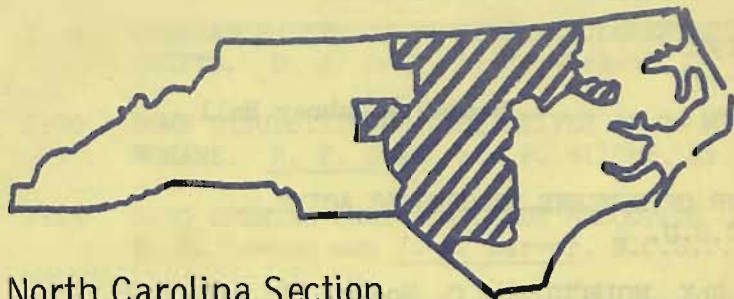


Non-Profit Org.
U. S. POSTAGE
1.64 PAID
DURHAM, N. C.
PERMIT NO. 599

ACTIVITIES



North Carolina Section
American Chemical Society

Vol. I No. 1

Durham, N.C.

May, 1970

MEETING IN MINIATURE MAY 1 AT N. C. STATE - PROGRAM INSIDE

A Message from the Chairman

A change in established practice, especially one grown familiar to over 700 members of a society, calls for an explanation from those who initiate it. The publication you are now reading is one such change.

No one can enlist all the members, or even a majority, in the activities of any organization. Some will consistently choose to exercise their right to "belong" but to participate only in a casual or passive way. Over the past several years the elected officers and appointed committees of this Section have experimented with changes aimed at increasing the attendance at regular meetings. Scheduled times have been varied, special speakers have been invited, and more frequent opportunities for social gathering have been provided. Some success has been attained, but there has remained the realization that such meetings, each attended by a small fraction of the membership, are woefully inefficient in providing opportunities to report, discuss, and transact the business of the Section.

This publication is an effort to reach every member of the North Carolina Section. It is in the capable hands of Art Diesing, Manager of Information Services at Liggett and Myers, formerly the Asst. Business Manager for the Detroit Section's magazine, and one example of

the talent and experience available in a growing section like ours. Success will depend on the response to his plea made elsewhere in this issue. As Editor he cannot generate the facts, ideas, suggestions (and complaints) needed to sustain a publication. We, the members, must not allow it to become a stale vehicle for proclamations from the officers and canned releases from A.C.S. headquarters.

And so we come to a definition of purpose as we presumptuously label this volume I, number 1: To place before all the members, on a more or less regular basis, information regarding the business transacted or proposed by the officers and their agents; to identify those officers and their responsibilities in the hope that as they become better known they will become more responsive to your needs; to publicize events and existing conditions affecting the practice of chemistry within the territory of the North Carolina Section; to provide a forum for the exchange of views. In short, what can begin here is a modest effort to communicate; and for any organization after all, communication is the name of the game.

An Editorial Plea

Some weeks ago the Chairman of this Section and the Editor met to plan the first issue of this publication. Assuming that this publication survives, which we are confident will be (Continued on back page)

PROGRAM: 1970 MEETING IN MINIATURE

North Carolina Section - American Chemical Society

North Carolina State University, Raleigh, North Carolina

May 1, 1970

Technical Session A

Room 214 Dabney Hall

Presiding: M. K. DeArmond

- 1:30 SUBSTITUENT EFFECTS ON PHOSPHORUS NMR OF BENZENE PHOSPHONIC ACIDS. C. C. Mitsch and C. G. Moreland, N.C.S.U.
- 1:45 RAMAN AND FAR INFRARED SPECTRA OF R_3SbX_2 MOLECULES. C. Woods, III and G. G. Long, N.C.S.U.
- 2:00 ^{57}Fe AND ^{121}Sb MÖSSBAUER SPECTRA OF SOME $Fe(CO)_3X_2$ MOLECULES. P. Garrou, L. H. Bowen and G. G. Long, N.C.S.U.
- 2:15 EXCHANGE REACTIONS OF DIMETHYLANTIMONY TRICHLORIDE. W. Kustes and G. G. Long N.C.S.U.
- 2:30 FARADAY EFFECT IN RHODIUM (III) PENTAMMINES. E. A. Hopcus and A. F. Schreiner, N.C.S.U.
- 2:45 RUTHENIUM AMMINE CHEMISTRY. S. -W Lin and A. F. Schreiner, N.C.S.U.
- 3:00 SPIN FORBIDDEN TRANSITIONS IN CR(III) SULFUR CHELATES. W. J. Mitchell and M. K. DeArmond, N.C.S.U.

