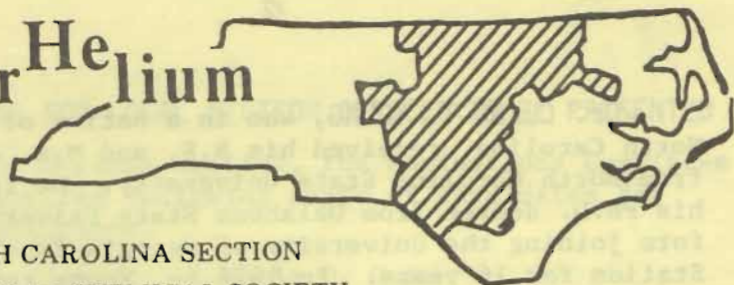


Tar Helium



NORTH CAROLINA SECTION
AMERICAN CHEMICAL SOCIETY

Vol. 12, No. 2

Raleigh, N.C.

October 1981

"GIVING PEANUTS TLC"

Speaker: Dr. Clyde T. Young
Department of Food Science
North Carolina State University

Date: Wednesday, October 21, 1981

Place: Washington Duke Motor Inn
605 W. Chapel Hill Street
Durham, North Carolina

Time: 5:30 Social Hour
(Cash Bar - \$1.25-\$2.25)

6:30 *Dinner
(\$7.80 for members/\$3.90 for
students)

7:45 Program

* Please make reservations no later than Friday,
October 16, 1981. Call Barbara Hannah at
966-1566 in Chapel Hill, Terry Laing at 684-2414
in Durham or Tana Taylor at 737-2548 in Raleigh.

Dr. CLYDE T. YOUNG, who is a native of Durham, North Carolina, received his B.S. and M.S. degrees from North Carolina State University. He received his Ph.D. degree from Oklahoma State University before joining the University of Georgia Experimental Station for 16 years. In 1976 Dr. Young returned to North Carolina where he now is Professor of Food Science in the Food Science Department at North Carolina State University. Dr. Young has published extensively in the areas of the analytical chemistry and the biochemistry of raw and roasted peanuts and other peanut products.

* * *

Dr. Young will survey the history of peanuts and the peanut industry and will supply samples of peanuts for the audience to examine. He will discuss the utility of head space analytical technology for quantifying flavor components and will illustrate the application of this technology in evaluating the 1980 domestic peanut crop and imported peanuts from China and other parts of the world. Dr. Young will also discuss chemical reactions involved in roasting peanuts which give them their typical roasted flavor.

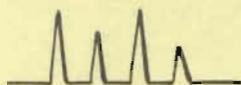
NOMINATIONS FOR LOCAL SECTION OFFICES TO BE PRESENTED

At the October meeting, the Nominations Committee will present the following slate of candidates for the fall elections.

- Chairman Elect: Louis D. Quin
Duke University
- Bernard F. Spievogel
Army Research Office
- Secretary: John A. Myers
N. C. Central University
- William L. Switzer
N. C. State University
- Councilor: Maurice M. Bursley
Univ. of N. Carolina-Chapel Hill
- Forrest W. Getzen
N. C. State University
- Alternate Councilor: Robert A. Izydore
(3 year term) N. C. Central University
- Colin G. Pitt
Research Triangle Institute
- Alternate Councilor: Steven A. Benezra
(1 year term) Burroughs Wellcome Company
- Derek J. Hodgson
Univ. of N. Carolina-Chapel Hill

The Office of Alternate Councilor which has a 3-year term is the office which is normally filled with this election. The Office having a 1-year term is to fill the unexpired term vacated by Dr. Monica Nees.

Nominations will be accepted from the floor at the October meeting. However anyone making a nomination from the floor should clear that nomination with the candidate and also have a short biography available at the meeting for publication in the TarHelium.



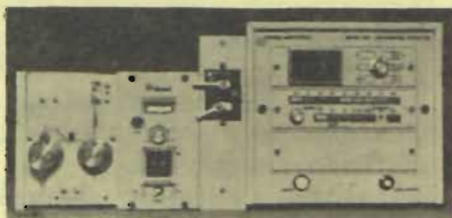
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OR

Ruth Heard at Waters Associates in Milford, MA
617/478-2000

LIQUID CHROMATOGRAPHY SYMPOSIUM

The Second Annual Research Triangle Park Liquid Chromatography Symposium sponsored by Burroughs Wellcome and Waters Associates will be held at the Burroughs Wellcome Auditorium October 14 and 15. There is a nominal charge of \$5.00 per registrant, which will be collected at the symposium to cover meals for both days. Preregistration information available from Waters Associates, 101 Glasgow Rd., Cary, N. C. 27511 or by phone (919) 832-6612.

