

# The TarHelium

Volume 24, Number 7

March 1994

## Polymer Discussion Group

Thursday, March 10, 1994

Lynn Yanyo, Lord Corporation

"Ceromers as Environmentally Resistant  
Coating for Metals"

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 noon, March 8, with  
Walter Pawlowski (919) 543-2243 (IBM-  
RTP).

## Dues Increase Approved

The vote to increase the Local Section  
dues from \$3 to \$5 was approved by a  
vote of 103 in favor and 14 opposed.

## Seminar on Molecular Modeling

The ACS is broadcasting a Satellite TV  
Seminar on "Molecular Modeling: The  
Small Molecule Approach", March 29,  
1994, 1:00 p.m. to 4:00 p.m. (see p. 2)

## TCDG Noon Meeting

A representative from the US FDA labs  
in Cincinnati OH will speak on Product  
Tampering at 12:15 on Tuesday, March  
29 in Dreyfus Auditorium at the Research  
Triangle Institute. A light lunch will be  
served starting at 11:45am reservations  
for this lunch time seminar are required  
and attendance will be limited. Make  
reservations by calling Judi Price 541-  
8852). For information call John Hines  
541-6647.

## MRSDG Poster Session

The Magnetic Resonance Spectroscopy  
Discussion Group will hold its annual  
Spring Poster Session on Tuesday, April  
5, 1994. (see p. 3)

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

The Triangle Chromatography Discussion  
Group will hold its 11<sup>th</sup> Annual Exhibit,  
Symposium and Poster Session at the  
McKimmon Center in Raleigh on  
Thursday, May 19, 1994. (see p. 4)

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

The 108<sup>th</sup> Conference of the North Car-  
olina Section is Saturday, April 16, 1994  
at Duke. There will be both regular and  
poster sessions. Presenters will receive a  
meeting favor and will be the guest of the  
Section at a buffet luncheon. **The dead-  
line for receipt of titles is Friday,  
March 11, 1994.** An application form  
showing the required information is given  
in the *Call for Papers* on Page 2.  
Please feel free, however, to send the in-  
formation by e-mail, FAX or phone.

## The TarHelium

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

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A. Tropsha (UNC), TMMDG, *Ex Officio*

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

10-General ACS  
11-Polymer Discussion Group  
52-Magnetic Resonance Spectroscopy Discussion Group  
53-Mass Spectrometry Discussion Group  
54-Triangle Chromatography Discussion Group

## National ACS meetings:

March 13-18, 1994, San Diego  
August 21-26, 1994, Washington  
April 2-7, 1995, Anaheim

August 20-25, 1995, Chicago  
March 24-29, 1996, Seattle  
August 25-30, 1996, Boston

**Deadline for April Publication: March 1, 1994**

**Dated Material - Please Deliver Promptly**

W. L. Switzer, Editor  
P. A. Flowers, Advertising

S. T. Purrington, Assistant Editor

*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: (919) 521-6247 Fax: (919) 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:

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Columbus, OH 43210

If you wish to receive announcements of Local Section ACS events by electronic mail, please submit your e-mail address to the Internet address given above for the Editor.

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## Satellite Seminar on Molecular Modeling

The ACS is broadcasting a Satellite TV Seminar on "Molecular Modeling: The Small Molecule Approach", March 29, 1994, 1:00 p.m. to 4:00 p.m. The local ACS section, Molecular Modeling Discussion Group, and the North Carolina Supercomputing Center (NCSC) are sponsoring the local viewing of this Seminar which will take place at the MCNC (Microelectronics Building), 3021 Cornwallis Rd., Research Triangle Park.

