



# The TarHelium

Volume 25, Number 7

March 1995

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## Polymer Discussion Group

Thursday, March 9, 1995

Menas S. Vratsanos

Air Products & Chemicals Inc.

### "Impulse Viscoelasticity - An Advanced Polymer Characterization Technique"

NCSU Faculty Club

4200 Hillsborough St., Raleigh

5:30 p. m. Social Hour

6:30 p. m. Dinner\* (members-guests: \$15; students \$8)

7:30 p. m. Lecture

\*Reservations by 5:00 pm, March 6 with Richard Venditti in Raleigh at: 515-6185 or richard\_venditti@ncsu.edu

## Triangle Area Mass Spectrometry Discussion Group

7:00 PM, Thursday, March 2, 1995

Ken Tomer, NIEHS

"Direct Analysis of Affinity-Bound Analytes by MALDI-TOF Mass Spectrometry"

Lester Taylor, Burroughs Wellcome  
"Applications of APCI-MS in the Pharmaceutical Industry"

Location: Chemical Industry Institute of Toxicology (CIIT), 6 Davis Dr., Research Triangle Park

**109<sup>th</sup> NC Section Conference  
See Page 2**

**12<sup>th</sup> Annual TCDG Symposium  
and Instrument Exhibit  
See Page 2**

## The TarHelium

c/o William L. Switzer, Editor  
Department of Chemistry-8204  
North Carolina State University  
Raleigh NC 27695-8204

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### Voicemail Information Line: (919) 541-7183 in the RTP

6010-General ACS  
6052-Magnetic Resonance Spectroscopy Discussion Group  
6054-Triangle Chromatography Discussion Group

6011-Polymer Discussion Group

6053-Mass Spectrometry Discussion Group

### National ACS meetings:

April 2-6, 1995, Anaheim  
December 17-22, 1995, Honolulu  
March 24-29, 1996, New Orleans

August 20-24, 1995, Chicago  
International Chemical Congress of Pacific Basin Societies

August 25-30, 1996, Orlando

**Deadline for April Publication: March 10, 1995**

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W. L. Switzer, Editor

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P. A. Flowers, Advertising

*The TarHelium* is a publication of the North Carolina Section of the American Chemical Society. The views expressed herein are not necessarily those of the Section. Public lectures and seminars as well as announcements of interest to the ACS membership will be listed as deemed appropriate by the editor and as space permits. Short commentaries or contributed articles will also be considered. Also, we are happy to publicize, free of charge, any job openings for chemists. (We also accept paid advertisements for more extensive recruiting announcements.) The **Deadline** for each publication is usually the first of the month prior to publication.

Contributions for *The TarHelium*: Send to W. L. Switzer, Editor, Chemistry-8204, North Carolina State University, Raleigh NC 27695-8204. Phone: (919) 515-2945, Fax: (919) 515-5079 and Internet: bill\_switzer@ncsu.edu.

**Advertising:** All nine issues of the *TarHelium* will accept advertising. The cost is \$25 per column-inch based on a 3.5 inch width; two-inch minimum. There is a 10% discount for advertising in four or more issues in a publication year which runs from September through April plus one issue in the summer. Contact Paul Flowers, Advertising Manager, Department of Physical Science, Pembroke State University, Pembroke NC 28372, Phone: (910) 521-6247 Fax: (910) 521-6649 and Internet: paul@nat.pembroke.edu.

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

If you wish to change your membership status or *The TarHelium* mailing address, please submit your new address along with your old address in the form of a recent *C&EN* or *TarHelium* address label to:

Manager, Membership & Subscription Services  
American Chemical Society  
P. O. Box 3337  
Columbus, OH 43210  
meminfo@acs.org

When communicating electronically, include your membership number and a return telephone number in your message. You may request membership applications electronically, but when completing them please write NC Section in the blank labeled Local Section/Division Commission Claim in the lower right hand corner of the first page. You may also request add/drop subscriptions among other services.

If you wish to receive job announcements and announcements of Local Section ACS events by electronic mail, please subscribe to the NCACS list. Send e-mail to: listserv@listserv.ncsu.edu. Include a one-line message saying: subscribe ncacs <your name>. To remove your name, send a message to the same address saying: unsubscribe ncacs. Other features of the list can be obtained by sending mail to the same address with the one-line message saying: info ncacs. The info file includes on-line job search information and a list of companies in the Section who hire ACS members. Questions may be addressed to the *TarHelium* Editor.

To subscribe to a Local Section bulletin board to discuss general topics of interest to the chemical profession, follow the same procedure described above, but include the one-line message saying: subscribe ncacsdialog <your name>. To post to the list, send mail to ncacsdialog@ncsu.edu.

