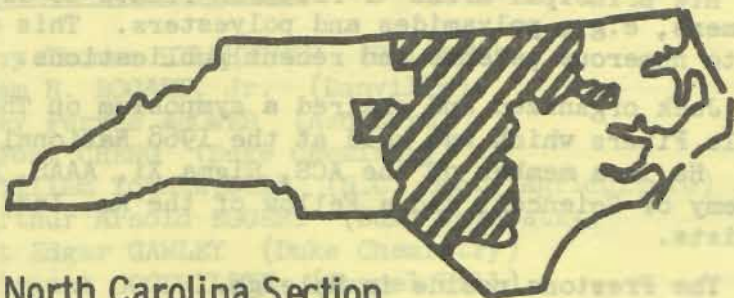


ACTIVITIES



North Carolina Section American Chemical Society

Vol. I, No. 8

Durham, N. C.

March 1971

CALL FOR PAPERS - THE MEETING IN MINIATURE

MARCH MEETING

Our own Jack Preston will be the speaker at the March Meeting. His topic will be "High Temperature Polymers." The date is March 16 with a gratis social hour beginning at 5:30 p.m. at the Holiday Inn in Durham. This is the downtown Holiday Inn located on Chapel Hill Street near the corner of Gregson Street. Dinner will be from the regular menu and will start at about 6:30 p.m.

The meeting will be held in Room 112 of Hubbard Chemistry Building on the campus of North Carolina Central University at 8:30 p.m. This is a brand new facility at NCCU and Ezra Totten, Chairman of the Department has extended an invitation to us to look around the building. (See map for directions.)

Dr. Preston, who is a Science Fellow at the Chemstrand Research center in the Triangle, is a native of Birmingham, Alabama. He received his B. S. degree from Howard College and his M. S. and Ph.D. degrees from the University of Alabama. His graduate work was in the field of unsaturated aliphatic sulfonyl compounds. After graduation, Jack joined

Chemstrand, as a Research Chemist, where he has moved up the ladder to his present position (1970).

His principal areas of research relate to condensation polymers, e.g., polyamides and polyesters. This effort has led to numerous patents and recent publications.

Jack organized and chaired a symposium on Thermally Stable Fibers which was held at the 1968 National ACS Meeting. He is a member of the ACS, Sigma Xi, AAAS, New York Academy of Sciences, and a Fellow of the Am. Inst. of Chemists.

The Prestons reside in Raleigh.

High Temperature Polymers

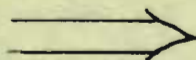
by

Jack Preston

Space Age Technology requires polymeric materials having much greater performance characteristics than those possessed by conventional polymers, natural or synthetic. During the past decade a great effort by academic and industrial research has been aimed at the development of thermally stable polymeric materials, for industrial, military, and space applications. Of particular interest are the tractable organic polymers which may be spun to fibers or cast to films.

A review of the approaches taken to produce and to evaluate high temperature polymers will be discussed. Some details of synthesis of the more successful developments will be given. For those materials that have been characterized as fibers and films, evaluations under end/use conditions will be presented. The tensile properties, for example, of fibers at highly elevated temperatures or after heataging in air will be discussed.

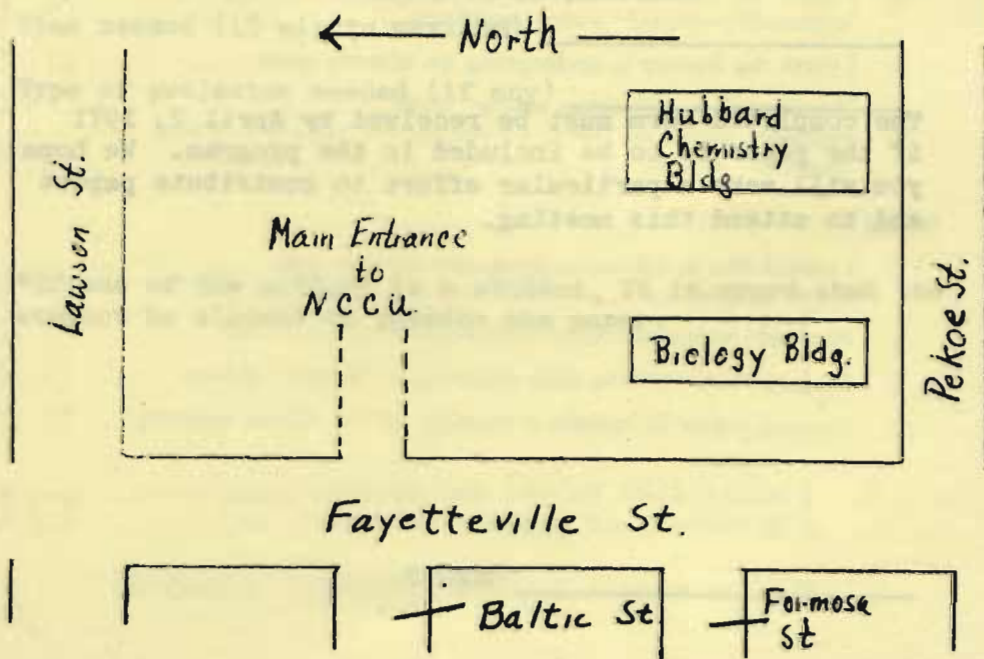
SEE MAP FOR DIRECTIONS
TO HUBBARD HALL AT NCCU



