

ACTIVITIES



North Carolina Section American Chemical Society

Vol. III, No. 1

Raleigh, N. C.

October 1972

OCTOBER MEETING

Professor John L. Burmeister will address the October meeting of the North Carolina Section to be held on WEDNESDAY, October 18 in Raleigh. A gratis social hour will begin at 5:30 p.m. at the NCSU Faculty Club. Dinner will be ordered from the menu at 6:15 p.m. Professor Burmeister's talk, "Ambidentate Ligands - the Schizophrenics of Coordination Chemistry" will be at the FACULTY CLUB at 8:00 p.m.

John Burmeister was born in Fountain Springs, Pennsylvania in 1938. He received his B. S. degree from Franklin and Marshall College in 1959 and his Ph.D. from Northwestern University in 1963. His doctoral research was carried out under the supervision of Professor Fred Basolo.

Dr. Burmeister has been a laboratory assistant with the Bakelite Company, a research chemist with the Union Carbide Plastics Company, and an Instructor in Inorganic Chemistry at the University of Illinois. He has been a faculty member at the University of Delaware since September of 1964, having been promoted to an Associate Professor of Chemistry in 1969. He was the recipient of

Continued on Page 2

the Gelewitz Award given by Northwestern University in 1963 and the Excellence in Teaching Award given by the Lindbach Foundation and the University of Delaware in 1968. He is a member of the American Chemical Society, the Chemical Society (London), Sigma Xi, and Phi Lambda Upsilon. He is a consultant for the Sun Oil Company, Marcel Dekker, Inc., and AMP, Inc., and is a member of the Editorial Advisory Boards of INORGANICA CHIMICA ACTA and SYNTHESIS IN INORGANIC AND METALORGANIC CHEMISTRY.

"Ambidentate Ligands - the Schizophrenics of
Coordination Chemistry"

ABSTRACT

Our efforts to discover what factors determine the bonding mode adopted by ambidentate ligands in a given situation are being carried out with the eventual goal in mind of achieving a clearer understanding of the bonding in coordination compounds. An ambidentate ligand, such as the thiocyanate ion (NCS^-), is, in a very real sense, a chemical probe of the molecular environment, and its response to controlled electronic and steric stimuli can tell us a great deal about their importance and function. Thus far, nine distinct factors governing the bonding modes have been identified: control by the metal atom, cooperative electronic ligand control, cooperative steric ligand control, control by both anionic and cationic non-coordinated groups, solvent control, control by the physical state, pressure control, photochemical control, and mechanistic control. Examples of each of these will be presented and discussed within the framework of current bonding theories.

PEP

All ACS local sections and divisions have been asked by President Max Tishler to set up campaign organizations and to take an active part in the million-dollar solicitation campaign for PEP, the American Chemical Society's Professional Enhancement Program. At the New York national meeting a briefing session was held for PEP representatives, who will report back to their sections and divisions, and a mail solicitation was sent to all members early in September. Campaign plans call for a personal contact with every ACS member.

PEP booths were active in the registration areas at New York, and volunteers, armed with pledge cards, attempted to provide each registrant with an opportunity to contribute.

The ACS Board of Directors has already advanced \$100,000 to get the program off the ground, and four ACS staff departments have introduced new member services or begun expanded professional activities under the PEP program. ACS President-elect Alan C. Nixon is chairman of the PEP Steering Committee, and James H. Stack, special assistant to the Executive Director, has been named staff coordinator of the campaign. The committee includes several Board and Council committee chairmen as well as staff representatives.

ACS LOCAL SECTIONS ASKED TO AID \$1,000,000 PEP DRIVE

Initiated in response to member demands for increased professional activity, the PEP program will include direct financial assistance to unemployed members, increased employment aids, new professional relations services, and expanded government and public programs.

The PEP Committee for the North Carolina Section is chaired by Dr. Don Scott of the Environmental Protection Agency. If you would like to help in this program please feel free to contact Don at either Cary, 467-6875 or 549-8411 extension 2447.

