

Vol. 13, No.3

February, 1983

## A SPECIAL EVENT

The Triangle Chromatography Discussion Group and the N.C. Section are Pleased to Jointly Present

RECENT DEVELOPMENTS IN RETENTION
OPTIMIZATION FOR REVERSED-PHASE SYSTEMS

by

Dr. Lloyd Snyder

Date: Tuesday, February 8, 1983

Dinner: 6:00 p.m., Bamboo Court Restaurant
Triangle Square at the intersection
of NC 55 and NC 54, approximately one
mile west of RTP, (\$7.00 for members,

\$3.50 for students).

Lecture: 8:00 p.m., CIIT, on Davis Drive between

Cornwallis Road and NC 54 in RTP. Wine and cheese to be served after the lecture.

For dinner reservations, please call one of the following by February 2: In Durham, call Ms. Nancy Kearns at 684-3010; in Chapel Hill, call Ms. Barbara Haddock at 966-1566; and in Raleigh, call Ms. Tana Taylor at 737-2548.

DR. LLOYD SNYDER and the term liquid chromatography are practically synonymous. He has written over 150 papers in the areas of separation science, clinical chemistry, and petroleum chemistry. He is the author of the classic text "Principles of Adsorption Chromatography" and coauthor of "An Introduction to Separation Science" and "Introduction to Modern Liquid Chromatography". Together with Dr. Jack Kirkland. Dr. Snyder has educated numerous chemists in the theory and practice of HPLC through the ACS short courses which they have given over the past 12 years. Dr. Snyder has been the recipient of the ACS Award in Petroleum Chemistry in 1970. He is on a number of editorial boards of journals dealing with chromatography and analytical chemistry. Dr. Dnyder is now an independent consultant.

## **ABSTRACT**

A rational approach to the selection of solvent systems for the optimum separation of multicomponent mixtures by HPLC is presented. A requirement for an optimum separation in reversed-phase HPLC is an understanding of the nature of the solvent and its interaction with the solute and the stationary phase. Once the stationary phase is selected, a systematic procedure is followed which optimizes the k' and  $\alpha$  terms of the general resolution equation with a minimum number of solvents and experiments.

#### **ELECTION RESULTS**

The 1982 election results are in and are presented below. Congratulations to the winners. It is unfortunate that not all could win as each nominee, according to the nominations committee, has served the section extremely well.

Chairman-elect BERNARD SPIELVOGEL-83

John Myers-65

Treasurer ERIC BIGHAM-98

Joseph Templeton-52

Councilor MARCUS HOBBS-100

Richard Wells-46

Alternate PETER SMITH-82
Councilor Derek Hodgson-68

## 1983 CENTENNIAL SCHOLARSHIP ASSURED

Treasurer Eric Bigham announced at a recent executive committee meeting that the net income from the fall short course presented by Dr's Maurice and Joan Bursey was \$320. The total course income for 1982 was \$990 and thus sufficient funds for awarding a 1983 Centennial Scholarship of \$1000 have been earned. Information regarding application for the scholarship will be presented in the next issue of the TarHelium.

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or call

Dick Schreiber, Pete Talarico, or George Young at 919/832-6612

or Joanne Costanza at 617/478-2000



Waters, the Liquid Chromatography People

## CHAIRMANSHIPS FILLED

All chairmanships for standing committees for the 1984 Southeastern Regional Meeting have been filled according to past chairman Kathy MacLeod. The chairmen are:

General Chairman	Professor William Little UNC-CH
Program Chairman, Symposia	Professor Ned Porter Duke
Program Chairman, General Session	Professor Charles Moreland NCSU
Arrangements Chairman	Prof. Halbert Carmichael NCSU
Development Chairman	Professor Marcus Hobbs Duke
Exhibits Chairman	Dr. Steve Benezra Burroughs Wellcome
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- Electron Probe X-Ray Microanalysis
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- Electron Spectroscopy for Chemical Analysis Analysis of thin (25-50A) surface films
- Optical Emission Spectroscopy
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### HAZARDOUS WASTE MANAGEMENT WORKSHOPS

