

ACTIVITIES



North Carolina Section American Chemical Society

Vol. I, No. 10

Durham, N. C.

MAY
April 1971

NORTH CAROLINA SECTION
of the
AMERICAN CHEMICAL SOCIETY

announces a

MEETING IN MINIATURE

at the

UNIVERSITY OF NORTH CAROLINA, CHAPEL HILL

on

April 30, 1971

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PROGRAM

The technical program will be held in Venable Hall starting at 1:30 p.m. Participants are invited to have lunch at the nearby Carolina Inn beforehand - there is a cafeteria as well as formal dining rooms.

TECHNICAL SESSION A

Venable Hall, Room 12-1

Presiding: S. B. Knight

- 1:30 pm EVALUATING INTEGRALS IMPORTANT TO QUANTUM CHEMISTRY BY MONTE CARLO TECHNIQUES. D. E. Hoskins, University of North Carolina, Chapel Hill.
- 1:45 pm FLUORINE EXCHANGE IN TRIBENZYL ARSENIC DIFLUORIDE. C. C. W. Wooten and C. G. Moreland, North Carolina State University.
- 2:00 pm PROTON EXCHANGE IN MIXTURES OF 100% HYDROGEN PEROXIDE AND WATER. P. Smith, P. E. Miller, and J. J. McLeskey, III., Duke University.
- 2:15 pm CONCENTRATION DEPENDENCE OF THE DIFFUSION COEFFICIENT OF FISSION PRODUCT METALS IN GRAPHITE. A. Skerker, and L. Zumwalt, North Carolina State University.
- 2:30 pm DIFFERENTIATING EXO- AND ENDO- NORBORNEOL BY ION-MOLECULE REACTIONS: AN ION CYCLOTRON RESONANCE STUDY. M. K. Hoffman and M. M. Bursey, University of North Carolina, Chapel Hill.
- 2:45 pm A HIGH SPEED SMALL COMPUTER MAGNETIC TAPE SPECTRAL SEARCH SYSTEM APPLIED TO MASS SPECTRA. S. W. Woodward, L. E. Wangen and T. L. Isenhour University of North Carolina, Chapel Hill
- 3:00 pm ORTHO EFFECTS ON ORDERING FACTORS IN MASS SPECTRAL REARRANGEMENTS. LOSS OF KETENE FROM PHENYL ACETATES AND ACETANILIDES. S. A. Benezra and M. M. Bursey, University of North Carolina, Chapel Hill
- 3:15 pm ELECTROCHEMICAL DEUTERIUM LABELING OF ORGANIC COMPOUNDS. J. R. Cockrell, Jr., and R. W. Murray, University of North Carolina, Chapel Hill.

Presiding: D. C. Jicha

- 1:30 pm OXIDATION OF COMPOUNDS CONTAINING IRON METAL-METAL BONDS. J. A. Ferguson and T. J. Meyer, University of North Carolina, Chapel Hill.
- 1:45 pm OUT-OF-PLANE INTERACTION IN DICHLOROBIS (2-METHYLPYRIDINE) COPPER (II) AND DIBROMOBIS (2-METHYLPYRIDINE) COPPER (II). D. Y. Jeter and W. E. Hatfield, University of North Carolina, Chapel Hill.
- 2:00 pm THE CRYSTAL AND MOLECULAR STRUCTURE OF TRIS (ETHYLENEDIAMINE)COBALT(III) HEXACHLORO-CADMATE DICHLORIDE MONOHYDRATE. J. T. Veal and D. J. Hodgson, The University of North Carolina, Chapel Hill.
- 2:15 pm COMPUTER SIMULATION OF ESR SPECTRA OF TRANSITION METAL COMPLEXES. J. Hempel and W. E. Hatfield, Univ. of North Carolina, Chapel Hill.
- 2:30 pm CHEMISTRY AND STRUCTURE OF $(C_6H_5)_3CH_3SbX$ COMPOUNDS ($X=F, Cl, Br, NO_3, ETC.$) IN THE SOLID STATE AND IN SOLUTION. B. C. Andrews and G. G. Long, North Carolina State University
- 2:45 pm ISOMERIC TCNE ADDUCTS OF A COBALT SCHIFF BASE COMPLEX. A. L. Crumbliss and F. Basolo, Duke University and Northwestern University.
- 3:00 pm ELECTRONIC EXCITED STATE INFORMATION FOR d^6 COMPLEXES FROM MCD SPECTRA. P. J. Hauser, J. D. Gunter, and A. F. Schreiner, North Carolina State University.
- 3:15 pm ONE-ELECTRON ENERGY LEVELS IN $Cu(H_2O)_4TiF_6 \cdot NH_4F$. R. A. Palmer and R. C. Roy, Duke University.