The three-hour satellite seminar will feature leading research experts who are developing new modeling techniques and are successfully putting them to work solving practical problems in drug design research. Organized by Dr. J. Phillip Bowen of the University of Georgia, the seminar will include the following presentations:

- Conceptual Framework for Drug Design, by Garland R. Marshall, Director of the Center for Molecular Design and Professor of Molecular Biology and Pharmacology, Washington University

- Molecular Modeling in the Design of Potent and Selective D1 Agonists, by Yvonne C. Martin, Senior Project Leader, Computer-Assisted Molecular Design, Abbott Laboratories

- Use of Pharmacophore Models in the Design of N-Methyl-D-Aspartate, by Daniel F. Ortwine, Research Associate, Parke-Davis Pharmaceutical Research Division, Warner-Lambert Company.

This seminar will also feature two panel discussions--a unique and exciting opportunity to speak directly to the guest panelists and to pose any questions you may have about pharmacophore modeling.

For more information, contact Professor Alexander Tropsha (UNC-CH, e-mail: tropsha@gibbs.oit.unc.edu, (919) 966-2955), or Dr. Ken Flurchick (NCSC, e-mail: kenf@ncsc.org, (919) 248-1121). Those planning to attend are kindly requested to send a "please register" e-mail message to either of the local coordinators of the Seminar.

## Final CALL FOR PAPERS

### 108<sup>th</sup> NC Section Conference Saturday, April 16, 1994 Duke University, Durham 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

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

## DEADLINE: Friday, March 11, 1994

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) 217-9095 (H)

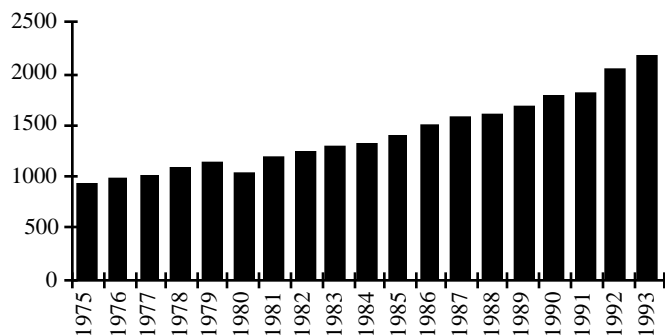
**Housing at ACS Meetings:** Looking for a roommate for an ACS meeting? Why not advertise in *The TarHelium*. Send us your name, gender, preference for smoking/nonsmoking, address, daytime/evening telephone number, and for which ACS meeting(s) you are seeking a roommate. We will publish this information in our newsletter under a roommate wanted ad and members can help each other find roommates. We will not take responsibility for roommate matches.

## Section Growth Continues

For the calendar year 1992, the NC Section set an all-time record for growth adding 233 members. For 1993, the calendar year just ended, this rapid growth continued with the addition of 135 members., which was the third largest annual increase in the history of the Section. Membership stands at 2173 as of December 31, 1993.

The demographic report shows that 75.7% of the members are male and 23.7% female. In this and other categories, some membership data were not available so percentages do not always add to 100%. The 31-35 year-old age group has the most members with 15.8%. There are 80.8 % of the members having their degrees in chemistry, 5.2% in chemical engineering and 11.3% in other fields. Of those member having degrees in chemistry, 44.8% have PhD degrees, 16.0% masters and 33.1% bachelors. The largest primary field is analytical with 12.3%; organic is next with 11.2%; followed by medicinal with 9.9%; environmental - 9.1% and biochemistry - 6.6%. Eight other primary fields had between 1% and 5% of the membership. The largest primary job function is graduate student with 11.1% of the membership; next was industrial applied research with 9.8%; industrial basic research and industrial product research and development with 6.0% each; and research professor with 5.6%.

