



# The TarHelium

Volume 23, Number 7

March 1993

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**WORKSHOP**

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April TarHelium will be late because of Section Conference

*The TarHelium*  
c/o William L. Switzer, Editor  
Department of Chemistry-8204  
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Raleigh NC 27695-8204

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Donations to the NC Section of the ACS help sustain Local Section activities. All contributions are tax deductible and greatly appreciated.

Voice-mail Information Line: (919) 541-7183 in the RTP

10-General ACS  
11-Polymer Discussion Group

### **Deadline for April Publication Friday, March 19, 1993**

Because the 107<sup>th</sup> NC Local Section Conference is scheduled for Saturday, April 24, the April issue of *The TarHelium* will be late to give extra time for preparing the Conference Program. For that reason, the calendar and other events are publicized through April 15 this month.

### **TCDG Short Course**

**March 2 & 3, 1993**

**"Analytical Gas Chromatography-  
Practical Capillary GC"**

**Walt Jennings and Dean Rood  
J&W Scientific, Folsom CA  
NCSU Chemistry Department  
Room 124, Dabney Hall**

The Triangle Chromatography Discussion Group (TCDG) will sponsor a 2-day capillary GC short course taught by Dr. Walt Jennings and Dr. Dean Rood, J&W Scientific, from 8:30 a. m. to 5:00 p. m. on March 2-3, 1993.

COST: \$190 non-ACS members  
\$160 ACS members  
\$80 students

For additional information, interested people can contact Drake Dowler at (919) 282-5836.

### **Polymer Group Meeting**

**Thursday, March 11, 1993**

**North Carolina State University Faculty Club  
4200 Hillsborough St.**

**Richard J. Spontak  
Materials Science and Engineering  
North Carolina State University**

**"Morphological Studies of Self-Organized  
Block Copolymers and Their Blends"**

**Abstract:** Self-organized, or microphase-separated, block copolymers have been the subject of interest for over 25 years

now, and still researchers continue to find new insight into (i) the mechanism of self-assembly and long-range ordering and (ii) the impact of molecular conformation on morphology and property development. In this work, attention is drawn to the double-diamond (DD) morphology, a recent addition to the block copolymer Molau phase diagram. While reported for systems containing a small-molecule surfactant, this microstructure is the first ordered bicontinuous morphology observed in a polymeric system. A 3-D rendering of this morphology obtained *in situ* with electron tomography, at a spatial resolution of *ca.* 2 nm, will be presented. Copolymer molecular characteristics (*i.e.*, chain length and architecture) affecting formation of this morphology in diblock and multiblock copolymer/homopolymer blends are identified, along with conditions dictating stability of self-organized assemblies.

**Biography:** Richard J. Spontak earned his Ph.D. in Chemical Engineering from the University of California at Berkeley in 1988 and carried out postdoctoral research at the University of Cambridge (UK) and the Institute for Energiteknikk (Norway), 1988-1989. After spending 2-1/2 years in the Corporate Research Division of The Procter & Gamble Co., he joined the NCSU faculty in August 1992. His research interests include novel imaging techniques of polymeric and surfactant systems, block copolymers and blend compatibilization, heterophase polymer surface characterization, and supramolecular organization in liquid crystalline polymers. He is a member of the American Chemical and Physical Societies, the Materials Research Society, and the Microscopy Society of America. He has been the recipient of the P&G Corporate Team Achievement Award, the Institute of Metals Edward Emley Award, and the Penn State University Scholars Medal.

### **Burroughs Wellcome Invites Section**

**Tuesday, March 16, 1993**

**12:00 noon to 3:00 p. m.**

**Burroughs Wellcome Auditorium  
3030 Cornwallis Rd., Durham  
Satellite TV Seminar**

**"Molecular Modeling in the Discovery of  
New Drugs"**

Host: Helen Free, 1993 President, ACS

Cost: Open to the public compliments of Burroughs Wellcome

Coordinator: Jonathan Greer, Ph. D., Abbott Laboratories

Speakers:

John J. Baldwin, Ph. D., Merck Research Laboratories  
John W. Erickson, Ph. D., National Cancer Institute  
Gerd Folkers, Ph. D., ETH (Swiss Federal Institute of Technology)  
Michael D. Varney, Ph. D. Agouron Pharmaceuticals  
Peter Warner, Ph. D., ICI Pharmaceuticals

Sponsored in Part by Digital Equipment Corporation

**Computer-Aided Modeling—Is It Anything More than Stunning Graphics?** You've heard about the almost frenetic speed of advances being made in the design of new molecules thanks to molecular modeling and computational chemistry. But if you're like many, you've wondered if there's anything more to computer-aided modeling than stunning graphics and sophisticated theory. You may have even questioned

whether computer-aided modeling has ever actually led to the development of any tangible products.

