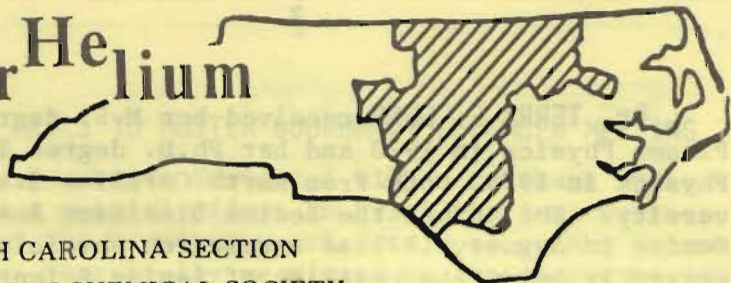


# Tar Helium



NORTH CAROLINA SECTION  
AMERICAN CHEMICAL SOCIETY

Vol. 12, No. 5

Raleigh, NC

January 1982

## "RADIATION TECHNOLOGY IN THE MEDICAL PRODUCTS INDUSTRY"

Speaker: Dr. Terry S. Dunn  
Becton Dickinson

Date: Thursday, January 14, 1982

Place: North Carolina State University  
Faculty Club

Time: 6:00 Social Hour  
Faculty Club (\$1.00 per drink)

7:00 \*Dinner  
Faculty Club Buffet (\$10.50  
for members; \$5.25 for students)

8:00 Program  
Faculty Club  
Sponsored jointly by Eastern  
Carolinas Section of the  
American Nuclear Society

\*Please make reservations by NOON, Monday, January 11, 1982. 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. TERRY S. DUNN received her M.S. degree in Plasma Physics in 1970 and her Ph.D. degree in Nuclear Physics in 1975, both from North Carolina State University. She joined the Becton Dickinson Research Center in August, 1975 as a research physicist. She currently holds the position of Senior Scientist and Associate Head of the Materials Research Department. During her six years with BD, she has worked primarily in the areas of radiation physics and chemistry and the modification and characterization of polymer surfaces. She is a member of the American Physical Society, American Chemical Society, and the Eastern Carolinas Section of American Nuclear Society. Dr. Dunn is coauthor of over 20 publications and holds 2 patents. She has presented both contributed and invited papers at international meetings on radiation processing and is currently on the editorial board of the Journal of Industrial Irradiation Technology for Plenum Press.

\* \* \*

Emphasis is often unduly placed on the negative aspects of radiation effects. Radiation is an extremely useful resource for achieving specific chemistries both in the bulk and on the surface of polymers. This talk will address novel uses of radiation to achieve useful chemical changes that benefit the biological disciplines. The role of radiation technology in areas such as polymerization, grafting, sterilization, immunology, tissue culture, and other areas related to the new biotechnologies will be discussed.

#### DIRECTIONS TO FACULTY CLUB

Exit from the Raleigh Beltline at Hillsborough Street. Turn toward the NC State Fairgrounds. Turn right at the first driveway leaving Hillsborough after the beltline.

## SECTION FAILS TO MUSTER QUORUM AT DECEMBER MEETING

The Executive Committee wishes to thank those who made a special effort to brave the foul weather to attend the December meeting to vote on the Bylaws changes. Regretfully we missed by ten people having a quorum at this meeting. When questions were raised in the audience about the legality of any action, it was decided to postpone the vote.

## ELECTION RESULTS

Chairman Elect	QUINN - 94	Spielvogel - 59
Secretary	Myers - 50	SWITZER - 102
Councilor	BURSEY - 93	Getzen - 60
Alternate Councilor (3 yr)	Izydore - 60	PITT - 93
Alternate Councilor (1 yr)	BENEZRA - 81	Hodgson - 70

**WATERS  
1982  
LC  
SHORT  
COURSE**



MILLIPORE

WE WILL CONDUCT OUR 1982 SHORT COURSE ON LIQUID CHROMATOGRAPHY AT THE GOVERNOR'S INN IN THE RESEARCH TRIANGLE PARK ON WEDNESDAY AND THURSDAY, JANUARY 20 AND 21.

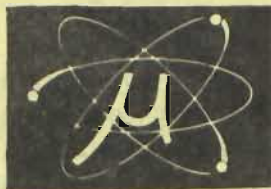
WE WELCOME THOSE ENTITLED TO THE COMPLIMENTARY ENROLLMENT INCLUDED WITH THE PURCHASE OF THEIR WATERS LIQUID CHROMATOGRAPH.

OTHERS ARE WELCOME TO ATTEND WITH THE PAYMENT OF A \$200 REGISTRATION FEE.

To register, please call Carole Wade at Waters in Milford, Massachusetts, 617/478-2000.

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- Electron Spectroscopy for Chemical Analysis**  
Analysis of thin (25-50Å) surface films
- Optical Emission Spectroscopy**  
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- X-Ray and Electron Diffraction**  
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SEPARATION BY SIZE

## SPRING SHORT COURSE ON MICROCOMPUTERS BEING ORGANIZED

Dr. David Smith, Burroughs Wellcome Company, has agreed to organize a short course on digital electronics and/or digital data handling techniques. Presently the course content is negotiable and the Education Committee is seeking advice regarding course level and content. If you are interested in attending and/or are interesting in sending someone, please indicate which of the courses below is most appropriate. Also if you wish to suggest selected topics which might be part of a short course, please indicate your suggestions. This page may be folded, stapled and returned to Dr. Maurice Bursey, Chairman of the Education Committee.