TECHNICAL SESSION C

Venable Hall, Room 222

Presiding: D. L. Harris

- 1:30 pm TEMPERATURE DEPENDENCE OF UNSYMMETRIC AZO COMPOUND PHOTOLYSIS. L. J. Marnett and N. A. Porter, Duke University.
- 1:45 pm REACTIONS OF EXCITED THIOINDIGO WITH HYDROXYLIC COMPOUNDS. G. M. Wyman, U. S. Army Research Office-Durham.
- 2:00 pm PHOTOCHEMISTRY OF BETA-PHENYL KETONES. G. L. Carlson and D. G. Whitten, University of North Carolina, Chapel Hill.
- 2:15 pm PHOTOCHEMISTRY OF BISPYRIDYLETHYLENE. SOLVENT EFFECTS. Y. J. Lee and D. G. Whitten, Univ. of North Carolina, Chapel Hill.
- 2:30 pm PHOTOCHEMISTRY OF RUTHENIUM COMPLEXES. LIGAND ISOMERIZATION VIA ORBITALLY DIFFERENT EXCITED STATES. P. P. Zarnegar and D. G. Whitten, University of North Carolina, Chapel Hill.
- 2:45 pm ELECTROCHEMICAL AND EPR STUDIES ON PHENYL SUBSTITUTED CYCLOOCTATETRAENES. R. A. Copenhafer and R. D. Rieke, University of North Carolina, Chapel Hill.
- 3:00 pm EPR STUDIES ON STRAINED AROMATIC HYDROCARBONS. S. E. Bales, and R. D. Rieke, University of North Carolina, Chapel Hill.
- 3:15 pm THE LOW TEMPERATURE PROTONATION OF CYCLO-OCTATETRAENEIRON TRICARBONYL. E. R. Davis and M. S. Brookhart, University of North Carolina, Chapel Hill.

Presiding: R. L. McKee

- 1:30 pm PROPERTIES OF TRYPSIN COVALENTLY BOUND TO POLYSTYRENE BEADS. J. B. Taylor, North Carolina State University.
- 1:45 pm BIOSYNTHESIS OF MESEMBRINE I. THE AMINO ACID PRECURSORS. P. W. Jeffs, W. C. Archie, R. L. Hawks, D. S. Farrier, and N. H. Martin, Duke University.
- 2:00 pm BIOSYNTHESIS OF MESEMBRINE ALKALOIDS II. NORBELLADINES AS PRECURSORS. P. W. Jeffs, H. F. Campbell, D. S. Farrier, G. Molina, and N. H. Martin, Duke University.
- 2:15 pm THE PREPARATION AND REACTIONS OF C(α)N,N-TRI-LITHIOHYDRAZONES. C. F. Beam, R. S. Foot and (the late) C. R. Hauser, Duke University.
- 2:30 pm CYCLOADDITION REACTION OF ISOQUINOLINIUM SALTS. F. H. Day and C. K. Bradsher, Duke University.
- 2:45 pm MECHANISM AND KINETICS OF ACID - CATALYSED ALCOHOLYSIS OF EPOXIDES. N. B. Chapman, J. Biggs, A. F. Finch, and V. Wray, Duke University and Hull University, England.
- 3:00 pm A MECHANISTIC STUDY OF CYCLOPROPANE FORMATION VIA THE WITTIG REACTION. R. G. Ghirardelli and R. A. Izydore, Duke University.
- 3:15 pm PHOTOCHEMICAL REACTION OF NF_2 WITH 1,1-DI-FLUOROETHYLENE. R. L. Leonard and C. L. Bumgardner, North Carolina State University.

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REFRESHMENTS WILL BE SERVED IN THE LOWER LOBBY OF VENABLE HALL 3:00 - 3:45 PM.