To communicate with the entire Executive Committee, send mail to: acsexcomm@ncsu.edu. On-line copies of recent issues of *The TarHelium* are now available on the Triangle FreeNet at the University of North Carolina, Chapel Hill. One may telnet to: tfnet.ils.unc.edu with login: freenet and password: guest. Issues are archived under:

4. Business/
3. Professional organizations/
  1. ACS American Chemical Society/
  1. ACS TarHelium (newsletter)/

Alternatively one may reach the server by gopher. From the State of North Carolina:

University of North Carolina at Chapel Hill, Info system  
Other information services  
Triangle Free-Net development gopher  
Business  
Professional organizations  
ACS American Chemical Society  
ACS TarHelium (newsletter)

Quantitative Technology Inc. - p.

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3 Elementar Analysis

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5 PO Box 470

6 Whitehouse NJ 08888

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8 (908) 534-4445

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12 Feb, Mar, Apr, Sep, Oct and Nov

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Quantitative Technology Inc. - p. 2

### 109<sup>th</sup> NC Section Conference

Saturday, April 22, 1994

### University of North Carolina, Chapel Hill

The application forms for submitting titles appeared in the January and February issues of *The TarHelium*. The deadline for submitting titles is March 3, 1995. After this date, titles will be accepted for the poster session and a supplemental poster program will be available at the meeting. If you wish information about the program or wish to submit a poster title, contact:

Thomas A. Lehman                      Internet: lehmant@mary.iiia.org  
DUMC Mass Spectrometry Facility    (919) 549-0709 (FAX)  
99 Alexander Dr, Box 14991            (919) 549-0445(W)  
Research Triangle Park NC 27709    (919) 933-8932 (H)

### Call for Papers

### 12<sup>th</sup> Annual TCDG Symposium and Instrument Exhibit

The Triangle Chromatography Discussion Group (TCDG) will hold its 12<sup>th</sup> Annual Exhibit, Symposium and Poster Session at the McKimmon Center in Raleigh on Thursday, May 18. As part of this meeting, the Group will sponsor a poster session. Anyone may participate in the poster session, but for students posters only, prizes will be given. The first prize is \$400 and second prize is \$200. The abstract deadline is Friday, March 31. 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. Joseph R. Hudson  
Rhône-Poulenc Ag Company  
PO Box 12014  
Research Triangle Park NC 27709

Acceptance will be acknowledged no later than April 15, 1995.

### Glaxo-BW "Merger"

by Bill Switzer, Editor

It has been hard to escape the recent news about the possible buy-out of Burroughs Wellcome by Glaxo. I have worked closely with colleagues in both companies over the years and have perhaps a higher than usual interest in the buy-out. I have asked a number of colleagues in the two companies about their thoughts and feelings regarding the developments. I have been told that they have been discouraged from talking to and, in some cases, forbidden to talk to outside people about the possible buy-out. To a person, no one has offered any facts, but a few colleagues have shared some of their feelings. One colleague offered that rumors were so rampant it was hard to tell what was fact and what was rumor, anyway.

I was not surprised by the high anxiety level at Burroughs Wellcome, but I found that workers at Glaxo seem equally concerned. One colleague felt that the US management at Burroughs Wellcome has always looked after the well-being of its employees. This person is unsure that the UK management has the same

concerns for the individuals and is unsure that Glaxo or any company will match the "dream world" working conditions that BW has provided in this country.

One colleague at Glaxo indicated that the purchase seemed consistent with this person's perceived long term goals for the company. Another colleague at Burroughs Wellcome felt that the sale was inevitable and that Glaxo was likely a better buyer than most. From Glaxo there was a concern, however, that the company might be spending money that could (should) have been invested in R&D. At both companies, workers recognize the need to remain productive, but they acknowledged that it is difficult to focus on work because of the turmoil created by the merger. My concerns and best wishes go to colleagues at both companies during these trying weeks of indecision.

DIONEX c. - p.

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3 IC, Automation and HPLC

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5 1950 Lake Park Drive, Suite 175

6 Smyrna GA 30080

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8 (404) 432-8100 (voice)

9 (404) 432-8300 (fax)

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## High School Teachers

by Dr. Sarah Allen, allen@odie.ncssm.edu

The **National Chemistry Olympiad Exams** have been ordered and we look forward to a successful year of student involvement in chemistry by taking the exam. Exam booklets and answer booklets will be sent to those who have requested them by March 6th. Some of you who have had students involved in previous years have received separate mailings in hopes of not having the opportunity for your students to participate pass you by. Thank you for your response and interest. Remember that you have until the 13th of March to get the exams back to Dr. Myra Halpin, NCO-ICO Coordinator at the address on the mailings. For those of you who have requested copies of old exams, those are on the way if you have not already received them. This is a good way to help students who are considering taking the Chemistry AP Exam to identify areas of weakness and thus have a better opportunity to adequately prepare for this exam.