FALL ACS SHORT COURSE

Enclosed is a registration form for the fall short course on electrochemistry. Members and non-members should remember that proceeds from the short courses support the ACS Centennial Scholarship program sponsored by the Section and awarded to a graduate student within the Section. Participants are asked to register as early as possible to assist with planning the program since sufficient interest must be demonstrated in order to offer the short course. Once again, the Section is offering this course to students at half price.

BYLAW CHANGES

Below is the first printing of two proposed changes in the bylaws. The first change, Bylaw X: Finances, alters the mechanism by which the Section may be assessed dues. The old bylaw allowed dues to be set by amendment to the Bylaws at a Local Section meeting; the new version requires a mail ballot. The second change, Bylaw XI: Amendments Section 1, alters the mechanism by which all amendments are approved. The new bylaw requires that a mail ballot replace a vote at a Local Section Meeting. The Executive Committee feels that the proposed changes will allow wider participation by the membership when changes in the Bylaws or assessment of dues are required. The Committee hopes that the

(Continued page 8)

Fall ACS Shortcourse

ELECTROCHEMISTRY FOR THE NON-ELECTROCHEMIST:

recent applications in environmental, organic biological and analytical chemistry.

LECTURE DATES: Thursday, November 12, 1981 and Friday, November 13, 1981;
Drefus Auditorium, Research Triangle Institute

REGISTRATION DEADLINE: Monday, November 2, 1981

PREREQUISITE: An interest in the course and a B.S. degree or higher in a scientific field. The principles of electrochemistry will be presented in the introductory lectures.

SHORTCOURSE COORDINATOR: Dr. Kenneth W. Hanck, Department of Chemistry,
North Carolina State University, Raleigh, N.C. 27650,
(919) 737-2947 or 737-2545

Electrochemical techniques have undergone a series of advances in response to more demanding research problems and the availability of inexpensive computerized instrumentation. The objectives of this course are to present the principles of modern electrochemical methods and illustrate their application in environmental, organic biological and analytical chemistry. Most university courses emphasize the analytical and physical applications at the expense of equally valid applications in other areas. This course will attempt to reverse that emphasis.

INSTRUCTORS: Bill Anderson, Assistant Professor of Chemistry, Duke University.
John Facci, Graduate Student with Royce Murray, UNC-Chapel Hill.
Kenneth Hanck, Professor of Chemistry, N. C. State University.
Harvey Herman, Professor of Chemistry, UNC-Greensboro.
Mark Shuman, Professor of Environmental Chemistry, UNC-Chapel Hill.

SCHEDULE: Thursday, November 12

- 1:00-2:00 Principles of Modern Electrochemical Methods - Kenneth Hanck.
- 2:00-3:00 Pulse Polarographic and AC Voltammetric Methods - Kenneth Hanck.
- 3:00-3:15 Break
- 3:15-4:15 Applications of Anodic Stripping Voltammetry in Environmental Chemistry - Mark Shuman.
- 4:15-5:15 Chemically Modified Electrodes - John Facci.

Friday, November 13

- 1:00-2:00 Principles of Organic Electrochemistry - Bill Anderson.
- 2:00-3:00 Applications of Electrochemistry in Organic Synthesis - Bill Anderson
- 3:00-3:15 Break
- 3:15-4:15 Ion Selective Electrodes: principles and practice - Harvey Herman.
- 4:15-5:15 Applications of Electrochemistry to the Study of Biological Molecules - Bill Anderson.

Enclosed is a check (payable to the North Carolina Section, American Chemical Society) as registration fee for Electrochemistry for the Non-Electrochemist. A check must accompany registration. Billing cannot be arranged, but receipts will be given to aid registrants in obtaining reimbursement.

___ \$40.00 ACS member; ___ \$50.00 Non-ACS member; ___ \$20.00 Full Time Student

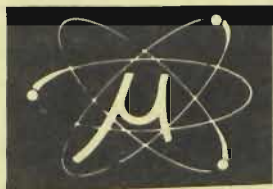
NAME: _____ HIGHEST DEGREE _____ TELEPHONE: _____

BUSINESS ADDRESS _____

Send to: Dr. Eric Bigham, Burroughs Wellcome Company, 3030 Cornwallis Road,
Research Triangle Park, N. C. 27709

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Qualitative and quantitative elemental (-Be) microanalysis
-  **Electron Spectroscopy for Chemical Analysis**
Analysis of thin (25-50A) surface films
-  **Optical Emission Spectroscopy**
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membership will approve both changes when they come to a vote at the December meeting.