CALENDER OF COMING EVENTS

- Oct. 12 Ivin Fridoritch, Duke University at
UNC, 4:00 P.M.
- Oct. 13 R. H. Martin, University of Brussels at
Duke,
- Oct. 16 Glenn Gordon, University of Maryland at
NCSU, 4:00 p.m.
- Oct. 19 Sanford Lipsky, University of Minnesota at
UNC, 4:00 p.m.
- Oct. 27 J. F. Bunnett, U. Calif. at Santa Cruz, at
Duke
- Oct. 30 Robert Cargill, University of South Carolina
at NCSU
- Nov. 2 Herbert O. House, Georgia Tech., at UNC
- Nov. 6 H. Vermeer, University of Amsterdam, at
NCSU
- Nov. 10 J. W. Huffman, Clemson University, at Duke
- Nov. 15 Joseph P. Park, University of Colorado, ACS
at UNC

The membership of the North Carolina Section climbed to 832 in June 1972. This enlarged membership entitles the section to elect a third member of the council, the policymaking body of the ACS. This councilor as well as other section officers will be elected at the November meeting.

LOCAL SECTION MEMBER COUNT (1970 vs 1971)

Recently published statistics for 1971 on the 174 local ACS sections indicate that 107 showed a net loss of 0.2% to as much as 12.2% of their membership, seven had no net change in membership, while 60 underwent a net increase. The data for the ACS sections with the seven highest percentage net increase in membership are given below.

Section	Number of Members		Percent Increase
	July 1970	July 1971	
Heart o' Texas	49	58	18.4
South Plains	75	88	17.3
Puerto Rico	184	211	14.7
Central Arkansas	127	143	12.5
Northeastern Indiana	109	122	11.9
Southern Arizona	205	227	10.7
NORTH CAROLINA	715	782	9.4

Only one ACS section had a net gain in number of members larger than that of the North Carolina Section. This was the Florida Section which rose from 1589 to 1660.

According to the records of the Section Archivist (Dr. H. D. Crockford), the membership status of the Section as of 1 July, 1970 was Member 69.5%, Associate Member 7.0%, Student Members and Associate Members 20.9%, and Emeritus Members, 2.6%; and their employment distribution was Academic 60.7%, Industrial, Government, etc. 22.6%, and Retired 16.7%.

Peter Smith

THE NORTH CAROLINA SECTION OF THE AMERICAN CHEMICAL SOCIETY

EXECUTIVE COMMITTEE

Peter Smith (Duke), Chairman
H. H. Carmichael (NCSU), Ch.-Elect
Maurice Bursey (UNC), Sec./Trea.
Charles N. Reilley (UNC), Councilor
Keith Lawson (Chemstrand), Councilor
Marcus Hobbs (Duke), Alternate Councilor
Alton Reid (NCSU), Alternate Councilor
Vivian Stannett (NCSU), Past Chairman
Robert Ghirardelli (AROD), Past Chairman
Gilbert Long (NCSU), Past Chairman

AWARDS COMMITTEE

Frances C. Brown (Duke), Chairman
Forrest W. Getzen (NCSU)
Kenneth T. Knapp (EPA)
Colin G. Pitt (RTI)
Ezra L. Totten (NCCU)

HOSPITALITY COMMITTEE

Charles G. Moreland (NCSU), Chairman
Thomas J. Meyer (UNC-CH)
Richard A. Palmer (Duke)

MEMBERSHIP COMMITTEE

Maurice M. Bursey (UNC-CH), Chairman
Joan T. Bursey (RTI)
Horace D. Crockford (UNC), Sec. Archivist
Forrest C. Hentz, Jr. (NCSU)
Richard J. Thompson (EPA)
Richard L. Wells (Duke)

PROFESSIONAL RELATIONS COMMITTEE

William P. Utermohlen, Jr.
(Schieffelin), Chairman
Forrest W. Getzen (NCSU)
Marcus E. Hobbs (Duke)
Suzanne T. Furrington
Donald R. Scott (EPA)
Edward Tyczkowski (Beaunit)

PUBLICATIONS COMMITTEE

H. H. Carmichael (NCSU), Chairman
Arthur C. Diesing (Liggett & Myers)
Robert C. Ghirardelli (AROD)
Kenneth W. Hanck (NCSU)

PROGRAM COMMITTEE

H. H. Carmichael (NCSU), Chairman
Carl E. Anderson (UNC-CH)
John H. Margeson (EPA)
Anton Schindler (RTI)
Bernard F. Spielvogel (AROD)

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

RE WILLIAMSON
DEPT OF CHEM
UNIV OF N C
CHAPEL HILL N C 27514

NON-PROFIT ORG.
U. S. POSTAGE PAID
RALEIGH, N. C.
PERMIT NO. 431