I am sure you are hearing about activity on the **Information Highway** and hope you are actively trying to look at your options. Has your school gotten on the North Carolina Information Highway? If so, you have at your school the facilities required to participate in a Chemistry Teachers Peer Forum. You can do all this without leaving the comfort of your school and avoid the hassle of travel. At the North Carolina School of Science and Mathematics, Chuck Roser and Myra Halpin will facilitate a 10 session forum during Spring Semester, 1995. Topics to be discussed are: Gases, Equilibrium, Acid/Base Chemistry, Buffers, Thermodynamics, Chemical Bonding, Physical Properties, Rates of Reactions, Electrochemistry, and a viewer's choice of other topics. The goal will be to provide a mechanism for teachers from schools across the state to exchange ideas, activities, and teaching techniques. CEU credit will be awarded to participants in 10 sessions. The broadcast will be sent to 4 sites at a time. After registration is completed, times for sessions will be established. Times will likely be after school from 3-4 or 4-5 pm. Your school will need two-way audio/video to participate in this forum. If you need more information or would like to register, contact either Chuck or Myra at 919-286-3366 or email Halpin@odie.ncssm.edu.

Some of you may have heard of the **Young Scientists' Conference** to be held on Saturday March 4, 1995, at the new Southern High on Clayton Road. The conference is sponsored and supported by Duke University and the Chemistry Seminar of the Duke/Durham Fellows Program, an ongoing venture which brings together teachers in the local public high schools and Duke Faculty for discussions of academic and curricular matters and laboratory procedures related to the secondary school course. Unfortunately this announcement is too late to help any of your students participate this year but it will serve to let you know to look for it next Spring. Some of the workshop topics are Illegal Drugs in NC (Special Agent Nancy Gregory NC State Bureau of Investigation); Ecology and Global Change (Dr. William Schlesinger, Duke); The Chemistry of Dyes and Colors (Dr. Frank Brown, NCSU); Video Games That Reveal the Secrets of Mother Nature (Dr. Ned Porter, Duke); Modern Methods in Drug Discovery (Dr. Frank Brown and Dr. Daniel Sternbach, Glaxo, RTP); The Use of Light to Probe the Structure and Reactions of Molecules (Dr. Karl Straub, Duke); Chemical Toxicology, (Dr. Shirley Osterhout, Duke); Polymers as Vehicles for Controlled and Targeted Drug Delivery (Dr. Howard Clark, Duke); Understanding and Improving Indoor Quality (Kelly Leovic, EPA, RTP); DNA Cloning (Dr. William Hawe, Duke). Once again, my apologies for not having announced this in time for more folks to nominate student participants. Remember that it has happened twice and will hopefully happen again next year, so it is an excellent opportunity to show students what exciting opportunities are available to chemistry students. So next year try to get some of your students involved if you are in the Durham area.

The **NSTA Philadelphia meeting March 23-26** is just around the corner. Hope to see some of you there helping to make it a good professional meeting. Please remember to get information to me so that the High School Chemistry Column will be useful in helping to keep us all aware of important happenings. S. Allen NCSSM 1219 Broad Street, Durham, NC 27715; 919-286-3366(225); or Allen @odie.ncssm.edu.

**The Science House** at NCSU offers a number of workshops for teachers and those interested in doing outreach to elementary, middle and high school students. The **Countertop Chemistry** workshop for those working with students grades 4-8, will be

held on four consecutive Monday's from 4:30-7:00 p.m. beginning April 3. All the step by step recipes will be given to make your classroom a chemical exploratorium. Instructions will be given for making glurch, slime, dancing spaghetti and many other ideas for laboratories that are safe and easy to put together. For grades 7-12, **Using Computers in the Laboratory** will be given from 9 a.m. - 4 p.m. April 18, 19 and 20. This workshop will share the experience of the Science House in using computers and microcomputer-based laboratory equipment to support science teaching in rural schools. Two other workshops that are less oriented towards chemistry, but which may be of interest are: **Digging Into Earth Science** (Teachers in Grades 4-9; four Wednesdays, 4:30-7:00 beginning March 8) and **Veterinary Medicine for Middle School Teachers** (Teachers in Grades 6-8; Saturday, April 8, 8 a.m.-1 p.m., Wednesday, April 12, 4:30-7:00 p.m. and Tuesday April 25, 4:30 -7:00 p.m.) All of these programs have a \$20 registration fee, which will be refunded as part of a \$40 stipend upon successful completion of a course. Each course carries at least one hour renewal credit from the NC Department of Public Instruction. As a participant you will receive teacher material to use with your own classes. All classes meet on the NCSU Campus. Contact The Science House, Box 8211, North Carolina State University 27695-8211 or phone (919) 515-6118. **These workshops are supported by the Burroughs Wellcome Company.**

