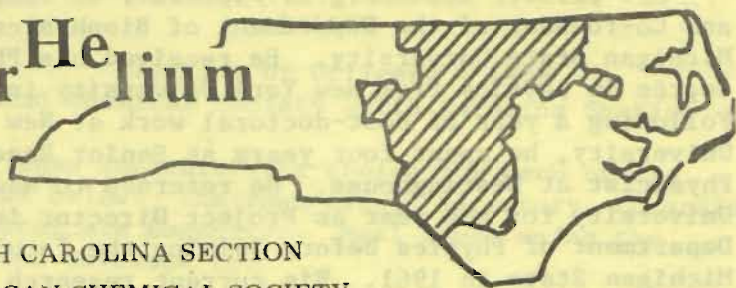


Tar Helium



NORTH CAROLINA SECTION
AMERICAN CHEMICAL SOCIETY

Vol. 8, No. 2

Raleigh, N. C.

October, 1977

"PLATINUM COMPLEXES FOR THE TREATMENT OF CANCER"

- Speaker: Dr. Barnett Rosenberg
Professor of Biophysics
Michigan State University
- Date: Tuesday, October 18, 1977
- Place: Duke University
Durham, North Carolina
- Time: 5:30 Happy Hour
President's Room
Duke Student Union
- 6:30 *Dinner (order from menu)
Oak Room
Duke Student Union
- 8:00 Lecture
Room 103
Paul M. Gross Chemical Laboratory

* Reservations are not necessary for the dinner.
Student and student affiliate members may attend
dinner at half price.

Dr. Barnett Rosenberg is Professor of Biophysics and Co-founder of the Department of Biophysics at Michigan State University. He received his Ph.D. degree in physics from New York University in 1955. Following a year of post-doctoral work at New York University, he spent four years as Senior Research Physicist at Westinghouse. He returned to New York University for one year as Project Director in the Department of Physics before joining the faculty at Michigan State in 1961. His current research interests lie in the application of metal coordination complexes in cancer chemotherapy and in the application of thermodynamic principles of aging.

Dr. Rosenberg's talk will discuss the role of some platinum coordination complexes as anticancer drugs. This new class of chemotherapeutics was discovered during the investigation of the electric field effects on bacterial growth. A platinum complex, which was released during electrolysis of a Pt electrode, caused complete cessation of cell division in the bacterial rods. Further bacterial studies with many such complexes suggested that charged platinum complexes were bacteriocidal, while the neutral platinum complexes induced filamentation and, in lysogenic bacteria, lysis. The active neutral species have two monodentate cis leaving groups (or one bidentate leaving group), and two cis bonds to relatively inert amine groups which maintain the structure of the complex in the biological system.

Pt complexes are synergistic with almost every other anticancer drug in current use. Kidney toxicity is the dose limiting side effect in man. The drug, in combination therapy, has proved effective in the treatment of all forms of testicular cancer as well as head and neck cancer, and ovarian cancer. Activity against the other major cancers is now being studied.

BALLOT

Election of Officers - 1978
American Chemical Society North Carolina Section

Please indicate your choice for each of the offices below: Chairman-elect, Secretary, Councilor, and Alternate Councilor. Mail these using the enclosed envelope to:

Dr. Howard G. Clark
Department of Biomedical Engineering
Duke University
Durham, North Carolina 27706

Please sign the outside envelope legibly to validate the ballot. All ballots must be received by Dr. Clark no later than 12:00 noon, November 14, 1977.

CHAIRMAN-ELECT:

_____ ERIC WIECHERT

SECRETARY:

_____ KEITH DeARMOND

_____ KATHRYN MacLEOD

COUNCILOR:

_____ ERNEST ELIEL

ALTERNATE COUNCILOR:

_____ HALBERT CARMICHAEL

_____ RICHARD THOMPSON

ABOUT THE CANDIDATES

Originally from Illinois, ERIC WIECHERT attended Eastern Illinois University for a B.S. degree. After earning a Ph.D. from the University of Tennessee in 1971, he taught for two years at

Brevard College and four years at Meredith College in Raleigh. He is currently the Chemistry Lab Manager at Cutter Laboratories in Clayton, N. C. He was the Editor of TarHelium from 1974-1977.