Technical Session B

Room 206 Cox Hall

Presiding: F. Getzen

- 1:30 CHEMICAL MODIFICATION OF ACTIVE CENTER RESIDUES OF MALATE DEHYDROGENASE. E. M. Gregory, M. S. Rohrbach and J. H. Harrison, U.N.C.
- 1:45 SOME OBSERVATIONS ON INTRAMOLECULAR HYDROGEN BONDING IN DIMETHYLSULFOXIDE SOLUTIONS OF GLUCOSE AND POLYGLUCOSES. K. K. Ghosh and R. D. Gilbert, Shaw Univ. and N.C.S.U.
- 2:00 CONFORMATIONS OF CYCLOPENTYLHALIDES, W. E. Shasky, C. G. Moreland, and D. W. Wertz, N.C.S.U.
- 2:15 KINETIC STUDIES OF REDISTRIBUTION REACTIONS BY NUCLEAR MAGNETIC RESONANCE. R. J. Beam, N.C.S.U.
- 2:30 ESR STUDIES OF THE PHOTOLYSIS OF RHODIUM DIAMINE CHELATES. W. Halper and K. DeArmond, N.C.S.U.
- 2:45 ISOTOPE EFFECTS IN DECOMPOSITION OF CHEMICALLY ACTIVATED MOLECULES. B. D. Neely and H. H. Carmichael, N.C.S.U.
- 3:00 REACTION KINETICS IN RADIO FREQUENCY PLASMAS. J. H. Murphy and H. H. Carmichael, N.C.S.U.
- 3:15 REACTION OF ALKALI METAL HALIDES WITH AN OXYGEN PLASMA. M. Hotchandani and C. E. Gleit, N.C.S.U.

Technical Session C
Presiding: N. Porter

Room 214 Cox Hall

- 1:30 EXO ADDITION OF ACRIDIZINIUM TETRAFLUOROBORATE TO NORBORNENE TYPE SYSTEMS. M. E. Parham and C. K. Bradsher, Duke Univ.
- 1:45 REARRANGEMENTS OF DIHYDRODICYCLOPENTADIENE DERIVATIVES: 1, 3 and 1, 4 HYDRIDE SHIFTS. D. J. Cash, R. C. Wheland, G. W. Wright and P. Wilder, Jr., Duke Univ.
- 2:00 SOME DISUBSTITUTED DERIVATIVES OF 2-METHYL-6-THIATRICYCLO (3.2.1.1^{3,8}) NONANE. R. F. Gratz and P. Wilder, Jr., Duke Univ.
- 2:15 RING OPENING DURING HYDRIDE REDUCTION OF N-CYCLOPROPYL IMINES. C. L. Bumgardner, E. L. Lawton and J. G. Carver, N.C.S.U.
- 2:30 THE PREPARATION AND PRELIMINARY CHARACTERIZATION OF CERTAIN ALL-ORGANIC POLYSPIROKETALS. C. F. Beam and W. J. Bailey, Duke Univ. and U. of Maryland
- 2:45 AN UNEQUIVOCAL SYNTHESIS OF ISOXAZOLES AND PYRAZOLES FROM 1,4-DIANIONS OF OXIMES OR PHENYLHYDRAZONES HAVING AN α -HYDROGEN. C. F. Beam, R. S. Foote, M. C. D. Dyer, R. A. Schwarz, and C. R. Hauser, Duke Univ.
- 3:00 CYCLIZATION AND ADDITION REACTIONS OF 2 EXO-PHENYL 3 ENDO-CARBOXY BICYCLO-(2.2.1.)HEPTENE 5. J. B. Cannon and P. Wilder, Jr., Duke Univ.
- 3:15 PREPARATION AND REACTIONS OF A TRIANION FROM A NON-ENOLIC SYSTEM. M. L. Miles and L. E. Brieady, N.C.S.U.

REFRESHMENTS WILL BE SERVED IN THE LOBBY OF DABNEY HALL 3:15 - 4:00

4:00 PLENARY SESSION
Presiding: R. G. Ghirardelli

Room 251 Williams Hall

Presentation of 50-year A.C.S. membership certificate to John H. Nair

Presentation of the CARDINAL AWARD

PLENARY ADDRESS: Recent Work in the Photochemistry of Linear Conjugated Dienes

R. SRINIVASAN

IBM - Thomas J. Watson Research Center

The 1970 Meeting in Miniature is being held in conjunction with the annual meeting of the North Carolina Academy of Science, which continues through Saturday, May 2.