A chemistry on the road program is also available through the Science House for all levels K-12. The senior level program, which is entitled "**Chemical Energy Transformations**", explores the conversion of chemical energy to light energy, heat energy, electrical energy and kinetic energy and *vice versa*. For younger groups, the program focuses more on states of matter and transitions between them. The senior level program can be adapted for individual or combined 50-minute or 90-minute classes as well as for groups. This program supplements the popular physics on the road program that has been available for several years. Contact the Science House at the same address and phone number listed above or contact Bill Switzer directly, (919) 515-2945.

The **National Microscale Chemistry Center** is holding workshops for K-12 teachers as well as university level workshops. See "Microscale News" p. 5 for further details.

The Local Section is once again offering a **\$500 Professional Development Award** for High School Chemistry Teachers. The announcement was made from September-November, but was accidentally omitted for the last several months. The **deadline is May 1**, which represents an extension of two months to give a final chance for applications. The objective of the award is to facilitate teachers' efforts to improve their professional skills and opportunities. Teachers may request funds to help defray costs of a course or a workshop, travel expenses to a professional meeting, expenses for research projects, etc. Proposals will be reviewed by a committee of the NC Section ACS Members and awards will be announced as soon as possible thereafter. Awardees will be asked to report on the benefits of their professional development activity. Eligibility: Applicants must teach within the counties served by the NC Section. These counties were listed above. Qualifications: Applicants must have taught at least one chemistry class for at least one year and be scheduled to teach at least one chemistry class next year. The application procedure has been streamlined to encourage participation. The application form is included on p. 5, following this column.

## ACS Minority Scholars Program

In the January 16 issue of the *C&E News* an article appeared describing the recently approved Minority Scholars Program. (You may request a reprint from the *TarHelium* Editor.) By September 1995 we will need to identify mentors for the scholarship winners. We need Local Sections members to help give support to these students. We believe that many of the scholars will be close to the living areas of our members. It is our goal to assign more than one mentor to a student. The volunteer members we seek are those who are willing to give both academic and emotional support. Being a mentor to these scholars does not require qualifying as a minority yourself. It requires a willingness to help, to give support over an extended period of time (either over the phone, or in person), an ability to listen, good one-on-one communication skills, and an open mind to explore other cultures. The rewards of such a relationship are significant. We will offer a pilot training program for mentors in Chicago at the ACS National Meeting. Please give us your support by volunteering to become a mentor. To express your interest, you may call or send an e-mail communication to Dorothy Rodmann, Administrator of the Minority Scholars Program. E-mail: dpr94@acs.org or by phone: (202) 872-6250 or (800) 227-5558 and (Press 9, 3, 5).

Beckman Instruments, Inc. - p.

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Chemical Instrumentation

4

5 Howard Rosenberg, Ph. D.

6 1210 Ashbrooke Dr.

7 West Chester PA 19380

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9 (215) 429-1375 (PA)

10 (201) 818-8900 (NJ)

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## Application

ACS Professional Development Award  
For High School Chemistry Teachers

Description of professional development activity:

Goal of professional development activity:

Budget:

Previous teaching experience:

Degrees held:

Applicant's signature and date:

School address:

County where you teach:

Principal's Certification: This applicant is scheduled to teach at least one chemistry class in the 1995-96 school year.

School principal's signature and date:

Mail to: Michael T. Riebe, Chair '95  
Glaxo INC., EP 2084  
5 Moore Dr.  
Research Triangle Park NC 27709

## Micro-Scale News

by George Wahl, george\_wahl@ncsu.edu

Several notices of workshops that might be of interest to area K-12 teachers, as well as College and University faculty have appeared recently.

The Microscale Chemistry Workshops, Organic and General, offered by National Microscale Chemistry Center at Merrimack College, No. Andover, MA, for the summer of 1995 are now full. However, there is a waiting list for both of the workshops, and there is a good chance that many from the waiting list may get an opportunity to participate in the workshop. However, they also encourage registration now for 1996 workshops (subject to the availability of funding). Many have already started to sign up for these 1996 workshops.

There are few openings still available for the Inorganic Chemistry Workshop, 1995. The High School and Elementary Workshops for the Spring of 1995 are all full. However, there are several slots left for these Workshops in the Fall of 1995.