4:00 pm

PLENARY SESSION

Venable Hall, Room 207

Presiding: W. F. Little

The plenary address will be entitled

"THE HISTORY OF THE NORTH CAROLINA SECTION, 1896-1971"

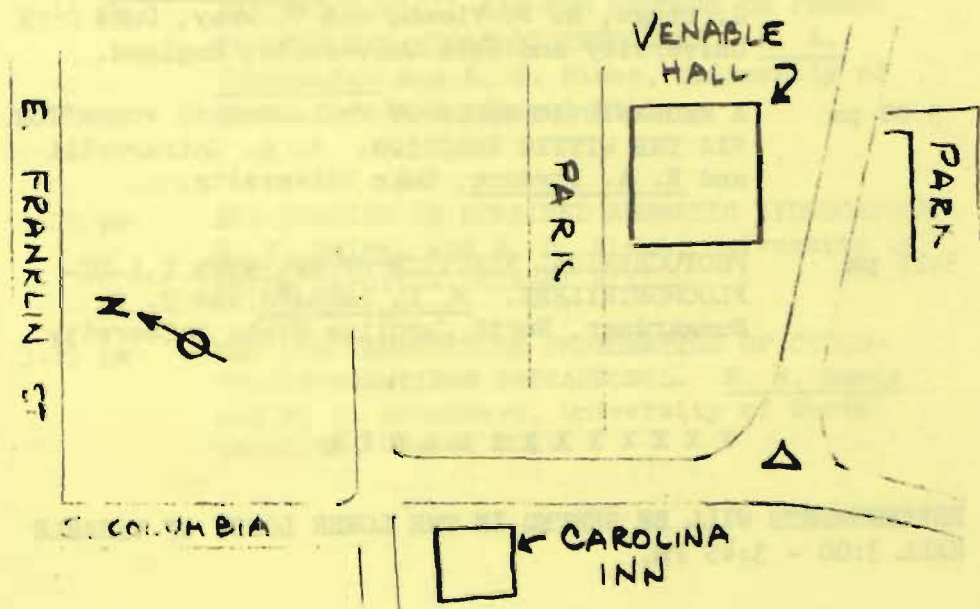
by

H. D. CROCKFORD

NC Section Chairman, 1932

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Following the Meeting in Miniature, all members and their spouses are cordially invited to attend a SOCIAL HOUR and DINNER at the Carolina Inn. The social hour (gratis) will start at 5:15 pm and the dinner, at 6:15 pm. The cost of the dinner will be \$3.50 per person, plus 3% sales tax and an optional gratuity. The menu will be Baked Half Cornish Hen with brown rice and sauterne sauce, plus an appetizer, potatoes, vegetables, salad, hot rolls, a dessert, and a beverage.



Newcomers to Our Section

Mrs. Marjatta AMEIN (Raleigh)
Julia Cheryl BAKER (U. N. C. Chapel Hill)
Dr. Roy L. BENNETT (Raleigh)
John Arthur BITTIKOFER (Durham)
Gilbert M. BROWN (U. N. C. Chapel Hill)
Dr. Norman B. CHAPMAN (Duke)
Thomas Gordon CONLEY Jr. (Durham)
Marshall L. DEANHARDT (Knightdale)
Donald Lee FOX (U.N.C. School of Public Health)
Sarah M. GILBERT (Durham)
D. Bruce HENSCHER (Durham)
George JURKIEWITSCH (Raleigh)
Mrs. Catherine E. LAMAZE (R. T. I.)
Robert Watts LAMON (Durham)
Dr. William Thomas McKEAN Jr. (N. C. State)
Dr. Darrell Eugene MOUNT (Durham)
Whyte Glendower OWEN (U.N.C. Biochemistry)
William Edward RICH Jr. (U.N.C. Chapel Hill)
Dr. Sathyabhama Devi ROY (Durham)
James Edwin TILLOTSON (Raleigh)
Edward TOKARSKY (Durham)
Charles Kenneth WHITE (Carrboro)
Robert Franklin WINTON (Fort Bragg)
Mrs. Donna M. K. WOODS (Fayetteville)

WELCOME!

CALENDAR OF EVENTS

- Apr. 29 at UNC-CH (4:00 PM) M. P. KLEIN (Berkeley)
- Apr. 30 at UNC-CH (2:30 PM) The MEETING IN MINIATURE
featuring H. D. CROCKFORD. Social hour and
dinner at the Carolina Inn. The complete
program will be found in this issue.
- May 3 at NCSU (4:10 PM) P. YATES (Toronto)
"Aspects of the Chemistry of α -Diazo Ketones"
- May 7 at Duke (3:30 PM) F. A. LYTLE (Purdue)

(Continued on back)

- May 14 at Duke (3:30 PM) N. B. CHAPMAN (Hull)
(Reynolds Visiting Professor at Duke)
- May 17 at NCSU (4:10 PM) B. E. DOUGLAS (Pittsburgh)
"Circular Dichroism Studies of the Stereo-
chemistry of Metal Complexes"

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. Reilley, K. Lawson, Councilors.

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