Dr. KEITH DeARMOND received his B.A. degree in Chemistry from DePauw University and his Ph.D. from the University of Arizona. Following a post-doctoral appointment at the University of Illinois, he joined the faculty at North Carolina State University in 1964. He now is Professor of Physical and Inorganic Chemistry at NCSU. He spent the summer of 1972 as Visiting Professor at the Physical Chemistry Institute in Romania and then he spent the spring and summer of 1977 at the University of Bologna in Italy on academic leave. He has served as Social Chairman for the local Section.

KATHRYN E. MacLEOD earned her B.S. degree in Chemistry from the University of South Carolina in 1968. Prior to accepting her present position with the U.S. Environmental Protection Agency in 1971, she worked for the South Carolina Pollution Control Authority. She is also presently completing work on a masters degree in chemistry. She has served on the PEP and Nominating Committees and is serving as Secretary of the Section.

Dr. ERNEST ELIEL is William Rand Kenan, Jr. Professor of Chemistry at the University of North Carolina, Chapel Hill. He received his D. Phys. Chem. Sci. degree from the University of Havana and his Ph.D. degree from the University of Illinois. He is a member of the National Academy of Sciences and serves on the Committee on Chemistry and Federal Policy. With the ACS he has served on the advisory board of the Petroleum Research Fund. He is chairman of the Council Committee on Publications and has served as Chairman of the Executive Committee of the Division of Organic Chemistry. Dr. Eliel presently serves as Councilor from the North Carolina Section of the ACS.

HALBERT CARMICHAEL was born in St. Louis. He received his B.S. degree from the University of Tennessee in 1959 and his Ph.D. from the University of California, Berkeley in 1963. In 1964 following a post-doctoral appointment at the National Bureau of Standards in Washington, D. C., he joined the faculty at North Carolina State University, where he now holds the position of Associate Professor of Chemistry. Dr. Carmichael has been active in the Section serving as Secretary/Treasurer 1971/1972, and Chairman 1973. He has also chaired and/or served on the Hospitality, Nominating and Publications Committees.

Dr. RICHARD J. THOMPSON is presently Chief of the Analytical Chemistry Branch, Environmental Monitoring and Support Laboratory, U.S. Environmental Protection Agency. Dr. Thompson received his B.S., M.A. and Ph.D. degrees from the University of Texas, Austin. He has served as Chairman of both the South Plains and North Carolina Sections of the ACS. He has also served on several Section Committees and is currently Alternate Councilor.

MEMBERSHIP COMMITTEE ASKS YOUR HELP

If you know of colleagues who may be qualified and interested in joining the ACS, please give us their names and addresses so that we may contact them with further information and/or applications. New memberships result in an extra contribution from the National Office to our section if sent in through the Section Committee.

Larry Bowen, Chairman	NCSU 737-2995
Slayton Evans	UNC 933-6319
Robert Izydore	NCCU 683-6351
Peter Smith	Duke 684-2238

QUESTIONNAIRE ON LATE AFTERNOON OR EVENING SHORT COURSES
SPONSORED BY THE NORTH CAROLINA SECTION OF THE ACS

The North Carolina Section of the ACS has for several years sponsored late afternoon short courses in areas of interest to local scientists. These have been well received in the past. In an effort to plan topics for future short courses, we would appreciate your completing and returning the following questionnaire. Check areas which might be of interest to you and do not hesitate to suggest topics other than those shown. Also as an aid to the planning committee, please indicate at the bottom scientists (including yourself) who might assist in teaching a given short course.