All workshops are offered FREE. However, there is a small registration fee for each Workshop. (High School Workshops - \$30; Elementary School Workshops - \$25; and, for week long Summer Workshops the fee is \$60.) If you have any questions, please contact Mono M. Singh, Director, at (508) 837-5137, Fax (508) 837-5017. <MSingh@merrimack.edu>

This information was obtained from the National Microscale Chemistry List:

MICROSCALE-L@merrimack.edu>

To subscribe, send mail to:

listserv@merrimack.edu

Include the one-line message:

subscribe microscale-l <your name>

The subject line is ignored; <your name> is your name, not your e-mail address.

Galbraith Laboratories - p.
2
3 Microanalysis Services
4
5 PO Box 51610
6 Knoxville TN 37921-1750
7
8 2323 Sycamore Dr
9 Knoxville TN 37921-1750
10
11 (615) 546-1336
12 (615) 546-7209
13

## Area Seminars

by Maja Krickler, Krickler%NIEHS.bitnet@cunyvm.cuny.edu

- 2 Mar Barry Snider, Brandeis University, "TBA", UNC
- 2 Mar Ken Tomer, NIEHS, "Direct Analysis of Affinity-Bound Analytes by MALDI-TOF Mass Spectrometry" and Lester Taylor, Burroughs Wellcome, "Applications of APCI-MS in the Pharmaceutical Industry", M\$DC
- 3 Mar Barry Snider, Brandeis University, "Mechanistic and Synthetic Aspects of Mn(III)-Based Oxidative Free-Radical Cyclizations", Duke
- 6 Mar Lanny Liebeskind, Emory University, "Synthetic Organic Methodology Using Ring Strain and Transition Metals", NCSU

- 7 Mar Albert Meyers, Colorado State University, "Asymmetric Organic Reactions", Duke
- 9 Mar Menas S. Vratsanos, Air Products & Chemicals Inc., "Impulse Viscoelasticity - An Advanced Polymer Characterization Technique", PDG
- 10 Mar Jeffrey Aubé, University of Kansas, "New Ring Expansion Reactions in Organic Chemistry", Duke
- 13 Mar Nicholas Winograd, Pennsylvania State University, "Molecule Specific Imaging with Ion Beams and Lasers", UNC
- 14 Mar Stanton Ching, Connecticut College, "Chemically Modified Electrodes Derived from Early Transition Metal Complexes", UNC
- 15 Mar Terry Oas, Duke University, "TBA", UNC
- 20 Mar Steve Cooper, Mallinkrodt Medical, "TBA", NCSU
- 21 Mar Suzanne Harris, University of Wyoming, "A Theoretical Approach to Hydrodesulfurization Catalysis", UNC
- 23 Mar Paul Hopkins, University of Washington, "Covalent Chemical Reactions of Duplex DNA", Duke
- 24 Mar Lloyd Smith, University of Wisconsin-Madison, "High Speed DNA Sequencing: Present and Future Technologies", Duke
- 27 Mar Adrian Michael, University of Pittsburgh, "Modified Microelectrodes as Detectors and Sensors", UNC
- 27 Mar Michael Tarlov, National Institute of Standards and Technology, "Controlling the Position of Biomolecules on Surfaces with Patterned Self-Assembled Monolayers", NCSU
- 31 Mar Danial Wayner, National Research Council, Canada, "Reductive Cleavage by Dissociative, Stepwise and Associative Pathways: Kinetics and Thermodynamics of Radical Anion Reactions", Duke
- MSDC-Triangele Area Mass Spectrometry Discussion Group. Call Carol Haney 515-3746 (NCSU). Voice Mail 541-7183, box 6053
- PDG-Polymer Discussion Group. Call Richard Venditti at NCSU: 515-6185 or richard\_venditti@ncsu.edu. Voice Mail 541-7183, box 6011
- Duke (Chemistry) Call Bonnie Turner at 660-1506.
- NCSU (Chemistry) Call Joyce Weatherspoon at 515-2548.
- UNC-CH (Chemistry) Call Becky Smith at 962-2172.