So begins the program description. Call Alicia Ford at Burroughs Wellcome for more information: 248-8326.

## **TCDG Workshop "Capillary Electrophoresis"**

Wednesday, April 7, 1993; 9:15 a. m. - 4:00 p. m.  
NC Biotechnology Center  
79 Alexander Drive, Research Triangle Park NC

Instructors: Dr. Harold McNair, VPI  
Dr. Michael Black, Beckman Instruments  
Mr. Maha Khaled, VPI  
Dr. Markus Lymann, VPI

Sponsors: Virginia Tech Department of Chemistry  
The Triangle Chromatography Discussion Group  
Beckman Instruments

This workshop will provide an introduction to the theory, instrumentation and applications of capillary electrophoresis. Three operating systems will be available for the workshop.

COST: \$125 registration -- includes workshop materials, lunch, and refreshments (20% discount for three or more participants from the same company)

For more information, registration, confirmation, contact:

Sarah Porter (703) 231-3751  
Department of Chemistry  
Virginia Polytechnic Institute

Dr. Harold McNair: (703) 231-3255 (FAX)

Include name, company address, and phone

### SCHEDULE

9:15 a. m. Registration - details in lobby  
9:30 a. m. Introduction to CE  
10:45 a. m. Coffee  
11:00 a. m. CE Instrumentation  
12:00 p. m. Lunch (included with registration fee)  
1:00 p. m. CE Applications  
2:00 p. m. Three demonstrations on working systems (rotate, 30 minutes each)  
3:30 p. m. Open discussion/questions  
4:00 p. m. End of Program

## **Voice Messaging System Added**

From Jim Chao (IBM), Delegate to TCESS

The ability to call a local number to receive last minute information on our meeting announcements is non available. This system was made possible through the sponsorship of the Triangle Council of Engineering Science Societies (TCESS) organization to which the Local Section belongs along with over 30 other science and engineering societies located in the Triangle. Charles Lord, chairman of the local IEEE chapter, proposed last fall that TCESS sponsor this enterprise, which makes use of a personal computer donated by IBM. RTI agreed to donate a phone line, which means that the phone messaging system is a local call for many members of the TCESS organizations.

The system is designed to allow each society to have a separate phone mailbox assignment—in our case one for the Local Section and one for each of the four subgroups, Polymer, NMR, MS and TCDG. As this system proves itself, potential enhancements may include bulletin board capability, and other networking services.

The phone number is 541-7183. Press 10 for general Local Section information and press 11 for Polymer Group information. Other ACS groups have not been assigned mailbox numbers yet. Watch the publication information box on page 2 of every issue for more information as it becomes available. Your patience is appreciated during the period that the system is being installed and checked out.

## **March Calendar**

- Mar 2 W. Jennings and D. Rood, J & W Scientific, "Workshop: Analytical Gas Chromatography - Practical Capillary GC", TCDG (March 2-3) 8:30 a. m. at NCSU
- Mar 2 F. Stoddart, University of Birmingham, England, "TBA", 1993 Atlantic Coast Lecture, Duke
- Mar 3 T. Oas, Duke, "Biophysical Studies of an HIV Inhibitory Peptide", noon, UNC-CH
- Mar 4 F. Stillinger, AT&T Bell Laboratories, "A Toy Model of Protein Folding", 4:00 p. m., UNC-CH
- Mar 5 R. Hochstrasser, University of Pennsylvania, "Ultrafast Vibrational Spectra of Molecules and Proteins", Duke
- Mar 8 K. Potts, Rensselaer Polytechnic Institute, "Chemistry and Supramolecular Chemistry of 2,6-Oligopyridine-diyls: Self-Assembly to Double-Stranded Helicates", NCSU
- Mar 11 R. Spontak, North Carolina State University, "Morphology of Block Copolymers", Polymer
- Mar 12 J. Marshall, University of South Carolina, "Synthesis of Macrocyclic and Carbohydrate Natural Products", Duke
- Mar 15 S. Burke, University of Wisconsin, "TBA", Glaxo Lecture, NCSU
- Mar 16 Satellite TV Seminar, "Molecular Modeling in the Discovery of New Drugs", noon, BW
- Mar 17 C. Hardin, North Carolina State University, "Structural and Kinetic Studies of C<sup>+</sup>C<sup>+</sup> Base Pairing in DNA Quadruplexes", noon, UNC-CH
- Mar 17 M. French, Wellcome Laboratories-UK, "Biospecific Assays Using Flow injection Techniques", 10:00 a. m., BW
- Mar 18 J. Simon, University of California at San Diego, "Photochemistry of Chlorine Dioxide in Solution", 4:00 p.m., UNC-CH
- Mar 19 J. D. Simon, University of California, San Diego, "Ultrafast Laser Studies of Chemical Reactions in Solution", Duke
- Mar 19 L. M. Tolbert, Georgia Institute of Technology, "Solutions in a Box: The Organic Chemistry of Molecular Wires and Switches", noon, UNC-CH
- Mar 22 T. O'Halloran, Northwestern University, "Molecular Basis of the Heavy Metal Recognition by the MerR Metalloregulatory Protein", NCSU
- Mar 23 T. Marks, Northwestern University, "Design and Construction of Molecular Assemblies with Very Large Optical Nonlinearities", Hill Lecture, 8:15 p.m., Duke