\* \* \*

— Elementary Digital Electronics - Small and medium scale digital integrated circuits. Discussions would begin with buffers logic gates, flip flops and probably end with integrated circuit counters, shift registers, etc.

— Advanced Digital Electronics - Large scale digital integrated circuits useful in computer interfaces. Discussions would include descriptions of serial and parallel computer interfaces, the hardware available to facilitate these interfaces, analog-to-digital and digital-to-analog conversion, etc.

— Data Processing Techniques - Digital methods of processing data with a computer. Discussions would include curve fitting methods, digital noise reduction and other methods of numerical analysis.

Remarks (may be continued on the back):

# SPECIALISTS IN MICROSTRUCTURAL ANALYSIS

Fold and Staple

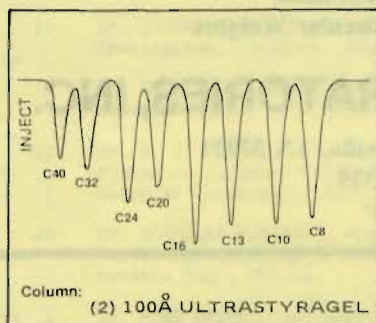
Stamp

Dr. Maurice Bursey  
Chairman Education Committee-ACS  
Chemistry Department  
University of North Carolina  
Chapel Hill, N. C. 27514

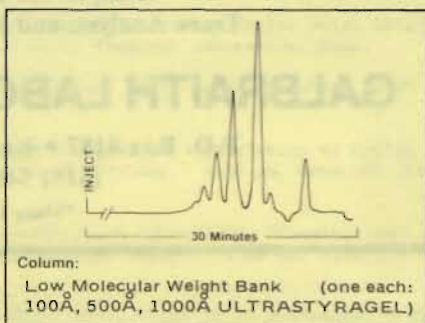
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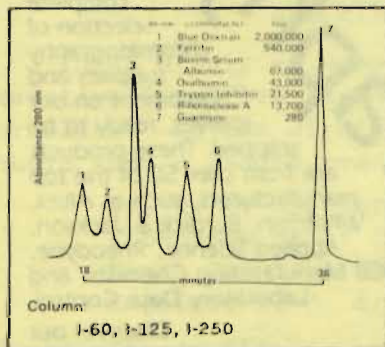


Hydrocarbon Analysis



Oligomer Analysis

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Concanavilin A	89%
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Bovine Serum Albumin	94%
Egg Albumin	93%
αChymotrypsin	85%
Myoglobin	92%
Ribonuclease A	91%

\*As calculated by Lowry and spectrophotometric methods

Protein Recoveries

For more information, please call . . .

**Don Harris or Dick Schreiber**  
**Waters Associates in North and South Carolina**  
**919/832-6612**

or . . .Michelle Worgul at Waters Associates in Milford, MA  
**617/478-2000**



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- Jan 14 Dr. ROBERT G. BERGMAN, University of California, Berkeley, "Formation of New Bonds to Carbon Using Organotransition Metal Complexes," Venable Lecture, 8:00 pm, Room 207 Venable Hall, UNC-CH.
- 14 Dr. TERRY S. DUNN, Becton Dickinson Research Center, "Radiation Technology in the Medical Products Industry," ACS Lecture, 8:00 pm, Faculty Club, NCSU.
- 15 Dr. EDWARD MIHELICH, Proctor and Gamble, "Stereoselective Metal Catalyzed Epoxidation," 3:30 pm, Room 103 Gross Chemical Laboratory, Duke.
- 18 Dr. KATHLYN A. PARKER, Brown University, Title to be announced, 3:30 pm, Room 124 Dabney Hall, NCSU.
- 22 Dr. R. J. FRIARY, Schering Plough Corporation, "Annulation of Cyclic Dienes by Iterated Cycloadditions of Nitrones," 3:30 pm, Room 103 Gross Chemical Laboratory, Duke.
- 28 Dr. NICHOLAS WINOGRAD, Pennsylvania State University, "Chemical and Structural Analysis of Surfaces with Ion Beams," 11:00 am, Room 308 Venable Hall, UNC-CH.
- Feb 1 Dr. MARK RATNER, Northwestern University, Title to be announced, 3:30 pm, Room 124 Dabney Hall, NCSU.
- 5 Dr. DAVID CANE, Brown University, "<sup>13</sup>C NMR Studies in Biosynthesis," 3:30 pm, Room 103 Gross Chemical Laboratory, Duke.

### ADVERTISING RATES

In an effort to help offset section expenses, the Executive Committee has authorized advertising for the TarHelium. Anyone wishing to submit an advertisement should send a camera ready copy to:

Dr. W. L. Switzer, Advertising Manager  
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12.0cm x 12.0cm	\$40.88	\$36.79	\$34.75
12.0cm x 19.0cm	\$60.00	\$54.00	\$51.00

The TarHelium still offers free advertising both for job openings appropriate to section members and for unemployed section members who are seeking employment.

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