Newcomers to Our Section

Jeffrey Thomas BILLHEIMER (Raleigh)
William H. BOGART, Jr. (Danville)
Stanley Ferree BROWER (Asheboro)
Chun Fong CHENG (Duke Chemistry)
Dr. William Younts COBB (N.C. Dept. Agriculture)
Dr. Arthur Arnold EGGERT (Duke Chemistry)
Robert Edgar GAWLEY (Duke Chemistry)
Mark Bryant GOODWILLIE (Chapel Hill)
Jerry Paul KOONTZ (U. N. C. - Chapel Hill)
Charles Albert LEWIS, Jr. (Carrboro)
Thomas M. McINNIS, Jr. (UNC-CH Botany)
John Edgar NEAL (Chicopee Mfg - Benson)
Dr. Leonard SMITH (Raleigh)
Rex W. SOUTER (Duke Chemistry)
Grace Elaine STEWARD (Chapel Hill)
Glenn Alfred TAYLOR (Chapel Hill)
Donald James TINDALL (Chapel Hill)
Fred W. WEYTER (N.C.S.U. Animal Science)

WELCOME!



CALL FOR PAPERS
Meeting-in-Miniature

April 30, 1971

To Members of the North Carolina Section,
American Chemical Society

The annual Meeting-in-Miniature will be held on Friday
afternoon, April 30 of this year at the University of
North Carolina in Chapel Hill. To make application to
present a paper, fill in the facing page and return it
to:

North Carolina Section
American Chemical Society
P. O. Box 4768
Duke Station
Durham, N. C. 27706

The completed form must be received by April 2, 1971
if the paper is to be included in the program. We hope
you will make a particular effort to contribute papers
and to attend this meeting.

Editorial Rerun

The following questionnaire may be considered a sequel to or rerun of the February, 1971 editorial which dealt with improving the attendance at local meetings. This type of questionnaire has appeared in many local section publications but the one below is reprinted from the MIDLAND CHEMIST, Midland, Michigan Section.

Tear out this page, if you are so inclined, and mail to us, with or without your application to present a paper at the M in M. The results, if any, will be tabulated and reported in a future issue.

QUESTIONNAIRE

NATIONAL

Yes No

- | | | |
|--|--------------------------|--------------------------|
| 1. I want the ACS to represent me in Congress, say like the AMA does for physicians | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. I want the ACS to do something positive about my salary level | <input type="checkbox"/> | <input type="checkbox"/> |
| pension rights | <input type="checkbox"/> | <input type="checkbox"/> |
| job opportunities | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. The Society's business is run in an autocratic way | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. I think the Society should take a more positive stand on "chemically-related" social problems | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. I think the Society is undergoing an identity crisis | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. The Council is a "rubber stamp" body | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Members would be better served by the Society if it had "regional" offices | <input type="checkbox"/> | <input type="checkbox"/> |

LOCAL

- | | | |
|---|--------------------------|--------------------------|
| 1. I would like to see more discussion groups and fewer lectures | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Eliminate automatic local membership | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Replace local sections with meaningful "Action" groups | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. I would prefer to remain a member of the "silent majority" | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. I would like to see the Section publish a Directory of members at modest cost..... | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Hold an annual (DANCE) (PICNIC) (NEITHER) | | |

Application to Present Paper at Meeting-in-Miniature
on April 30, 1971.

Author(s): _____

Position(s): _____

Institution: _____

Title of Paper: _____

QUESTIONNAIRE

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

To be presented by*: _____

Time needed (15 minute maximum) _____

Type of projector needed (if any) _____

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

SIGNED _____

Attention Unemployed Members

Chairman Stannett has appointed a Committee on Professional Status for the North Carolina Section. One of its primary objectives will be to assist any unemployed member (including students) of the Section in his efforts to relocate. We lack information on the extent of the problem and the number affected. Will all members who are currently unemployed or underemployed send to the Chairman of this Committee their name, address, phone number, field of specialization, and date of severance from last position.

Thank you.

John H. Nair, Chairman
Committee on Professional Status
2424 Wentworth St.
Raleigh, N. C. 27609

Eastern Analytical Symposium

The Eastern Analytical Symposium will be held November 10-12, 1971, at the Statler-Hilton, New York City.