NC Section Growth



## Proposed Operating Budget for 1994

Revenues:	1993 Proposed	1993 Actual	1994 Proposed
Annual ACS Allotment	10312.00	10312.00	11291.00
New Member Commissions	110.00	140.00	100.00
Local Section Dues	3800.00	4164.53	4500.00
Publications, Advertisements	3600.00	1990.00	3500.00
Meals	800.00	488.00	500.00
Receipts, Short Courses	1000.00	0.00	0.00
Interest, Dividends			
Savings Account	500.00	276.64	500.00
Certificate of Deposit	1230.45	919.55	0.00
Donations, Contributions	2000.00	3834.25	2000.00
Symposium	5000.00	0.00	5000.00
Project SEED	9000.00	4750.00	3000.00
ACS Rebate	3750.00		
TCDG Donation	1000.00		
Scholarship Fund	0.00	0.00	0.00
Nat'l. Chem. Week		800.00	
Young Chemists' Road show		294.18	
Expenses	626.63		
Income	920.81		
Net Income	294.18		
ACS Rebates, Councilor Travel	1000.00	951.63	1000.00
Totals	38352.45	28920.78	31391.00

Expenses:	1993 Proposed	1993 Actual	1994 Proposed
<u>Administrative</u>			
Miscellaneous	1000.00	808.12	1000.00
<u>Committee Expenses</u>			
High School	1000.00	414.48	1000.00
Workshop	1500.00	1539.20	1500.00
Nat'l. Chem. Day	0.00	0.00	100.00
Nat'l. Chem. Wk.	1200.00	1200.00	1200.00
Safety	100.00	0.00	100.00
Publicity	50.00	0.00	200.00
Archives	50.00	0.00	50.00
Academic/Industrial Interface	50.00	0.00	50.00
Chemistry Olympiad	200.00	321.31	350.00
<u>Subsidies to Subsections and Others</u>			
NC Institute of Chemists	100.00	100.00	100.00
NC Academy of Sciences	100.00	0.00	100.00
Polymer Group	500.00	500.00	100.00
Chromatography Disc. Group	100.00	0.00	100.00
Mass Spectrometry Group	100.00	0.00	100.00
MRS Discussion Group	100.00	0.00	100.00
TCESS	50.00	50.00	50.00
Molecular Modeling			100.00
<u>Short Courses</u>			
Honoraria	0.00	0.00	0.00
Incidental Expenses	500.00	0.00	0.00
<u>Local Meetings</u>			
Travel Expenses	0.00	0.00	0.00
Section Conference	2000.00	2500.09	2000.00
Expenses	2696.09		
Income	196.00		
Net Expense	2500.09		
<u>Meals Expenses</u>			
Meals	1000.00	1631.11	1000.00
Miscellaneous	50.00	0.00	50.00
<u>Publications, TarHelium</u>			
Printing	5100.00	8945.34	8800.00
Postage	3200.00	2116.72	2700.00
<u>Awards, Scholarships</u>			
Awards	5000.00	3750.00	1500.00
Project SEED	9000.00	11600.00	5250.00
HS Teachers, Prof. Dev.	1000.00	1000.00	500.00
<u>Travel Subsidies</u>			
Councilors	2000.00	1503.25	2000.00
LSOfficers	500.00	500.00	500.00
Symposium	5000.00	0.00	5000.00
Miscellaneous	150.00	0.00	150.00
<b>Total Expenses</b>	<b>40700.00</b>	<b>38479.62</b>	<b>35750.00</b>

## MRS Discussion Group Poster Session

The Magnetic Resonance Spectroscopy Group will hold its annual Spring Poster Session on Tuesday, April 5, 1994, 6:00-10:00 p.m. at the Duke University Gross Chemistry Building. Those interested in presenting should contact, Dr. Ron Crouch, (919) 315-3840, Burroughs Wellcome Company, 3030 Cornwalis Rd., Research Triangle Park, NC. Light dinner and refreshments will be served. The event will be open to all dues-paying members of the MRSDG. Dr. Steven C. Brown of Glaxo Research Institute will speak on "Structures of Peptide Nucleic Acid (PNA) Complexed to RNA, DNA, and PNA."