All members of the Section and their spouses are cordially invited to attend a social hour and dinner at Ballentine's Restaurant in Cameron Village following the Meeting in Miniature. The social hour (gratis) will begin at 5:30 p.m. and dinner (buffet style) will follow. Cost of the dinner will be \$2.50 per person. Please use the card attached to make your reservation.

An Editorial Plea - continued from page 1
the case, it will be interesting to look back on this first issue in the following years to see the changes that will have taken place in content and format. These changes, which hopefully will be for the better, will be brought about mainly by your comments and suggestions.

An important function of this publication is to serve as a means of disseminating official notices, meeting announcements, and other business of the North Carolina Section. While we have been disseminating meeting notices without the aid of a publication such as this, it is largely the area of "other business" which has been "hidden under a bushel" due to poor attendance at meetings. For example, do you know even roughly the present budget for the Section? Do you know the names of the officers or the total membership of the Section? From this first issue you at least know the names of our officers, that we number over 700, and from the masthead you can see the territory assigned to this Section. I must confess that these last two items were news to me too!

A second important function which we hope will be realized by this publication is that a forum will be provided for written comments-- letters to the Editor. Members are encouraged to express their opinions on any topic relating to the A.C.S., North Carolina Section or Chemistry in general. The only restrictions we request you observe are that you sign your name and not exceed 500 words. Those who wish to offer comments and suggestions, but not for publication as with a letter to the Editor, may submit them in any convenient manner such as by phone or a brief note on a scrap of paper. Correspondence may be sent to the Editor at the address shown on the past of this issue.

While I am soliciting your help let me point out that ACTIVITIES NCS/ACS is an excellent medium for informing members of this Section of any technical lectures or demonstrations which your organization, institution, or company sponsors and which are open to the public. Accordingly we will include a Calendar of Coming Events as a regular feature of this publication. How many coming events did we miss in our first calendar? It would help if one person at each organization would be on the lookout for coming events which could be announced in ACTIVITIES NCS/ACS and would forward this information to the Editor.

Present plans call for publishing the second issue of ACTIVITIES NCS/ACS in June. That issue will touch on the activities that took place at the Meeting in Miniature and will also feature an article on the ACS portable pension plan. In addition some proposed changes to our Section's Constitution will be presented.

There will be no issues published during the summer months; we will resume with issue No. 3 in the fall. This schedule will permit the readers to recuperate from the first two issues and brace themselves for the forthcoming year.

One final request -- anyone wishing to help in publishing ACTIVITIES NCS/ACS should contact the Editor. There are some choice jobs available. Art Diesing, Editor

LAST MINUTE CHANGE AT MARCH MEETING

If any of the 80 or 90 chemists who turned up at Duke on St. Patrick's Day came to hear Michael Dewar, they received a surprise: namely Edel Wasserman of Bell Labs. The "ringer" (Webster: Any person or thing of highest excellence in some activity) appropriately enough discussed recent results related to his earlier well-known syntheses of catenanes, i.e., compounds with interlocked rings. Mass spectral and NMR evidence for several more complex linked and looped structures was presented, and even a molecular Mobius strip!

Dewar's health prevented him from traveling, and Wasserman filled in obligingly on 24 hours' notice. Nobody could remember a similar occurrence, certainly not in the recent history of the Section.

Twenty-three members attended the social hour and steak dinner which followed at Hartman's. The liquor, following tradition, was late in arriving and, had elections not been restricted to the city of Raleigh, might never have made it at all.

CALENDAR OF EVENTS

Apr. 24 at Duke (3:30 PM) GEORGE OLAH
Apr. 24 at UNC-CH (8:00 PM) GEORGE PIMENTEL
May 1 at NCSU (1:30 PM) MEETING IN MINIATURE
May 1-2 at Raleigh-N.C. Academy of Science
May 4 at NCSU (4:10 PM) JIRI JONAS
May 14 at UNC-CH (afternoon) W. H. FLYGARE
May 14 (?) at UNC-CH ANTHONY LAMOLA
May 18 at NCSU (4:10 PM) THOMAS S. MEYER
May 24-29 Toronto A.C.S. Meeting
(no space for titles this issue)

ACTIVITIES NCS/ACS is published by the North Carolina Section of the American Chemical Society. 1970 officers: R. G. Ghirardelli, Chairman; V. Stannett, Chairman-elect; H. H. Carmichael, Secretary-Treasurer; C. R. Reilley, K. Lawson, Councilors. Direct all correspondence regarding this publication to Mr. Arthur C. Diesing, Editor, C/O Information Services, Liggett and Myers, Inc., Durham, N.C. 27702