Those who wish to present papers must send a 300-word abstract to A. Z. Conner, Hercules, Inc. Research Center, Wilmington, Del. 19899 by May 1, 1971. Papers will be limited to 30 minutes. For further information contact the Publicity Chairman, H. J. Ferrari, Lederle Lab. Div., American Cyanamid Co., Pearl River, N. Y. 10965.

MAIL - HELP!

A number of Section members do not receive ACTIVITIES and have not received any mailings from the local section for the past 12 months. This situation has been caused by our switching from first class to non-profit (bulk) mail rates. In the latter case mail is not forwarded.

Unfortunately our roster contains some incorrect addresses. Therefore please ask your ACS colleagues

if they are receiving ACTIVITIES. If they are not, ask them to provide their new as well as their previous address (plus zip code) to any Section Officer or to the Editor. Thanks.

MINUTES OF THE EXECUTIVE COMMITTEE MEETING

December 17, 1970

Present: Ghirardelli, Reilley, Reid, Carmichael, Smith

The following actions were taken:

1. Voted to replace the second sentence of Bylaw IV, Section 3 in the Constitution adopted October 14, 1970, with the following wording:

"Affiliates shall be entitled to all the privileges of membership in the Section, save those of voting for or holding an elective position, voting on articles of incorporation and Bylaws for the Section, or serving as a member of the Executive Committee."

The foregoing change was requested by the National Committee on Constitution and Bylaws.

2. Authorized the Publications Committee to establish a policy for accepting paid advertising in the Section Newsletter.
3. Authorized the Chairman to appoint a Professional Relations Committee.

H. Carmichael
Secretary-Treasurer

This Month's Puzzle

Swiped from the Genesee Valley Section publication are the following letter-for-number problems:

NOEL
NOEL
BELLS

HAPPY
HAPPY
HAPPY
DAYS
AHEAD

CALENDAR OF EVENTS

- Mar. 10 at UNC-CH (8:30 PM) Venable Lecturer
Klaus Biemann (M.I.T.)
- Mar. 12 at Duke (3:30 PM) C. J. BALLHAUSEN
(Copenhagen and LSU)
- Mar. 15 at NCSU (4:10 PM) C. D. GUTSCHE (Washington
U. at St. Louis) "Enzyme Model Studies:
Polyfunctional Catalysis of the Aldo-Keto
Isomerization"
- Mar. 16 at NCCU (8:30 PM) Meeting of the North Carolina
Section featuring JACK PRESTON (Chemstrand).
Social hour (gratis) at 5:30, dinner (ala carte)
at 6:30 at the Downtown Durham Holiday Inn.
- Mar. 18 at UNC-CH (4:00 PM) D. M. CROTHERS (Yale)
- Mar. 19 at Duke (3:30 PM) P. G. GASSMAN (Ohio State)
- Mar. 22 at Duke (3:30 PM) R. W. COLLINS (Eastern Michigan)
- Mar. 25 at UNC-CH (4:00 PM) G. A. RUSSELL (Iowa State)
- Mar. 29 at NCSU (4:10 PM) M. KAPLAN (Carnegie-Mellon)
"Magnetic Interactions in Ferric Chloride
Hexahydrate"
- Apr. 5 at NCSU (4:10 PM) W. H. FLYGARE (Illinois)
"The Molecular Zeeman Effect and the Measurement
of Molecular Quadrupole Moments"
- Apr. 8 at UNC-CH (4:00 PM) N-C YANG (Chicago)
- Apr. 9 at Duke (3:30 PM) C. LEVENTHAL (Columbia)
- Apr. 15 at UNC-CH (4:00 PM) E. H. WHITE (Johns Hopkins)
- Apr. 16 at Duke (3:30 PM) E. H. WHITE (Johns Hopkins)
- Apr. 19 at NCSU (4:10 PM) R. A. LAUDISE (Bell Labs)
"Crystal Growth of Electronic Materials"
- Apr. 21 at UNC-CH (8:30 PM) Venable Lecturer MICHAEL J. S.
DEWAR (Texas)

- Apr. 22 Section meeting featuring MARVIN D. RAUSCH
(U. Massachusetts) More details next issue
- Apr. 23 at Duke (3:30 PM) T. M. HARRIS (Vanderbilt)
- Apr. 30 at UNC-CH in the afternoon - THE MEETING IN
MINIATURE, featuring an address about the
early history of the Section by H. D.
CROCKFORD of UNC-CH, Chairman of the North
Carolina Section in 1932. See the center of
this issue for the Call for Papers.

Activities NCS/ACS is published by the North Carolina Section of the American Chemical Society. The editor assumes responsibility for all unsigned articles and the views expressed herein are not necessarily those of the North Carolina Section. Direct all correspondence regarding this publication to Arthur C. Diesing, Editor, C/O Information Services, Liggett and Myers Inc., Durham, N.C. 27702

Section officers for 1971: Vivian T. Stannett, Chairman; Peter Smith, Chairman-elect; H. H. Carmichael, Secretary-Treasurer; C. N. Reilly, K. Lawson, Councilors.

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