- Mar 24 J. M. Beechem, Vanderbilt University, "Molecular Biophysics of Gene Regulation: A Time-Resolved Fluorescence Study", noon, UNC-CH
- Mar 25 J. Francisco, Wayne State University, "The Role of Halocarbons in Stratospheric Ozone Depletion Processes: The Other Half of the Story", 4:00 p.m., UNC-CH
- Mar 26 J. Wright, University of Wisconsin, Madison, "Applications of Fully Resonant Four Wave Mixing Laser Spectroscopy for Chemical Measurements", Duke
- Mar 29 R. K. Marcus, Clemson University, "Radio Frequency Powered Glow Discharges for Elemental Analysis Across the Solids Spectrum: Alloys to Ceramics", NCSU
- Mar 31 T. Luntz, Ciba Geigy, "Expression of the Pathogenesis-related Protein PR-1a and Resistance to Oomycete Pathogens of Tobacco", noon, UNC-CH
- Apr 2 V. McGuffin, Michigan State University, "Direct Examination of Separation Processes in Chromatography by Laser-Induced Fluorescence", Duke
- Apr 5 J. Sullivan, Hewlett-Packard, Wilmington DE, "Plasma Diagnostics, Stable Isotopes and Pollutant Identification; Doing Chemistry at Hewlett-Packard", PLU, NCSU
- Apr 6 S. C. Harvey, University of Alabama, Birmingham, "Modeling Complexes Between Proteins and Large Nucleic Acids: Studies on the Ribosome and Investigations of DNA Looping", Becton-Dickinson Lecture, 8:15 p.m., Duke
- Apr 7 H. Ke, University of North Carolina, Chapel Hill, "Structure and Function of Immunophilin", noon, UNC-CH
- Apr 7 H. NcNair-VPI, M. Black-Beckman Instruments, M. Khaled-VPI and M. Lymann-VPI, 9:15 a. m.-4:00 p. m., NC Biotechnology Center, TCDG
- Apr 8 A. Sarko, Syracuse University, "Computer Modeling of Cellulose", Polymer
- Apr 8 W. C. Trogler, University of California, San Diego, "Catalytic Amination of Activated Olefins", 11:00, UNC-CH
- Apr 8 R. Pecora, Stanford University, "Dynamics of a Rod/Sphere Composite Liquid", 4:00 p.m., UNC-CH
- Apr 9 R. Pecora, Stanford University, "Dynamics of Rod/Sphere Composite Liquids", Duke
- Apr 12 M. Sepaniak, University of Tennessee, "Capillary Electrophoresis: Exploring the Uses of Mobile Phase Reagents to Enhance Separation and Facilitate Detection", NCSU
- Apr 14 R. Hisky, University of North Carolina, Chapel Hill, "Some Studies on Bovine Prothrombin", noon, UNC-CH
- Apr 15 C. Harris, University of California at Berkeley, "The Dynamics and Properties of Electrons at Interfaces", 4:00 p.m., UNC-CH

ACS-American Chemical Society monthly meeting

Polymer-ACS Polymer Discussion Group

TCDG-Triangle Chromatography Discussion Group

Duke (Chemistry) seminars at 3:30 p.m. Call Bonnie Turner at 660-1506 for information.

NCSU (Chemistry) seminars at 3:30 p.m. Call Joyce Weather- spoon at 515-2548 for information.

NCSU-BC (Biochemistry) seminars at 4:00 p.m. Call Pat Sullivan 515-2581 for information.