1	Huffman Laboratories, Inc. - p.
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3	Elemental Analysis
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5	4630 Indiana Street
6	Golden CO 80403
7	(303) 278-4455
8	(303) 278-7012 (FAX)
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## Area News

by Halbert H. Carmichael, halbert\_carmichael@ncsu.edu

**Duke: Edward M. Arnett**, R. J. Reynolds Professor Emeritus of Chemistry, participated in a special symposium at the Loker Hydrocarbon Research Institute at the University of Southern California to celebrate the awarding of the Nobel Prize in Chemistry to Professor George Olah, Director of the Institute. He also at-

tended a reception for Nobel Laureates held at the White House on November 28<sup>th</sup>. **Lou Coury** gave two invited seminars recently. He spoke at the University of North Carolina at Charlotte on "Enzymatically-Amplified Sensors for Pharmaceuticals" and at the University of Georgia on "Electrochemistry and Ultrasound." Graduate Student **Nanette A. Madigan**, a Ph.D. student in the Coury research group, recently received an awarded membership in The Electrochemical Society by the Industrial Electrolysis and Electrochemical Engineering Division of the society. **Barbara Ramsay Shaw** recently participated in the 4<sup>th</sup> International Conference on Mechanisms of Antimutagenesis and Anticarcinogenesis, Banff, Alberta, Canada, where she spoke on the "Interdependence of Mutational Events at the Molecular Level". Dr. Shaw also participated in the 11<sup>th</sup> International Round Table on Nucleosides, Nucleotides and Their Biological Application, Leuven, Belgium, where she and members of her group gave a poster on "Boranophosphate Nucleic Acids."

**NCBC:** Small companies (fewer than 500 employees) can now access 17 federal databases free of charge through the North Carolina Biotechnology Center's library. The Center's librarians will conduct searches of these databases on behalf of small businesses at no charge. Databases include PHS Technologies, University Technologies, Company Technologies, EPA Technologies, SBIR, and more. For information, contact Nancy Kozlowski, library manager, (919) 541-9366.

**NCSC:** In September 1994 the National Science Foundation announced funding of the Stimulating and Enhancing Entrepreneurial Development (SEED) program. SEED utilizes the high-performance computing expertise of NC Supercomputing Center, (NCSC) and the National MetaCenter for computational science and engineering to stimulate the development of small technology-oriented businesses in the pharmaceutical, chemical, plastics, engineering, and health technologies industries.

In this three-year program, NCSC will transfer technology to small businesses and provide advanced computing resources that are normally not accessible to them for proof-of-concept projects at little or no charge. SEED will target North Carolina industries in the first year and later expand to include businesses in other Southeastern states. NCSC will work through established small business development organizations and incubator facilities, including the Southern Technology Council, to reach groups of technology-oriented small businesses in the region efficiently.

NCSC is currently soliciting a new round of SEED program applications, due by March 31, 1995. For more information or if you would like to receive an application, contact NCSC Business Development at industry@mcnc.org or (919) 248-1133.

**NIEHS: Dr. Ronald P. Mason**, a researcher at the National Institute for Environmental Health Sciences, received the Southern Chemist Award from the Memphis, Tennessee Section of the ACS. His work has dealt with tracking free radicals that kill cells and, in some cases, cause cancer. Mason has published 190 research papers since he came to NIEHS in 1978.

**UNC: William E. Hatfield**, 1988 NC Section Chair, passed away recently after several months of declining health. Dr. Hatfield started the Fall ACS symposium series in 1987 when he was Chair-elect. In recent years he has served as chair of the Local Section nominating committee on a number of occasions. **Richard G. Hiskey**, Alumni Distinguished Professor of Chemistry at UNC has received the General Alumni Association's Faculty Service Award. Awards committee Chairman Ty Boyd presented the award at the Association's January 20 quarterly board meeting.

## Job Openings

All job announcements are broadcast immediately upon receipt to the NCACS recipients list. If you wish to be included, see subscription instructions given on the front inside cover. The INFO file for the NCACS bulletin board has instructions on searching job opening with the State of North Carolina, North Carolina State University and University of North Carolina, CH.

**Burroughs Wellcome:** Job Line (919) 315-8347.

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

**Glaxo:** Job Line (919) 248-2565.

**Rhône-Poulenc Ag Company:** Contact: Human Resources Department, Rhône-Poulenc Ag Company, PO Box 12014, Research Triangle Park NC 27709. Mass Spectroscopist Requires 5-10 years of direct mass spectrometry experience. A PhD in Analytical Chemistry or Organic Chemistry is required. Direct experience in the identification of trace metabolites is needed. The ability to interpret mass spectra and assign structures is required. The use of LC-MS and GC-MS for the quantitative analysis of pesticide residues is also highly desired. Strong technical and computer skills are needed. In addition excellent report writing skills are essential. A working knowledge of GLPs and other government regulations is also needed. Good interpersonal skills and a customer orientation are desired. The ability to work on technical terms is needed. The ability to provide technical leadership and to train, develop and coach other associates is also required.

Methods Development Scientist (Environments Chemistry) Requires 5-10 years of direct experience in agricultural analytical methods development chemistry as a lead chemist, a PhD or equivalent experience, and demonstrated successful performance in meeting registration study schedule deadlines in a quality and timely manner. Strong technical application skills, computer and statistical skills are necessary. Working knowledge of GLPs and other governmental regulations are critical, as are strong analytical and problem-solving skills. The ability to provide technical leadership and to train, develop, and coach research technicians is necessary.

