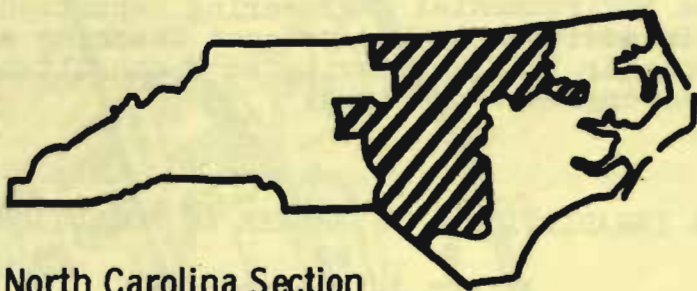


## ACTIVITIES



### North Carolina Section American Chemical Society

---

Vol. II, No. 1

Durham, N. C.

October, 1971

---

## OCTOBER MEETING ON WATER POLLUTION

### OCTOBER MEETING

Our first meeting of the new season will be held in Raleigh on Tuesday, October 19. A gratis social hour will begin at 5:30 p.m. at the N. C. State Faculty Club. Dinner will begin at 6:15 p.m. and will be ordered from the regular menu. The lecture will begin at 8:00 p.m. in Room 124 of Dabney Hall.

The Faculty Club is located at the intersection of N. C. 54 (Hillsboro St.) and U. S. 1 and 64 (belt line). The entrance is on N. C. 54 west of the overpass intersection. Directions for reaching Dabney Hall can be gotten from the enclosed map.

The speaker for the evening will be Arthur J. Condren, Assistant Professor of Civil Engineering at the University of Vermont. Dr. Condren received his BSCE degree (1964), MSCE (1966), and PhD (1969) from Purdue University. His graduate thesis related to the subject of oxidation of waste water.

While going to Purdue, Dr. Condren also worked part-time as a Sanitary Engineer for Union Carbide,

(Continued next page)

a consultant to several firms, and as an instructor in the Environmental Engineering Department.

In addition to his present teaching assignment, our speaker is also serving as a consultant to several engineering firms.

"GAMMA IRRADIATION - AN ANSWER TO POLLUTION CONTROL?"

by

Arthur J. Condren, PhD

The complete removal of the organic fraction of waste waters is an area of study receiving considerable attention by environmental researchers throughout the world. The researchers undertaking this task are investigating a multitude of physical, chemical and biological processes. An example of one such process is radio-induced oxidation caused by gamma-rays, X-rays or high speed electrons. It has been known for a long time that the absorption of energy emitted by a radioactive source such as cobalt-60 can lead to changes in the molecular structure of organic compounds in aqueous solution.

The application of this phenomenon to controlling water pollution is to be discussed. A number of specific experimental results will be presented along with possible schemes for implementing this peaceful use of atomic energy.

CALENDAR OF COMING EVENTS

N. C. Section Meetings

11/2 - At U.N.C., Moses Passer, A.C.S.  
Headquarters

12/7 - At Duke, M. K. Wilson, Nat'l Science  
Foundation

1/? - At U.N.C., J. K. Taylor, Nat'l. Bureau  
of Standards

(Continued page 6)

# North Carolina State University

NORTH CAROLINA SECTION  
AMERICAN CHEMICAL SOCIETY

DABNEY HALL

BELTLINE  
U.S. 1  
U.S. 64 WEST

Parking

1. HOLLADAY
2. ALUMNI
3. PRIMROSE
4. PEELE
6. WATAUGA
7. BROOKS
8. FOURTH
9. GOLD
10. WELCH
11. BAGWELL
12. BERRY
13. BEGTON
14. CLARK
15. FRANK THOMPSON GYM
16. BYME