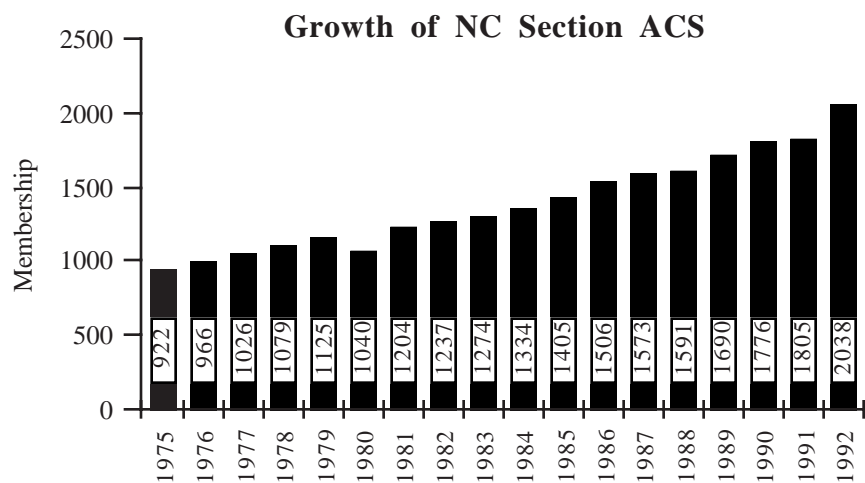
UNC-CH (Chemistry) seminars as noted. Call Becky Smith at 962-2172 for information.

## Local Membership Grows Membership Committee Recognized

The Membership Committee received commissions for 28 new members to the ACS. Larry Bowen, Chairman, says: "This was the highest commission we have received in recent years and, in fact, the highest commission received by any Section in 1992..." Committee members could use your help in recruiting new members. The Section receives a commission of \$5 for each new member and \$2.50 for each reinstated member. Membership information and application forms can be obtained from any Committee member:

George Brine, RTI  
Michael Crimmins, UNC-CH  
Robert Higgins, Fayetteville St.  
Robert Izydore, NCCU  
Larry Knecht, NCSSM  
Reginald Shiflett, Meredith  
Harold Teague, Pembroke State  
Jeff Gold, Duke  
Larry Bowen, NCSU (chair 515-2939)

Alternatively, contact the Editor and he will facilitate transmitting an application to you.



All of us recently received in the mail application forms and membership campaign information. Note that in the lower right hand corner there is a place to indicate to whom the commission should be awarded. Please fill in NC Section in that space.

Membership data recently became available for 1992. Officially, the NC Section now has 2038 members, an increase of 233 members over last year. This increase is, by far, the largest increase in modern history of the section.

The ACS National Office provides a profile of the section. From this profile, there are 22% female and 77% male members. There are 45.0% of members with doctorate degrees, 16.6% with masters degrees and 32.0% with bachelors degrees.

There are 80.2% of the members with degrees in chemistry, 5.6% in chemical engineering and 11.2% in other areas. The five most popular fields are: analytical-12.9%, organic-11.6%, environmental-10.3%, medicinal-pharmaceutical-8.8% and biochemistry-7.4%. The five highest classifications of primary function are: graduate student-12.4%, industrial applied research-9.5%, industrial basic research-6.5%, research professor-6.3% and industrial product R&D-5.5%.

## Safety News

### A recent message on SafetyNet:

From: Jack Gerlovich, Drake University, Des Moines, IA

Material Safety Data Sheets  
CHRIS: Hazardous Chemical Data

This document includes 1500 MSDS which meet Iowa standards  
The cost of the document is \$41.00

Superintendent of Documents  
U.S. Government Printing Office  
Washington, DC 20402

This is a government document, so, when necessary, you should be able to copy pages and distribute them to schools. There is no copyright on the materials. This is the most cost-effective source of MSDS's I have been able to locate.

There are several other, very costly, commercial MSDS sets available, however they do not appear to be any more effective than this source.

### Another SafetyNet Message:

From David Schleicher, ACS Department of Government Relations and Science Policy, Washington, DC

For those folks looking to save money on hazardous waste disposal, BEWARE! I read recently of an effort (I believe by a state EPA) to reduce illegal transport of waste by setting up a front company which advertised great deals on waste shipment but would admit it was not properly licensed. A lot of fish were caught.

## 107<sup>th</sup> NC Section Conference in April

The 107<sup>th</sup> Conference of the North Carolina Section is planned for Saturday, April 24, 1993 at North Carolina State University. For those expecting it to be located at Duke this year, we were forced to make a venue change because of scheduling conflicts. Please join us in presenting papers at this meeting. It is run as closely as possible in the format of a national meeting. There is an opportunity to present in either a regular or a poster session. Regular session papers are 20 minutes including a five-minute question-answer period.

As in past years, we plan to have a meeting favor for those who present and we invite all presenters to be the guest of the Section at a buffet luncheon that follows the meeting. The deadline for receipt of titles is Friday, March 19, 1993. An application form showing the required information is given below. Please feel free, however, to send the information by e-mail, FAX or phone.