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

The Triangle Chromatography Discussion Group will hold its 11<sup>th</sup> Annual Exhibit, Symposium and Poster Session at the McKimmon Center in Raleigh on Thursday, May 19, 1994. 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 Friday, April 1, 1994. 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  
Rhône-Poulenc Ag Company  
P. O. Box 12014  
Research Triangle Park NC 27709

Acceptance will be acknowledged no later than the end of April 15, 1994.

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### TarHelium Available on Triangle FreeNet

Beginning with the January 1994 issue, the full text of *The TarHelium* is now available on the Triangle FreeNet at the University of North Carolina, Chapel Hill. One may telnet to:

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login: freenet  
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Alternatively one may reach the server by gopher. Once in the State of North Carolina, the path is:

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)

This service is being offered through the Triangle Council of Engineering and Science Societies (TCESS) of which the ACS is a member organization. Thanks to Ms. Judy Hallman at UNC who has devoted much time to initiating this service. Contact Judy for help. judy\_hallman@unc.edu

Beckman Instruments, Inc. - p.

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### Job Openings

All job announcements are broadcast immediately upon receipt to the e-mail distribution list. If you wish to be included send your address to: bill\_switzer@ncsu.edu.

**Burroughs Wellcome: RADIOCHEMIST.** (Pos. #65364-19) Will prepare or support the preparation of requested isotopically labeled compounds, while complying with Company policies and government regulations. Candidates must have a Master's 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 Bachelor's degree with a major concentration in a chemically-related science plus eighteen months of applicable experience in radiochemical synthesis **OR** an Associate's 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. Candidates selected for interview will take an on-site writing assessment. We offer a competitive salary and comprehensive benefits. And our outstanding Research Triangle Park location is one of the most desirable areas of the country in which to work and live. Please send resume, indicating position #65364-19 in your cover letter

by **April 4, 1994**, to: Burroughs Wellcome Co., Human Resources-RD&M, 3030 Cornwallis Road, Research Triangle Park, NC 27709. For information on other job opportunities with Burroughs Wellcome Co., call our Job Information Line at (919) 315-8347.

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

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

**RTI:** Contact: Research Triangle Institute, Office of Human Resources, PO Box 12194, Research Triangle Park NC 27709-2194. Phone: (919) 541-6466. Analytical Chemist I G0077 76A BA/BS in Chemistry with experience or training in analytical instrumentation. Class 100 clean room and trace metal experience is preferred. Will operate Gas Furnace AA and ICP, prepare samples for instrumental analysis, work with spreadsheets. Analytical Chemist I G0078 76A BA/BS in Chemistry with experience or training in analytical instrumentation. Class 100 clean room and trace metal experience is preferred. Will operate Gas Furnace AA and ICP, prepare samples for instrumental analysis, work with spreadsheet. Chemist I F0431 63A BS/BA in Chemistry with training in organic synthesis. Will synthesize novel organic compounds. Chemist I F0432 63A BS/BA in Chemistry with training in organic synthesis. Will synthesize novel organic compounds. Chemist I/II F0427 64A BS/BA in Chemistry with emphasis in organic chemistry and training or experience in analytical methods. Will conduct studies of the metabolism of drugs and environmental chemicals and analyze biological fluids for these chemicals. Natural Products Scientist F0437 60A PhD with research experience in the isolation, structure determination, synthesis, or testing of natural products. Will lead natural products research: write successful grant/contract proposals; manage research projects and supervise laboratory staff. Postdoctoral Chemist F0417 60A PhD in Organic Chemistry with synthetic chemistry research experience. Will synthesize phosphonates and protein conjugates with some metabolism and kinetics work possible. Postdoctoral Chemist F0424 63A PhD in Organic Chemistry plus experience with organic synthesis. Duties include radiosynthesis. Postdoctoral Chemist F0426 63A PhD in Chemistry with experience in organic synthesis. Will synthesize novel organic compounds. Postdoctoral Chemist F0429 64A PhD in organic chemistry with experience or training in organic synthesis. Will conduct research to synthesize novel organic compounds. Postdoctoral Chemist F0430 63A PhD in Organic Chemistry with training in organic synthesis. Will conduct research to synthesize novel organic compounds. Postdoctoral Chemist F0433 60A PhD in Chemistry with training in organic chemistry. Will synthesize haptens and conjugates for catalytic antibody programs. Will involve some analytical (kinetics) work. Postdoctoral Chemist F0435 63A PhD in Organic Chemistry with research experience in organic synthesis. Will conduct research on the synthesis of novel organic compounds. Postdoctoral Chemist F436 63A PhD in Chemistry with research experience in organic syntheses. Will synthesize novel organic compounds. Postdoctoral Chemist F0438 63A PhD in Chemistry with research experience in organic synthesis. Will synthesize novel organic compounds. Research Associate I J0254 96A PhD in Chemical Engineering with 2-3 years experience in gas-solid reactions and catalysis or fluid-bed reactors. A background in gas separation is desirable. Will construct and operate bench-scale desulfurization/sulfur recovery reactor systems; analyze data; write technical reports and publications. Research Associate I J0256 96A PhD in Chemical Engineering