Residue Chemist (Environmental Chemistry) Requires 5-10 years of direct experience in analysis of environmental matrices, a PhD or equivalent experience and demonstrated performance in meeting registration study deadlines in a quality and timely manner. Strong technical skills, computer and statistical skills are necessary. Working knowledge of GLPs and other government regulations are critical, as are strong analytical and organization skills. The ability to provide technical leadership and to train, develop and coach other associates is necessary.

**RTI:** Contact: Research Triangle Institute, Office of Human Resources, PO Box 12194, Research Triangle Park NC 27709-2194. Phone: (919) 541-6466. Chemist I F0479 63A B.S./B.A. in Chemistry with training in organic synthesis. Will synthesize, purify and analyze organic compounds. Chemist I F0480 63A B.S./B.A. in Chemistry with training in organic synthesis. Will synthesize, purify and analyze organic compounds. Chemist I/II F0476 64A B.A./B.S. in Chemistry with basic organic & analytical chemistry skills including HPLC/GC analysis. Experience in working under GLP's helpful, computer literate, good writing, organization & manual dexterity skills. Duties: analytical chemistry support for toxicity studies. Chemist I/II F0481 64A B.S./B.A. in Chemistry w/emphasis in organic chemistry or related field w/extensive chemistry courses and research exp. in chemistry, analytical chemistry preferred. Exp. can be from

summer or co-op position. Will conduct studies of the metabolism of drugs & environmental chemicals; analyze biological fluids for these chemicals. Chemist II/III J0280 91A B.S./M.S. in Chemistry with 1-3 years of experience in method development and proficiency in liquid gas chromatography (HPLC and GC). Will perform development/evaluation, trace organic analysis and do report preparation. Env. Scientist II/III J0285 91B B.S./M.S. in Chemistry, Environmental Sciences or equivalent with 1+yrs. exp. in env. field. Must be computer literate; good writing & interpersonal skills essential. Will support senior staff in reviewing/evaluating env. data collection & analysis projects, report & presentation preparation, proposal writing, & project planning. Monitoring Scientist I ( 3 Positions) G0082 75A B.A./B.S. in science related field (BS in chemistry preferred) with good communication skills. Must have valid driver's license, ability to lift and carry at least 40 lbs.; ability to drive RV and trailer. Will conduct human exposure assessment sample and data collection in upper midwest states; perform gen. lab duties. (3 term pos.-offsite) Postdoctoral Chemist F0472 63A Ph.D. in Organic Chemistry with research experience in organic synthesis. Will synthesize novel organic compounds. Postdoctoral Chemist F0478 63A Ph.D. in Organic Chemistry with research experience in organic synthesis. Will synthesize organic compounds. Res. Pharm/Biochemist/Toxico/I/II/III F0484 64A Ph.D. w/ experience in xenobiotic metabolism/ disposition, abilities in modern chromatographic analysis by HPLC & capillary; GC, experience in use and analysis of radio isotopes, excellent interpersonal skills to effectively interact with clients and staff, excellent written skills to write clear reports in reasonable English. Will manage projects, take active lab role and supervise staff. Chemical Engineer II H0190 81A B.S./M.S. in Chemical Engineering with experience or training in fuel conversion. Will work on a biomass project to produce electrical energy.

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Analytical Services

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5 3815 Lancaster Pike

6 Wilmington DE 19805

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8 (302) 998-1184

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## Proposed Operating Budget for 1995