## FINAL CALL FOR PAPERS 107<sup>th</sup> NC Section Conference Saturday, April 24, 1993 North Carolina State University Raleigh NC

Author(s): \_\_\_\_\_

Position(s): \_\_\_\_\_

Title: \_\_\_\_\_

Phone (senior author): \_\_\_\_\_

e-mail address: \_\_\_\_\_

Presenter: \_\_\_\_\_

Institution: \_\_\_\_\_

Session:

- Analytical       Biochemistry       Chemical Education  
 Inorganic       Organic       Physical  
 Polymer       Other

Other (specify): \_\_\_\_\_

Type of Session:  Regular       Poster       Either

Regular session papers are 20 minutes including a five-minute question-answer period.

Type of Projector: \_\_\_\_\_

### DEADLINE: Friday, March 19, 1993

### Send application to:

William L. Switzer      Internet: bill\_switzer@ncsu.edu  
Chemistry-8204      (919) 515-5079 (FAX)  
North Carolina State University      (919) 515-2945 (W)  
Raleigh NC 27695-8204      (919) 847-7471 (H)

## FINAL CALL FOR PAPERS 10<sup>th</sup> Annual TCDG Symposium and Instrument Exhibit

The Triangle Chromatography Discussion Group (TCDG) will hold its 10<sup>th</sup> Annual Exhibit, Symposium and Poster Session at the McKimmon Center in Raleigh on Thursday, May 27, 1993. As part of this meeting, the Group will sponsor a poster session. Anyone is invited to participate in the poster session, but for student posters only, prizes will be given. The first prize is \$400 and second prize is \$200. Deadline for receipt of abstracts is Monday, March 1, 1993. The abstract should be no longer than one page. Send the abstract along with title, authors, affiliation and complete address and phone number to:

Dr. Joe Hudson, Poster Chair  
TCDG  
P. O. Box 12242  
Research Triangle Park NC 27709

Acceptance will be acknowledged no later than the end of March.

### Local News

**Boron Biologicals:** Boron Biologicals, Inc. (BBI) received a \$500,000 research contract from the National Institutes of Health (NIH) to expand its research and development of novel boron compounds. These compounds may lead to new drugs to help fight cancer and viral infections including AIDS. The research project will focus on modifying phosphates with nucleic acids containing boron. Phosphates dominate living processes, providing energy to drive biochemical synthesis and degradation, and are an integral part of the genetic materials DNA and RNA.

The contract is a Phase II contract of the federal government's Small Business Innovation Research (SBIR) program. This contract, titled "Nucleoside Phosphate Analogs with Boronated Phosphates," follows the success achieved under a previous \$50,000 Phase I contract awarded to BBI in July 1992.

BBI has been highly successful in the SBIR program, garnering more than \$3 million in 11 research contracts over the past 5 years. The SBIR program is highly competitive with funding going only to proposals with both high scientific merit and commercial promise. "NIH has, once again, shown its interest in BBI's pharmaceutical R&D efforts," said Charles R. Krause, BBI President and Chief Operating Officer. "Our goal is to demonstrate that boron-containing biomolecules can be highly effective antitumor and antiviral agents." BBI is assisted in its research by collaborators at Duke University and the University of North Carolina, Chapel Hill.

**Duke:** Richard Wells and Lou Coury received a three-year grant for \$597,000 from the Air Force for study of the "Chemistry Involving the Preparation, Isolation and Immobilization of III-V Compound Semiconductor Nanocrystals and Quantum Dots." Wells and his group are doing the synthetic work and Lou Coury and his group are performing sonochemistry and electrochemistry on these materials. They hope to immobilize the quantum dots on electrode surfaces, where they can communicate electrochemically with an external circuit. They expect applications to include more efficient solar cells and photoelectrochemical devices.

**NCSU:** Duke Power Co. has contributed \$500,000 to NCSU to fund research beneficial to the textile industry in North and South Carolina. The contribution is part of Duke Power's \$1

million commitment to the Century II Campaign. According to Dean Bob Barnhardt, the College of Textiles will use the funds for research that will stimulate innovation, promote energy conservation, enhance cost effective use of electrotechnologies, and strengthen University educational research capability.

