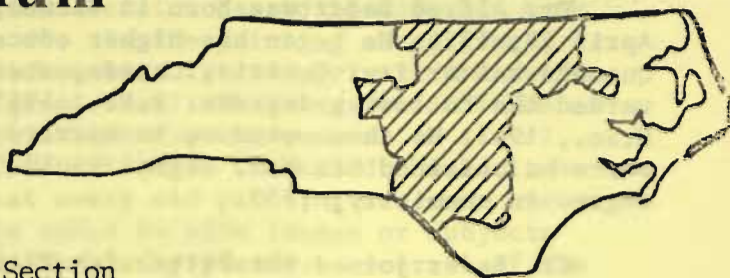


Tar^{He}lium



North Carolina Section
AMERICAN CHEMICAL SOCIETY

Vol. 5, No. 5 Raleigh, N. C. January, 1975

" CHEMISTRY AND ART "

Speaker: Dr. Alfred Bader
 President, Aldrich Chemical Company

Date: Thursday, January 16, 1975

Place: Meredith College
 Raleigh, N. C.

Time: 5:30 Happy Hour
 Faculty Club, NCSU

6:30 Dinner (Buffet, \$ 4.25)
 President's Dining Room
 Meredith College

8:00 Lecture
 Room 107 Hunter Hall
 Meredith College

Dr. Alfred Bader was born in Vienna, Austria on April 28, 1924. He began his higher education at Queen's University, Ontario, Canada, where he was awarded the following degrees: B.Sc., 1945; B.A., 1946; M.Sc., 1947. He then moved on to Harvard University where he obtained his M.A. degree in 1949 and his Ph.D. degree in chemistry, 1950.

Dr. Bader joined the Pittsburgh Plate Glass Company in 1950 as a research chemist, and was promoted to group leader of organic research in 1953. He joined the Aldrich Chemical Company (Milwaukee) in 1954 as chief chemist. Since 1955, Dr. Bader has been President of Aldrich.

Dr. Bader is a member of the Chemical Society (London) and the British Chemical Society. His research interest include fatty acids, quinones, reaction mechanisms, alkenylphenols, indoles. In addition, Dr. Bader is a collector of old master paintings and is quite knowledgeable of the chemistry of art.

"Chemistry and Art"

by Dr. Alfred Bader

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 in minutes, whether a painting is worth buying. The first criteria 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 Dutch artists? Are the wood or canvas and the ground those used by 17th century Dutch artists? Once I have aquired 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 over-paint- 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 uv light and under a magnifying glass, and tests with various solvents. Many specific examples will be given to illustrate these questions and their answers.

NOTES FROM THE NEW EDITOR

As your new editor I would first like to thank Monica Nees, the outgoing editor, for her great service and dedication as last years editor and say that I look forward to working with her in her new position as chair-elect.

Also I would welcome any suggestions and help on how to improve attendance at meetings and on any changes you feel that should be made in the newsletter.

As always, publicity about seminars of interest in the area is a welcome part of the newsletter. When providing information about these please include the speakers name, date, time and location and if possible the title as well.

Finally, don't forget that the newsletter is also a good way of advertising job openings, free of charge.

Eric Wiechert, editor

MEETING-IN-MINIATURE - CALL FOR PAPERS

The annual Meeting-in-Miniature will be held at Duke University this year on Saturday April 5. This

(Continued page 5)

Application to Present a Paper at the Meeting-in-Miniature
on April 5, 1975, at Duke University.

Author(s): _____

Position(s): _____

Institution: _____

Title of Paper: _____

Underline most appropriate section: biological, organic,
physical, inorganic, analytical

To be presented by*: _____

Time needed (15 minute maximum) _____

Type of projector needed (if any) _____

Note: Application must be received by March 15, 1975.

*If one of the authors is a student, it is urged that
the student be allowed to present the paper.

Mail to: Dr. Maurice Bursey
Department of Chemistry
The University of North Carolina at Chapel Hill
Chapel Hill, North Carolina 27514

year the meeting will be a joint meeting with the North Carolina Academy of Sciences.

An invitation is extended to all members of the Section to present a paper at the Meeting-in-Miniature. An application is enclosed with this newsletter. Let's have more participation!

CALENDAR OF COMING EVENTS

Local Section Meetings

- Feb. 18 Edward Aims, Univ. of Arkansas, "Some Chemical Phenomena in Solution"
- Mar. 28 R.V. Stevens, Rice University
- Apr. 5 Meeting-in-Miniature (at DUKE, joint with N.C. Academy of Science)
- Apr. 23 John F. Endicott, Wayne State Univ.

Duke University (Rm. 103, Gross Chemical Laboratory, 3:30 pm)

- Jan. 24 Dr. Grim, Univ. of Maryland, "Photoelectron Spectroscopy"
- Feb. 14 L.B. Rogers, Univ. of Georgia
- Feb. 28 Minisymposium held at UNC-Chapel Hill on Natural Products. Speakers: R.E. Ireland, Cal Tech, "Synthesis of Natural Products" and Morris Kupchan, Univ. of Virginia, "Structure of Natural Products"

North Carolina State Univ. (Rm. 124 Dabney)

- Jan. 10 (2:00 pm) Dr. Vincenzo Balzani, Instituto Chimico Universita Gedli Studi di Bologna, Bologna, Italy, "Quenching and Synthetizing Processes in Field of Transition Metal Complexes"
- Feb. 3 (4:00 pm) F.G. Riddell, McMaster Univ., "Heterocyclic Conformational Analysis"
- Feb. 17 M.D. Joesten, Vanderbilt Univ., "The Jahn-Teller Effect in Six-Coordinate Compounds"

UNC-Chapel Hill (Rm. 207, Venable Hall, 8:00 pm)

- Jan. 15 B. Widom, Cornell Univ., "Phase Equilibrium and Critical Points in Liquid Mixtures"
- Feb. 5 K.B. Sharpless, MIT, "New Reagents for the Oxygenation and Deoxygenation of Organic Cpd's"
- Feb. 12 C.A. Evans, Jr., Univ. Illinois, "Surface and Thin Film Analysis Employing Secondary Ion Mass Spectrometry, Auger Electron Spectrometry and Backscattering Spectrometry"

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TARHELIUM is published by the North Carolina Section of the American Chemical Society. The views expressed herein are not necessarily those of the Section. Direct all correspondence to Dr. Eric Wiechert, Editor, c/o Chemistry Department, Meredith College, Raleigh, N. C. 27611

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MR. ROBERT E. MERRITT, EDITOR

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CHEM. ABSTRACTS

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