with experience in gas-solid catalysis, hydrocarbon conversion. SO<sub>x</sub>/NO<sub>x</sub> control. Must have at least 2 years post-PhD experience. Will carry out laboratory experiments in gas-solid catalysis, write reports and technical publications based on results and contribute to proposals.

**Job Sought:** PhD chemist, mass spec experience, American-born, internationally-minded, seeks challenging position with Triangle firm intending to grow in domestic or international operations. Has teaching and research experience; fluent French, good personal and communication skills, publications. Contact Editor if interested.

Micron Inc. - p.

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## University Grants and Contracts

**Center for Aseptic Processing and Packaging Studies:** "Stabilization of Aseptically Processed Food Dispersions by Protein-Hydrocolloid Interactions", **E. A. Foegeding**, NCSU.

**Central Pharmaceuticals, Inc.:** "Characterization of the Nature of Polysaccharide Iron Complexes", **R. D. Bereman**, NCSU

**Kraft Inc.:** "Food Processing Enzymes from High Temperature Microorganisms", **R. M. Kelly**, NCSU

**National Academy of Sciences:** "National Academy of Sciences Soviet & East European Exchange", **P. F. Agris** and **A. J. Malkiewicz**, NCSU.

**NIH:** "Progressive Ligation-Mediated PCR Sequencing," **B. R. Shaw**, Duke; "Gene-Specific Therapy of Breast and Pancreatic Cancer," **B. R. Shaw**, Duke

**NC Biotechnology Center:** "Visiting Industrial Scientist", **C. R. Cornman**, NCSU

## Four Day Workshop at MCNC

**INTRODUCTION TO GAUSSIAN: THEORY AND PRACTICE**, April 26-29, 1994, Sponsored by The North Carolina Supercomputing Center and Gaussian Inc., held at MCNC, North Carolina Supercomputing Center, 3021 Cornwallis Road, Research Triangle Park, NC 27709-2889. See Page 6, February *TarHelium* for details.