### Job Related Information

**Burroughs Wellcome:** Development Scientist I-**Radiochemist.** (Pos. #64191-29) Will prepare or support the preparation of requested isotopically labeled compounds, while complying with Company policies and government regulations. Candidates must have a masters degree in a chemically-related science preferably with experience in semi-micro scale organic synthesis and/or some hands-on experience in radiochemical synthesis or a bachelors degree with a major concentration in a chemically-related science plus eighteen months applicable experience in radiochemical synthesis or an associates degree in a chemically-related science plus four years of applicable experience in radiochemical synthesis to include experience in scientific analysis and with chemical reactions. Candidates must have a thorough knowledge of modern synthetic methods especially as applied to chiral molecules. Candidates selected for interviews will take an on-site writing assessment. We offer competitive salary and comprehensive benefits. Our Research Triangle Park location is one of the most desirable areas of the country. Please send resume, indicating position number in your cover letter by April 19, 1993, to: Burroughs Wellcome Co., Recruiting and Staffing, 3030 Cornwallis Rd., Research Triangle Park NC 27709. For information on other job opportunities with Burroughs Wellcome Co., call our Job information Line at (919) 248-8347.

**EPA-RTP:** Job line (919) 541-3014. Updated every Friday.

**Galbraith Laboratories Inc.:** Independent Sales Representative for the Scientific Glassware Division of Galbraith Laboratories Inc. Commissioned rep will set up new accounts and service clients for Galbraith Scientific Glass, which repairs and fabricates scientific glassware for industrial and university laboratories. Requires established, experienced representative. For additional information, contact Marian Geohegan at Galbraith Laboratories Inc., 2323 Sycamore Drive, P. O. Box 51610, Knoxville TN 37950-1610, (615) 546-1335.

**NIEHS: Chemist,** GS-1320-09 (\$27,789-\$36,123 per annum) or GS-1320-11 (\$33,623-\$43,712 per annum) Division of Intramural Research, Laboratory of Molecular Biophysics, Research Triangle Park, NC, Opening Date: February 1, 1993, Closing Date: March 12, 1993, Career Conditional/Full-Time Permanent. Assignments will be in the area of mass spectroscopy and analysis of biological and environmental matrices for trace organic contaminants. The major activities are the analysis of biomedical/environmental samples, and assisting in the development of new analytical methodologies and basic research in analytical chemistry. For information and forms, contact NIEHS, Personnel Office, Delegated Examining Unit, P. O. Box 12233, Research Triangle Park NC 27709 (919) 541-7811.

**RTI:** In its February 1 listings of current openings at the Research Triangle Institute, the following positions were given: **Chemist I** F0368 63A, B. S. or B. A. in chemistry with experience or training in organic synthesis. Will be involved in research to synthesize, purify and analyze organic compounds. **Chemist I/II** J0207 91A, B. S. in chemistry with 1-2 years experience in chromatography and chemical analysis. Will assist

in methods development and perform chemical analysis. **Chemist I/II** F0369 63A, B. S. or B. A. in chemistry with training or experience in organic synthesis. **Chemistry I/II** F0383 64A, B. S. or B. A. in chemistry/Biochemistry with training or experience in organic and analytical chemistry. Experience in HPLC/GC analysis preferred. Should have good writing skills and be computer literate. Will provide analytical chemistry support for toxicity studies: chemical characterization, quantitation of text chemicals in biological matrices, data analysis and report writing. **Env. Sci./Eng. III** or **Res. Env. Sci./Eng. I** J0220 91A, B. S. or M. S. in chemistry, environmental science or environmental engineering with 2-3 years experience and knowledge of environmental laws and regulations particularly RCRA and Superfund. Must have good writing skills. Will assist in providing support for Superfund management program. Review and evaluate background document related to remedial action at hazardous waste sites. **For. An. Tox. III/Res. For. An. Tox I** F373 64A, B. S. or B. A. in chemistry or related discipline with at least 1-2 years experience with review/certification of GC/MS and immunoassay data, QC procedures and chain of custody. **Natural Products Scientist** F0378 60A, Ph. D. in related area with strong background in natural products chemistry with expertise in isolation and structure determination and/or synthesis and testing. Will provide leadership in natural products research; write grant proposals; manage research projects and supervise laboratory staff. **Five Postdoctoral Chemists** F0363 63A, F0371 63A, F0385 60A, F0386 63A, F0387 64A, positions in the general area of organic chemistry. **Quality Assurance Specialist I** F0379 60D, B. S. in chemistry or biological sciences with experience in analytical chemistry in a GLP environment. Will perform inspections on analytical chemistry and toxicological studies. **Res. Forensic An. Toxicologist I/II** F0374 64A, Ph. D. in chemistry, toxicology, pharmacology or related discipline with experience in the scientific and technical direction of urine drug testing laboratory. Will review laboratory applications and inspection reports, SOP's laboratory data and other information and determine certification status. **Contact:** Office of Human Resources, Research Triangle Institute, P.O. Box 12194, Research Triangle Park NC 27709-2194. (919) 541-6466.