North Carolina Section  
American Chemical Society

Revenues:	1994	1994	1995
	Proposed	Actual	Proposed
Annual ACS Allotment	11291.00	11291.00	11650.00
New Member Commissions	100.00	280.00	200.00
Local Section Dues	4500.00	4333.50	7200.00
Publications, Advertisements	3500.00	3276.25	3000.00
Meals (total)	500.00	254.00	500.00
Receipts, Short Courses	0.00	7215.00	0.00
Interest, Dividends: Mny Mrkt	500.00	709.25	500.00
Donations, Contributions	2000.00	2990.00	2000.00
ACS Rebates, Councilor Travel	1000.00	773.39	1000.00
Totals	23391.00	31122.39	26050.00
Expenses:	1994	1994	1995
	Proposed	Actual	Proposed
<u>Administrative</u>			
Miscellaneous	1000.00	75.10	500.00
<u>Committee Expenses</u>			
High School	1000.00	449.26	500.00
Workshop	1500.00	2225.00	1500.00
Nat'l. Chem. Week	1200.00	1300.00	1200.00
Safety	100.00	0.00	0.00
Publicity	200.00	0.00	0.00
Archives	50.00	0.00	0.00
Academic/Industrial Interface	50.00	0.00	0.00
Chemistry Olympiad	350.00	0.00	0.00
<u>Subsidies to Subsections</u>	750.00	600.00	500.00
<u>Short Courses</u>			
Honoraria	0.00	0.00	0.00
Incidental Expenses	0.00	7317.47	0.00
<u>Local Meetings</u>			
Travel Expenses	0.00	0.00	0.00
Sectional Meeting	2000.00	2624.50	2500.00
<u>Meals Expenses</u>			
Meals	1000.00	494.54	250.00
Miscellaneous	50.00	0.00	0.00
<u>Publications, TarHelium</u>	11500.00	11803.02	10000.00
<u>Awards, Scholarships</u>			
Awards	1500.00	1500.00	500.00
Project SEED	5250.00	6700.00	3150.00
<u>Travel Subsidies</u>			
Councilors	2000.00	1246.80	1500.00
Local Section Officers	500.00	520.30	500.00
Regional Mtg. Conference	0.00	0.00	500.00
<u>Other</u>			
Symposia	5000.00	5000.00	1000.00
Miscellaneous	150.00	50.00	150.00
<u>Total Expenses</u>	35150.00	41905.99	24250.00

For the last several years, the Local Section has had significant budget overruns, which has reduced our cash reserves; therefore, this year the Executive Committee has cut the budget.

### IEEE Meeting

Any ACS member also members of IEEE? The Eastern North Carolina Section of the IEEE will be hosting the premiere paper-based technical conference of the Southeast US, Southeastcon '95. This conference is to be held March 26-29 at the North Raleigh Hilton. There are some key positions and much peripheral work that needs to be done to help make this a successful conference. This posting is a plea to IEEE members (and

prospective members) to get involved and help out with this great event. Key areas that need help are: **Publications:** technical program chair (Ralph Begun, rbegun@vnet.ibm.com), **Publicity and Registration.** Charles Lord, Southeastcon '95 General Chair (c.j.lord@ieee.org), (919) 469-9682.

### Frontiers in Chemical Education

A Short Course on Chemical Education  
March 24-25, 1995

Department of Chemistry  
University of North Carolina, Chapel Hill

#### Friday, March 24, 1995

- 12:30 Holden Thorp (University of North Carolina, Chapel Hill) "Science Education in the Eye of Newt..Now What?"
- 1:00 Melanie Cooper (Clemson University) "Cooperative Chemistry Laboratories"
- 1:45 Richard Herrick (College of the Holy Cross) "Reflections on the Discovery Approach at Holy Cross"
- 2:30 Break (refreshments)
- 3:00 Susan Kegley (University of California, Berkeley) "Environmental Chemistry: A Modular Approach"
- 3:45 Norbert Pienta (University of North Carolina, Chapel Hill) "Computers in the Physical and Organic Chemistry at the University of North Carolina, Chapel Hill"
- 4:15 Tour of the computer center used for Physical and Organic Chemistry
- 6:00 Social Hour (George Watts Hill Alumni Center)
- 7:00 Banquet (George Watts Hill Alumni Center); speaker: Royce Murray (University of North Carolina, Chapel Hill) "Scientific Journals and Romantic Triangles: Editors, Authors and Reviewers"

#### Saturday, March 25, 1995

- 8:00 Coffee and Refreshments
- 8:30 John Kotz (State University of New York at Oneonta) "Is the Textbook Dead?"
- 9:15 Truman Schwartz (Mancalaster College) "'Why do I need to know that?': Chemistry Contextualized"
- 10:00 Break (refreshments)
- 10:30 Arthur Ellis (University of Wisconsin, Madison) "Elements of Curriculum Reform: Putting Solids in the Foundation"
- 11:15 Panel Discussion on the future directions of chemical education
- 11:45 Lunch
- 1:15 Gene Wubbels (National Foundation, Division of Undergraduate Education)

Contact: Norbert J. Pienta, Department of Chemistry, CB#3290, University of North Carolina, Chapel Hill, NC 27599-3290.

### University Grants and Contracts

**Drefus Fund:** "Teacher-to-Teacher: A Chemistry Outreach Program", **Alton Banks**, David Haase, John Park and Todd Boyette, NCSU; "Animation in Chemistry", **David A. Shultz**, NCSU

**National Institutes of Health:** "Nitric Oxide Mutagenesis and Deamination of DNA", **Barbara Ramsay Shaw**, Duke.

**Office of Naval Research:** Young Investigator Award, **Chris Gorman**, NCSU