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### Area Seminars

- Mar 8 Bob Scheidt, University of Notre Dame, "Oxidized Metalloporphyrins: Where are the Electrons?", UNC-CH
- Mar 8 Wade Sisk, University of North Carolina, Charlotte, "Nitric Oxide Chemiluminescence via Triplet Intermediates", UNC-CH
- Mar 8 Khjena Brainina, Urals Institute of National Economy, "Solid Electrodes in Anodic Stripping Voltammetry", NCSU
- Mar 10 Lynn Yanyo, Lord Corporation, "Ceromers as Environmentally Resistant Coating for Metals", PDG
- Mar 10 Alan P. Wolffe, National Institute of Child Health and Human Development at NIH, "Y Box Proteins: Roles in Transcription and Translation", NCSU Bio, Glaxo
- Mar 14 Friedrich Siebert, Albert-Ludwigs-Universität Freiburg, "Time-Resolved Step-Scan FTIR Absorption for Biological Systems: Application to Bacteriorhodopsin and Myoglobin", Duke
- Mar 15 Guenter Ahlers, University of California, Santa Barbara, "Patern Formation", London Lecture, Duke
- Mar 18 Joseph P. Dinnocenzo, University of Rochester, "The Mechanism of Amine Oxidation by Cytochrome P-450", Duke
- Mar 18 Rudolph A. Marcus, California Institute of Technology; William R. Heineman, University of Cincinnati; Benjamin Widom, Cornell University; James P. Collman, Stanford University; David G. Whitten, University of Rochester; Robert G. Parr, University of North Carolina, Ernest L. Eliel; University of North Carolina, "The Bicentennial Symposium, March 18 and 19, 1994", UNC-CH
- Mar 21 Fred Anson, California Institute of Technology, "New Electrocatalysts for the Reduction of Dioxygen and How They Work.", NCSU
- Mar 22 Fred C. Anson, California Institute of Technology, "Catalysis at Electrode Surfaces: The Chemistry Inherent in Electrochemistry", Duke, †Hill Lecture
- Mar 23 Luping Yu, University of Chicago, "Rational Design, Synthesis and Characterization of Photorefractive Polymers", NCSU
- Mar 24 Larry Miller, University of Minnesota, "Pi-stacks of Organic Molecules in Solution and in Polymers", NCSU
- Mar 25 Fred Brewer, Albert Einstein College of Medicine, "Lectin-Carbohydrate Cross-Linking Interactions", Duke

- Mar 28 L. Blum, University of Puerto Rico, "Electrodeposition of Cu on Gold(111). Theory and Experiment", UNC-CH
- Mar 29 Speaker form FDA, Cincinnati, to be announced, "Product Tampering", TCDG
- Mar 29 Satellite TV Seminar on "Molecular Modeling: The Small Molecule Approach", TMMMDG

MRSDG-Magnetic Resonance Spectroscopy Discussion Group.  
Call Terry Oas 684-4363 (Duke), Voice Info 541-7183, box 52

PDG-Polymer Discussion Group. Call Walter Pawlowski 543-2243 (IBM-RTP). Voice Info 541-7183, box 11

TCDG-Triangle Chromatography Discussion Group. Call John Hines 541-6647 (RTI). Voice Info 541-7183, box 54

TMMMDG-Triangle Molecular Modeling Discussion Group.  
Call Alex Tropsha 966-2955 (UNC-CH).  
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.

†Alpha Pi Chapter of Phi Lambda Upsilon and Duke University Chemistry Department Announce The 1994 Hill Memorial Lecture in Memory of Dr. Douglas Greenwood Hill.

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### Area News

**BASF:** ACS members **Jeffrey Burkey, Nancy Cargile** and **Margaret Lewandowski** were given their five-year service awards at BASF in December.

**CIIT:** ACS members **M. A. Carfagna, S. D. Held and J. E. Murphy** are among several scientists at CIIT who have shown that studies with isolated liver cells can predict chemical metabolism and toxicity in whole animals.

**GENOMED:** GENOMED Inc. was formed January 14, 1994 as a privately held corporation to market DNA purification kits. These kits will provide 85%-95% recovery for extraction of 20 bp to 45 kb DNA fragments from all types of agarose gels in less time at competitively lower prices. Three kits are currently available and release of a fourth is expected in the first quarter of 1994. GENOMED is a NC based company centered in a park of biotechnology companies. Our target market consists of scientists and researchers involved with nucleic acid research in both academic and industrial fields. Contact Glenn Seymour, President, or Adiar Miller, Product Manager for information. PO Box

14526, Research Triangle Park NC 27709-4526, 870-5430, e-mail Adair%GENOMED@mcimail.com.