Would you prefer to have a short course offered as:

Optional Credit (Continuing Education Units) _____/non-credit _____

Assuming a short course of eight hours, would you prefer:

- (a) one lecture per week for eight weeks _____
- (b) two lectures per week for four weeks _____
- (c) eight hours of lectures in two days (Friday & Saturday) _____

Specific Topics

- Elemental trace analyses _____
- HPLC (practical for users) _____
- GC-MS (practical for users) _____
- Technical writing and scientific public speaker _____
- Fluorimetry. _____
- Digital electronics and computer interfacing _____
- Use of isotopes in organic chemistry _____
- Stereospecific organic synthesis _____
- Organometallics in organic synthesis _____
- Organic photochemistry _____
- Organic radical chemistry _____
- Surface chemistry. _____
- Colloid chemistry _____
- (Other areas) _____

<u>General Areas</u>	<u>Specify area to be surveyed</u>	<u>Level (BS,MS,PhD)</u>
Analytical	_____	_____
Biochemistry	_____	_____
Inorganic	_____	_____
Organic	_____	_____
Physical	_____	_____
Polymer	_____	_____

Comments on who might assist in teaching a given course and their location:

Your Name _____

Address _____

Phone _____

Return by: October 22, 1977

To: Dr. James Coke
Department of Chemistry
University of North Carolina
Chapel Hill, N. C. 27514

PROPOSED BYLAW CHANGES

1. Bylaw V, Section 3

Present: The Executive Committee shall consist of the officers of the Section, the three immediate past Chairmen, the Councilors and the Alternate Councilors.

Proposed: The Executive Committee shall consist of the officers of the Section, the three immediate past Chairmen, the Councilors, the Alternate Councilors and the Editor of the Local Section Publication.

Reason for change: In order to report to the membership actions taken by the Executive Committee.

2. Bylaw VI, Section 6

Present: The actual election of officers shall be held at the November meeting of the Section. In the discretion of the Executive Committee, balloting may be by mail. In such a case the Secretary shall mail out ballots to each MEMBER and ASSOCIATE MEMBER in time to ensure that they can be returned and counted before the November meeting.

Councilors and Alternative Councilors shall be elected by a mail ballot of the members of the section.

Proposed: The officers, Councilors and Alternate Councilors shall be elected by a mail ballot of the members of the Section, prior to December 1.

Reason for change: National ACS changes.

PROCEEDINGS FROM THE EXECUTIVE COMMITTEE

Two changes in the Section's Bylaws were proposed, discussed and approved by the Executive Committee. These changes, printed on page 8, will be voted by the membership at the October meeting.

The Committee also approved awarding of Continuing Education Units (C.E.U.'s) for short courses given by the Section. These C.E.U.'s will be optionally available for an additional charge of \$2.00. One (1) C.E.U. is awarded per 10 contact hours. These C.E.U.'s will be awarded in the name of the North Carolina Section with records kept at Meredith College.

The Committee approved acquisition of mailing labels on a monthly basis from the National ACS. These labels will result in a significant savings in publication of the TarHelium. Typographical errors in transferring addresses to labels should be eliminated and address changes will be updated on a monthly basis, thus giving a more nearly accurate mailing list.

A budget for calendar year 1978 was discussed, modified and approved. Copies of this budget are available for consideration from the Editor or any of the Section officers. The Treasurer was also instructed to prepare a formal financial report at each meeting of the Executive Committee.

It was noted that the office of Treasurer was not up for election in 1978, whereas, that for Secretary was. The Nominating Committee was instructed to correct the error and provide a slate for announcement at the September meeting and for the October mailing of the ballot.

MEMBERSHIP PROMOTION AWARD

The North Carolina Section was a winner of one of the ACS Local Section Membership Promotion Awards. Receiving the award for the Membership Committee at the Chicago National Meeting was Dr. Slayton Evans.

CALL FOR PAPERS BY CHEMICAL TECHNICIANS

The ACS Committee on Technician Activities is sponsoring a Symposium for Chemical Technicians at the ACS National Meeting on March 12-17, 1978 in Anaheim, California. Papers are to be written and presented by a chemical technician. Co-authorship by members of the Society is acceptable, but not mandatory. No limitations are set on topics other than that they be related to the chemical field. DEADLINE for receipt of 3 copies of a 200-word abstract is December 2, 1977. These should be submitted on standard ACS forms. Submit abstract, and request additional information or ACS forms:

ALLEN W. TOWNE
 Celanese Research Company
 P. O. Box 1000
 Summit, New Jersey 07901
 (201) 273-6600 - Ext. 388

UNEMPLOYED CHEMISTS

Chemists meeting the National ACS guidelines for unemployment are reminded that they may place an ad in the TarHelium free of charge. Also employers are reminded that they may advertise valid openings free of charge.