### 1993 Local Section Budget

<b>Revenues:</b>	<b>1992 Prop.</b>	<b>1992 Acutal</b>	<b>1993 Prop.</b>
Annual ACS Allotment	9,757.00	9757.00	10312.00
New Member Commissions	100.00	102.50	110.00
Local Section Dues	3,800.00	3854.00	3800.00
Publications, Advertisements	1,000.00	2928.00	3600.00
Meals (total)	2,000.00	757.50	800.00
Receipts, Short Courses	1,000.00	0.00	1000.00
Interest, Dividends:			
Savings Account	750.00	398.03	500.00
Certificate of Deposit	1,000.00	1230.45	1230.45
Donations, Contributions	4,000.00	1584.00	2000.00
Symposium	5,000.00	0.00	5000.00
Project SEED	3,600.00	0.00	9000.00
Scholarship Fund (from TCDG)	0.00	1000.00	1000.00
WonderScience (from BW)	0.00	3865.00	0.00
ACS Rebates, Councilor Travel	750.00	833.88	1000.00
<b>Total</b>	<b>32757.00</b>	<b>26310.36</b>	<b>39352.45</b>

<b>Expenses:</b>	<b>1992 Prop.</b>	<b>1992 Acutal</b>	<b>1993 Prop.</b>
Administrative Expenses:			
Miscellaneous	1000.00	515.30	1000.00
Committee Expenses:			
High School	1,700.00	643.68	1000.00
Workshop			1500.00
Nat'l Chem. Day	100.00	73.25	0.00
Nat'l Chem. Wk	400.00	0.00	1200.00
Safety	100.00	300.00	100.00
Publicity	50.00	0.00	50.00
Archives	50.00	0.00	50.00
Academic/Industrial Interface	50.00	0.00	50.00
Chemistry Olympiad	200.00	0.00	200.00
Subsidies to Subsections:			
NC Institute of Chemists	100.00	100.00	100.00
NC Academy of Sciences	100.00	100.00	100.00
Polymer Group	200.00	700.00	500.00
Chromatography Disc. Group	100.00	0.00	100.00
Mass Spectrometry Group	100.00	0.00	100.00
MRS Discussion Group	50.00	0.00	100.00
TCESS	50.00	150.00	50.00
Short Courses:			
Honoraria	0.00	0.00	0.00
Incidental Expenses	500.00	0.00	500.00
Local Meetings:			
Travel Expenses	0.00	0.00	0.00
Sectional Meeting	3,200.00	2888.67	2000.00
Meals Expenses:			
Meals	2,500.00	1603.17	1000.00
Miscellaneous	50.00	0.00	50.00
Publications - TarHelium:			
Printing	5,000.00	5825.95	5100.00
Postage	3,200.00	1729.87	3200.00
Computer	2,700.00	2500.00	0.00
Awards, Scholarships:			
Awards	1,000.00	4500.00	5000.00
Project SEED	7,200.00	2150.00	9000.00
HS Teachers, Prof. Dev.	1,000.00	965.00	1000.00
WonderScience	0.00	3865.00	0.00
Travel Subsidies:			
Councilors	1,200.00	1567.77	2000.00
Local Section Officers	500.00	257.83	500.00
Other:			
Symposia	5,000.00	0.00	5000.00
Miscellaneous	150.00	0.00	150.00
<b>Total Expenses</b>	<b>37550.00</b>	<b>30435.49</b>	<b>40700.00</b>

### Toxicology for Chemist

A dynamic learning experience featuring ten Experts representing each major area of Toxicology. Sponsor: ACS, Department of Continuing Education. March 29-31, 1993 at the Omni Hotel in Charleston SC. Cost \$995 for ACS members; \$1095 for non members. Call the Continuing Education Short Course Office at (800) 227-5558 or (202) 872-4508. FAX (202) 872-6336. Course number: TOXC9303.

## Small Business Programs in Denver

At the Denver ACS meeting, the Division of Small Chemical Businesses will present symposia on Consultants and on Contract R & D Companies. On Monday morning, March 29<sup>th</sup>, session on concerns of consultants will feature presentations on a Colorado based consultants organization, how to use effectively consultants, how to consult for attorneys (opportunity or disaster?), and N. H. Giragosian will talk about market research as a career.

The afternoon session will consider the role and future of contract R & D firms. D. M. Golden will discuss contract research at SRI International. Other presentations will address alliance between small and large companies, critical elements for small business support from federal agencies, and how to obtain SBIR contracts. The characteristics of contract R & D organizations will be discussed followed by a presentation from Hauser Chemical Research on marketing contract R & D and a presentation by N. Hazen and T. McNulty on when contract R & D is the right choice.