**NCSU:** The Chemistry Department announced the following recipients of spring 1994 undergraduate scholarships. **Jennifer Fisher** and **Gregory Tew** received Proctor Undergraduate Scholarships; **Edgar Estupiñán** and **Melissa Hayworth** received Hoffman LaRoche, Undergraduate Research Scholarships; and **Suzanne Cukla** and **John Kitchin** received Glaxo Undergraduate Research Scholarships.

**Organon Teknika:** Organon Teknika now offers new tear-away bar code labels on its BacT/Alert® blood culture bottles. The new labels provide a convenient tracking method and can help reduce data entry and clerical errors. The pre-printed bar code labels assign each BacT/Alert® culture bottle a unique ID number and identify it by media type. By simply "wandering" the labels with the BacT/Alert® system's bar code reader, bottles can be easily logged into the fully-automated blood culture testing system. The convenient tear-off tab can be placed on patient requisitions for easy tracking. Since the bar code text on each label is oversized, it provides a large wandering surface area and reduces the possibility of covering the bar code with other labels.

**RTI:** RTI is conducting analytical chemistry and stability testing of treatment drugs for the National Institute on Drug Abuse. They also have additional National Cancer Institute funding for study of human metabolism of taxol (subgrant from Johns Hopkins), for research of targeted therapy for colonic cancer (subgrant from NYU) and for resynthesis of compounds for screening. For private-sector clients, RTI is conducting a bio-equivalence study, a developmental toxicity study, a metabolic disposition study, product development, method development and analysis of residues and bulk chemicals, and preparation of pharmaceutical compounds. For the Department of Energy, RTI is preparing and testing hot-gas desulfurization sorbents for fluidized beds. Also for DOE, RTI is demonstrating hot-gas desulfurization technology. DOE has provided additional funding for enhanced durability of desulfurization sorbents for fluidized-bed applications and for simultaneous removal of hydrogen sulfide and ammonia using mixed-metal oxide sorbents. For private-sector clients, RTI is preparing zinc-titanate sorbent. For the Naval Research Laboratory, RTI is studying InP solar cells. (This information taken from *Hypotenuse*, a publication of the Research Triangle Institute.)

## ACS Pamphlet on Recycling

**Recycling** has been added to the titles available in the ACS series of Information Pamphlets. **Recycling** was developed by the ACS Department of Government Relations and Science Policy under the auspices of the Society's Committee on Environmental Improvement. The pamphlet concentrates on the science and technology behind the recycling of the major constituents of the municipal solid waste stream: paper, plastic, glass, aluminum, steel and yard waste. The key recycling steps--sorting, processing and the development of new products--are reviewed for each material. The document also highlights the importance of recycling markets, marketing and market development. ACS Information Pamphlets are written for the educated non-scientist. Other titles available in the ACS Information Pamphlet series include the following: *Acid Rain* (April 1991), *Biotechnology* (December 1985), *Chemical Risk: A Primer* (December 1984), *Chemical Risk: Personal Decisions* (November 1989), *Global Climate Change* (July 1990), *Ground Water* (August 1989), *Hazardous Waste Management* (September 1992) and *Pesticides* (November 1987). Copies of these pamphlets can be ob-

tained by phoning (202) 872-8725, or by writing the ACS Department of Government Relations and Science Policy, 1155 16<sup>th</sup> St., NW, Washington DC 20036.

Quantitative Technology Inc. - p.

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## *Less is Better, Second Edition*

Environmental awareness, regulatory requirements and a desire to maintain good standing in their communities have contributed to increased efforts by laboratories to reduce their generation of chemical wastes. As the title of the recently released second edition of a booklet from the ACS Department of Government Relations and Science Policy suggests, laboratory efforts in reducing wastes may be rooted in the philosophy that "Less is Better."