27. MORRIS
28. LACMDRY
29. POWER PLANT
30. RIDDICK
31. DANIELS
32. MANN
33. WITHERS
34. 1911 BUILDING
35. RICKS
36. PATTERSON
37. BURLINGTON NUCLEAR LABS
38. WILLIAM NEAL REYNOLDS COLLEGE
39. CARMICHAEL GYMNASIUM
41. ALEXANDER
42. STUDENT SUPPLY STORE
43. BUREAU OF MINES
44. BROUGHTON
45. POLE
46. HARRELSON
47. D. H. HILL LIBRARY
48. ERDAHL-CLOYD UNION
49. SCOTT
50. GARDNER
51. WILLIAMS
52. AGRONOMY GREENHOUSES
53. LABORATORY BUILDING
54. OWEN
55. TURLINGTON
56. TUCKER
57. CAFETERIA
60. KILGORE
61. NELSON
62. DAVID CLARK LAB
63. PRINT SHOP
64. BRAGAW
66. BRANDON P. HODGES
66. ROBERTSON
67. AGRICULTURAL ENGINEERING
69. ANIMAL DIAG. LABORATORY

## PROJECT CATALYST

Three high school students from the Triangle area were among the 80 chosen to participate in Project Catalyst this summer. They are Brenda F. Ford of 515 Martha Street, Durham, a student at Hillside High School; James Dae of 1839 Malone Place, Raleigh, a student at Ligon Senior High School; and Emily P. Scott of Bahama, a student at Northern High School.

Miss Ford's summer research was done under the direction of Dr. C. K. Bradsher at Duke and involved the subject of "ion exchange as a means for the preparation of optically active compounds."

Mr. Dae's project was under the direction of Dr. G. O. Doak at N. C. State. The topic was "synthesis of some organoarsenic and organoantimony compounds."

Miss Scott's work involved "growth of optically active crystals" and was done at Duke under the direction of Dr. R. A. Palmer.

Project Catalyst is a unique program sponsored by the A.C.S. to help motivate young people from disadvantaged families and to give them an incentive to continue their education at the college level. Catalyst is part of the Society's Project SEED, a more comprehensive nationwide effort to aid the disadvantaged in both education and employment.

Now in its fourth summer, the program brings promising high school students, principally juniors, into university chemistry laboratories where they work for ten weeks on a one-to-one basis with professional scientists. The work they do is aimed at expanding their general knowledge of the scientific environment.

## WHO'S ON WHAT COMMITTEE

### Awards Committee

Richard Gilbert (Chairman) - N. C. State  
Patrick Hobson - Chemstrand  
Don Jicha - U.N.C.  
Richard Palmer - Duke

(Continued page 5)

Executive Committee

Vivian Stannett (Chairman) - N. C. State  
Peter Smith (Chairman-Elect) - Duke  
Halbert Carmichael (Sec.-Treas.) - N. C. State  
Charles Reilley (Councilor) - U.N.C.  
Keith Lawson (Councilor) - Chemstrand  
Marcus Hobbs (Alternate Councilor) - Duke  
Alton Reed (Past Chairman) - N. C. State  
Bob Ghirardelli (Past Chairman) - AROD  
Gil Long (Past Chairman) - N. C. State  
Monroe Wall (Past Chairman) - R.T.I.

Hospitality Committee

Maurice Bursley (Chairman) - U.N.C.  
Charles Moreland - N. C. State  
Charles Lochmuller - Duke

Nominating Committee

William Little (Chairman) - U.N.C.  
George Doak - N. C. State  
Dave Squire - AROD

Professional Relations Committee

Due to the death of John Nair, who served as chairman, this committee is being reorganized.

Program Committee

Peter Smith (Chairman) - Duke

Publications Committee

This committee is being reorganized.

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.

U.N.C. lectures (Venable Hall, Rm. 207, 4:00 p.m.)

10/14 - Wm. A. Chupka, Argonne Nat'l. Lab.

10/28 - Wm. A. Steele, Penn. State Univ.

11/3 - J. P. Collman, Stanford Univ. (Venable  
Lecture Series, begins at 8:30 p.m.)

11/17 - M. Kasha, Florida State Univ. (Venable  
Lecture Series, begins at 8:30 p.m.)

12/2 - N. L. Allinger, Univ. of Ga.

Duke lectures

Unavailable

N. C. State lectures

Unavailable

NON-PROFIT ORG.  
U. S. POSTAGE PAID  
RALEIGH, N. C.  
PERMIT NO. 491