NAME CHANGE FOR THE TARHELIUM

A reader from Durham writes that he is blue, because he has a devil-of-a-time accepting either the TarHelium or Wolfram Packium for the name of the Section's newsletter.

Your TUNG in cheek suggestion on page 6 of (September's) appropriately name TarHelium left me feeling Carolina Blue. After their second consecutive defeat by E.C.(U)., I assumed that the Wolfpack would change their name to the Kitty Litter anyway (foul-hitting below the belt). Perhaps we should change the name to the Pirate Pamphlet.

AREA SEMINARS

- Duke, 3:30 p.m., Room 103 Gross Chemical Laboratory
Oct. 21 Charles L. Liotta, George Institute
of Technology
"Naked Anions and Related Crown
Ether Chemistry"
- Nov. 4 Frederick S. Richardson, University
of Virginia
"Circularly Polarized Luminescence
Spectroscopy as a Probe of
Molecular Structure"
- NCSU, 4:00 p.m., Room 124 Dabney Hall
Nov. 14 Robert D. Bereman, State University
of New York, Buffalo
"Bioinorganic Chemistry of Types
I and II Copper(II)"
- UNC-CH, 11:00 a.m., Room 308 Venable Hall
*Oct. 19 Y. Pocker, University of Washington
"The Molecular Basis of Enzymatic
Hydration"
- Oct. 26 R. H. Grubbs, Michigan State
University
"Metalloacycles as Intermediates in
Organotransition Metal Chemistry"
- +Nov. 9 F. Anson, California Institute of
Technology
"Clinging Molecules: Electrochemis-
try with Reactants Attached to
Electrode Surfaces"

* Note: Date changed from that previously reported.

+ Venable Lecture: 8:00 p.m., Room 207, Venable Hall

EXECUTIVE COMMITTEE

- Suzanne Purrington (NCSU), Chairman
Richard Palmer (Duke), Chairman-Elect
Kathy MacLeod (EPA), Secretary
Forrest Getzen (NCSU), Treasurer
Marcus Hobbs (Duke), Councilor
Maurice Bursey (UNC), Councilor
Ernest Eitel (UNC), Councilor
Robert Ghirardelli (ARO), Alternate Councilor
Sally M. Horner (Meredith), Alternate Councilor
Richard J. Thompson (EPA), Alternate Councilor
and Past Chairman
Monica Nees (NCSTRC), Past Chair
Maurice Bursey (UNC), Past Chairman

COMMITTEE CHAIRMEN

- Awards - Derek Hodgson (UNC)
Certification - Richard J. Thompson (EPA)
Education - James L. Coke (UNC)
Hospitality - William Gutrecht (Duke)
Membership - Lawrence Bowen (NCSU)
Nominating - Howard Clark (Duke)
Program - Richard Palmer (Duke)
Publication - Halbert Carmichael (NCSU)
Public Relations - Marcus Hobbs (Duke)
Safety - Edward Tyczkowski (Armageddon)
Scholarship - David Yeowell (BW)

TARHELIUM IS PUBLISHED BY THE NORTH CAROLINA SECTION OF THE AMERICAN CHEMICAL SOCIETY. THE VIEWS EXPRESSED HEREIN ARE NOT NECESSARILY THOSE OF THE SECTION. DIRECT ALL CORRESPONDENCE TO DR. WILLIAM L. SWITZER, CO-EDITOR, C/O CHEMISTRY DEPARTMENT, NORTH CAROLINA STATE UNIVERSITY, RALEIGH, N. C. 27607.

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RALEIGH, N. C.

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