The NCSU Division of Continuing Education is offering workshops in hazardous waste management under RCRA, applied spill prevention, control and countermeasures and preparing RCRA, Part B permit applications for storage in tanks and containers. For more information about these workshops which will be held in February and March, contact

North Carolina State University Division of Continuing Education Post Office Box 5125 Raleigh, North Carolina 27650

ATTN: Woody Fairbrother/Michelle Howell

Telephone: 919/737-2261

## MEETING-IN-MINIATURE - FIRST CALL FOR PAPERS

The annual Meeting-in-Miniature is tentatively scheduled for Saturday, April 16 or 30, on the campus of UNC-CH. An application form is enclosed. The deadline for receiving titles is Monday, March 14, 1983. Please respond early to facilitate preparing the complete program for the April TarHelium.

Contributions are encouraged from both academic and non-academic laboratories. Participation by government and industrial laboratories has increased over the last several years and the Executive Committee hopes that participation by non-academic labs will be greater again this year.

Also we would be delighted to have people attend this meeting even if they do not present a paper.

# APPLICATION

# Meeting-in-Miniature Saturday, April 16 or 30 (Tentative) University of North Carolina at Chapel Hill

Author(s):	
Position(s):	
Presented by:	constituent
Institution:	February D
Title of Paper:	
THE REPORT OF THE PARTY OF THE	A SHITTA I
Section: Analytical	Inorganic
Biochemical	Organic
Chemical Education	Physical Polymer
Type: Regular Session Only:  *Either Regular or Poster Session:  *Poster Session Only:  Type of Projector (if any):	not builded
*If sufficient interest is shown, a poste will be added to this year's program.	er session
Application Deadline: Monday, March 14,	1983
Mail to: Dr. Bernard Spielvogel Chemistry Department US Army Research Office Post Office Box 12211 Research Triangle Park, NC 27	709

## DAVID SMITH TO PRESENT SPRING SHORT COURSE

Dr. David Smith of Burroughs Wellcome will present the section's spring short course on applications of minicomputers. As in the past, the net income from this course will be used for the Centennial Scholarship. Further details of the course will be announced later.

#### MARCH SECTION MEETING

Pembroke State University will be the site of a section meeting on Tuesday, March 15. The speaker will Dr. Irving S. Goldstein, NCSU, and the lecture title will be "Industrial Organic Chemicals from Biomass". Transportation to the meeting will be organized and discussed further in the next issue of the TarHelium.

## AMENDMENTS APPROVED

The amendments to the NC Section's bylaws have been approved by the (national) Committee on Constitution and Bylaws. These amendments, which became effective November 16, 1982, have been incorporated in the section bylaws and copies are available from section officers.

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ON

RECENT ADVANCES IN
THE MEASUREMENT OF POLLUTANTS
FROM AMBIENT AIR AND STATIONARY SOURCES

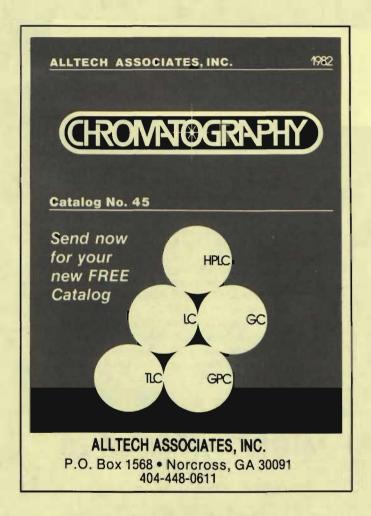
Topics: New developments in measuring methods and monitoring systems applicable to:

- o the monitoring of
- source emissions
  - ambient air
  - acid deposition
    - hazardous emissions
    - o personal monitors

Sponsor: EPA's Environmental Monitoring Systems Laboratory in Research Triangle Park, North Carolina

Date & Place: May 3 through 7, 1983 at the Raleigh Hilton in Raleigh, North Carolina

One page abstracts were officially due January 14, 1983. However, late submissions will be considered. If you wish to submit an abstract, please contact Mr. Seymour Hochheiser, MD 75, EPA, Environmental Monitoring Systems Laboratory, Research Triangle Park, North Carolina, 27711 (Telephone (919) 541-2106) on or before January 31, 1983.



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