The first edition of *Less is Better* quickly became a standard reference on lab waste minimization efforts. The second edition expands upon this success, also covering topics such as the regulatory implication of treating waste, increased use of computer systems and benefits of properly labeling laboratory chemical containers. The new version updates information on the economics of waste disposal, reflecting the significant increases implemented since the first version.

In an example of how "less is better," the booklet points out that, in light of disposal costs, a laboratory that purchases an "economy size" container can end up paying twice as much as it would have paid by purchasing two smaller containers. The booklet notes that in a laboratory where waste minimization practices have not been implemented, unused chemicals can constitute 40% or more of the waste stream.

The booklet was written by the ACS Task Force on Laboratory Waste Management. The Task Force authored the first edition as well as the *Waste Management Manual for Laboratory Personnel*. As with most other booklets published by the ACS Department of Government Relations and Science Policy, single copies of the second edition of *Less is Better--Laboratory Chemical Management for Waste Reduction* are available free. Non-profit organizations may order ten free copies.

The handbook was written with the scientific community in mind to be used as a reference for various regulations and science policy issues. For a copy, write to the ACS, Department of Government Relations and Science Policy, 1155 16<sup>th</sup> Street, NW, Washington DC 20036, or call (202) 872-8725. Other titles available in the handbook series include the following: *Chemical Risk Communication: Preparing for Community Interest in Chemical Release Data*, *Issues in Peer Review of the Scientific Basis for Regulatory Decisions*, *Principles of Environmental Sampling*, *Informing Workers of Chemical Hazards: The OSHA Hazard Communications Standard*, *Principles of Environmental Analysis* and *The Waste Management Manual for Laboratory Personnel*.

Huffman Laboratories, Inc. - p.

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## Teaching Macromolecular Chemistry and Engineering to Undergraduates

JULY 17 - 29, 1994: The National Science Foundation will sponsor a Faculty Enhancement Workshop offered by the Center for High Performance Polymeric Adhesives and Composites, Virginia Tech, Blacksburg, VA. The workshop will provide an in-depth exposure to modern theories and experimental techniques of polymer science and engineering so that participants can understand how to effectively incorporate these topics into undergraduate chemistry and engineering curricula. Experts will provide explanations of the fundamentals and subtleties of the analytical, physical, organic and technological details of polymers suitable for classroom use. Hands-on laboratories for participants provide exposure to details of polymer synthesis and the latest equipment for polymer characterization and analysis. Each participant will receive a source book of resources for teaching polymer science in the classroom and laboratory.

No registration fee. Room and board provided. Registration DEADLINE is April 15, 1994.

For further information, contact:

Timothy L. Pickering, Assistant Director  
NSF Center for High Performance Polymeric Adhesives & Composites 201A Hancock Hall  
Blacksburg, VA 24061-0257

Tel. (703) 231-4443, FAX: (703) 231-9452 E-Mail: timp@vtvm1.cc.vt.edu

## Nominees for National Technology Medal

All ACS members are invited by the Committee on Patents and Related Matters (CP&RM) to suggest possible candidates for nomination for the National Technology Medal. Recently funded by the United States Department of Commerce and established by the Stevenson-Wydler Innovation Act of 1980, the medal is awarded annually by the President of the US. It may be awarded to individuals, groups, companies or to institutions within the United States for outstanding contributions to technology or for the promotion of the technological work force. Nomination documents may be obtained by calling 202/872-8725, or writing to the staff liaison to CP&RM, Ms. Debora Fillinich, American Chemical Society, 1155 Sixteenth Street, NW, Washington, DC, 20036. The deadline for submitting nominations for the 1995 Award is May 30, 1994.

ChemInnovation Software - p.

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5 8190-E Mira Mesa Blvd., Suite 428  
6 San Diego CA 92126  
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8 (619) 566-2846

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## New Members

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Santonino Ku'caya Banya  
David G Barrett  
Silke Barrett  
G A Baumbach  
Warren H Bock  
Edie Caroline Bowles  
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