In a symposium organized by Ed Huffman, to be presented on Tuesday afternoon, March 30, several executives will tell their companies history. Participants include the following:

Sievers Instruments - M. Plam  
Analytical Development Corp. - V. G. Tye  
Chemistry & Industrial Hygiene - J. O. Rasmuson  
Telecation, Inc. - R. D. Teaty  
Wyoming Analytical Laboratories - J. Thomas

The paths through failure and success for these varied companies are certain to be fascinating.

Also on March 30, the Division will present a symposium organized by P. M. Coyne on Technology Transfer Opportunities for Small Businesses. In addition to an overview and consideration of the legal aspects, the symposium covers a wide range of information on technology transfer from federal and state agencies, universities and businesses. There will be a presentation specifically on the biotechnology area and one from the venture capital viewpoint.

## New Local Section ACS Members

Dr. Nancy Hubbartt Adams	Dr. Richard D. Jenkins
Uta-Maria Billhardt-Troughton	Sandra Kay Jerrim
Dr. Keisa Revonda Birdwell	Dr. Shanthini Jeyarajah
Robert Edward Brink	Matthew A. Jones
Michael G. Brown	Rohini Kanniganti
Bevie Jo Bryatn	W. Gilbert Kayser Jr.
Kendra Bunge	Christopher Edward Keefer
Charlotte Carroll	Adriene Dionne King
Ke Chen	Venkataram Krishnan
Jeffrey W. Driscoll	Dr. Li Li
Cleo Richard Greene	Wei Liu
Mark Andrew Hadwiger	Arthur H. Lockwood
Dorothea E. Heit	Marcel Bradut Madaras
Anita J. Hilliard	Dr. Richard Allen McLaughlin
Carolyn Hinton	David Menaldino
Pingyu Huang	

## Organic Division Bulletin Board

Through the agency of STN a Bulletin Board is available to Organic Division members. It can be reached via (800) 537-6116 (only three lines are available so be patient) or via Telenet to STN (type D instead of X to continue). The BB operates with 1200 or 2400 Baud modems and is configured as 7-1-E (8-0-N can be used with newer communications software). First time users must give their ACS number (see C&EN label) and be prepared to select a word processor (the default LINEDIT is satisfactory). Menus and help abound in the DOCBBS. Notices such as this are available for reference and official Notices of the Division are posted, so please refer to them when questions arise. Specific questions can be addressed to MCGEE, the system operator. Questions about Division activities should be addressed to GAJEWSKI.

Two articles entitles "looking for a Job" and "1992 Career Services Schedule" may be located on the DOC Bulletin Board. These articles were brought to the attention of the Secretary by the ACS Department of Member and Professional Services.

(I would like to publish comments written and submitted by users.—Editor)

## Division of Chemical Technicians

Call For Papers: the Fourth National Symposium of the Division of Chemical Technicians held at the 206<sup>th</sup> ACS meeting in Chicago, August 22-27, 1993. General Papers and Posters: Dr. Richard Cobb, Eastman Kodak Co, B-59, Rochester NY 14650-1717; (716) 477-4903. Polymers, Advanced Materials and Composites: Starla Felix, Union Carbide Corp. 3200-3300 Kanawha Tnpk., Bldg. 770-3123, South Charleston WV 25303; (304) 747-5714. Applied Chemical Technology Posters: Jerry Miller, Eastman Kodak Co. B-82, Rochester NY 14650-2102 (716) 477-5146. International Perspectives on Training Chemical Technicians: Inquiries-Dr. Fritz Kryman, University of Cincinnati, Cincinnati OH 45210 (513) 556-6556; Abstracts-Nancy Armstrong, Eastman Kodak Co. B-82, Rochester NY 14650-2102 (716) 477-6850. **Title Deadline: April 15, Abstract Deadline: May 1.** For information about the Division of Chemical Technicians (probationary), contact the ACS at (800) 227-5558.

## New Emeritus

Winfield Paul Cowgill  
Dr. William F. Durham

## Deaths

B. D. Brummet  
Dr. G. Ronald Husk  
Dr. Benjamin E. Sanders  
Dr. Henry Carrison Thomas  
Dr. Ezra L. Totton  
Dr. Edward J. van Loon

Michael P. Merkel  
Suzanne Mongrain Neighbors  
Thomas R. Nelsen  
Mark Nicholas  
Cindy L. Norwood  
Yolanda Kg Nunez  
Alison C. Pearson  
Karin Pihel  
Robert Lee Robinson  
Timothy James Schroeder  
Randy Joseph Shaver  
David E. Stark  
Jeffrey Thomas Sterbenz  
Zozislaw Szulc  
Darryl Stephen Williams  
Michelle Bragg Witz