Bylaw X: Finances

Section 1 - All members and National Affiliates assigned to the Section may be assessed annual local section dues. The amount of such dues shall be set by the Executive Committee of the Section, provided, however, that any change in dues must be approved by the Section members by mail ballot to be completed no later than March 1 of the year preceding the dues year. Forty-five days shall be allowed from the day of mailing of the ballots to the deadline for their receipt by the Secretary and this interval shall include at least one Section meeting at which the proposed change in dues will be discussed. Such a change requires the approval of a majority of the members voting.

Bylaw XI: Amendments

Section 1 - A proposed amendment to these bylaws shall first be submitted in writing to the Executive Committee. If it is approved by a majority of the Executive Committee, the secretary shall mail it to all members of the Section for a mail ballot, along with an appropriate explanation. Forty-five days shall be allowed from the day of mailing of the ballots to the deadline for their receipt by the Secretary and this interval shall include at least one Section meeting at which the proposed amendment will be discussed. The amendment shall be adopted if it receives the affirmative vote of two-thirds of the members voting by mail.

Delete Section 2, renumber sections 3, 4 as 2, 3.



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OTHER ACS MEETINGS PLANNED FOR THE FALL

In November, Dr. Richard Gilbert from the Textile Chemistry Department at North Carolina State University will speak on liquid crystals at the NCSU Faculty Club in Raleigh. The November meeting will be co-sponsored by the Polymer Group. In December, Dr. Richard Henderson from Francis Marion College will speak on the use and misuse of scientific evidence at Meredith College in Raleigh.

R.S.V.P.
ACCEPTANCES ONLY

Each month the Section invites its nearly 1200 members to the Local Section meeting. Of these members and their guests, we can reasonably expect 30 to 60 people for dinner before the meeting. However, planning a sit-down dinner for 30-60 people can be very nerve-racking if you do not know whether to expect 30 or 60 or some number in between. Please help us by making reservations for dinner by the deadline published in the TarHelium each month.

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- Oct. 8 Dr. J. L. DUDA, Pennsylvania State University, "Diffusion in Polymer Systems," Polymer Group, 7:30 pm, Faculty Club, NCSU.
- 12 Dr. LEON MANDELL, Emory University, "Towards the Total Synthesis of Quassin," 3:30 pm, Room 124 Dabney Hall, NCSU.
- 14-15 2nd Annual Liquid Chromatography Symposium, Burroughs Wellcome Auditorium, Research Triangle Park.
- 15 Dr. H. C. BROWN, Purdue University, "Adventures in Research," 10th Douglas G. Hill Memorial Lecture, 3:30 pm, Room 103 Gross Chemical Laboratory, Duke.
- 21 Dr. CLYDE T. YOUNG, North Carolina State University, "Giving Peanuts TLC," ACS Lecture, 7:45 pm, Washington Duke Motor Inn, Durham.
- 22 Dr. BURNABY MUNSON, University of Delaware, "Chemical Ionization Mass Spectrometry: Analytical Applications of Ion-Molecule Reactions," 11:00 am, Room 308 Venable Hall, UNC-CH.
- 23 Dr. JOHN A. POPLE, Carnegie-Mellon University, "Molecular Orbital Studies of Structure," 3:30 pm, Room 103 Gross Chemical Laboratory, Duke.
- 26 Dr. MYRON ROSENBLUM, Brandeis University, "Synthetic Applications of Organoiron Complexes," 3:30 pm, Room 124 Dabney Hall, NCSU.
- 29 Dr. FRED MENDER, Emory University, "Chemistry of Molecular Aggregates," 11:00 am, Room 308 Venable Hall, UNC-CH.
- 30 Dr. STANLEY SMITH, University of Illinois at Urbana-Champaign, "Teaching Chemistry with a Microcomputer," 3:30 pm, Room 103 Gross Chemical Laboratory, Duke.
- Nov. 6 Dr. BARRY SHARPLESS, Massachusetts Institute of Technology, "Asymmetric Oxidation of Olefins," 3:30 pm, Room 103 Gross Chemical Laboratory, Duke.
- 9 Dr. MELVIN R. CHURCHILL, State University of New York, Buffalo, "Unusual Tantalum and Tungsten Organometallics," 3:30 pm, Room 124 Dabney Hall, NCSU.

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, EDITOR, C/O CHEMISTRY DEPARTMENT, NORTH CAROLINA STATE UNIVERSITY, RALEIGH, N. C. 27650.

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