

The TarHelium

Volume 24, Number 3

Nov 1993

National Chemistry Week-see p. 7 for planned activities

*****Ballot for Proposed Dues Increase Enclosed*****

Polymer Discussion Group Meeting

**Thursday, November 11, 1993
North Carolina State University Faculty Club
4200 Hillsborough St.**

**Vassilios Galiatsatos,
University of Akron**

"Molecular Modeling of Polymers"

5:30 p. m. Social Hour
6:30 p. m. Dinner† (members-guests: \$15; students \$8)
7:30 p. m. Lecture

†Reservations by noon, November 9, with Walter Pawlowski (919) 543-2243 (IBM-RTP).

The TarHelium

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

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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 the 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.

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

10-General ACS
11-Polymer Discussion Group
52-NMR Discussion Group
53-Mass Spectrometry Discussion Group
54-Triangle Chromatography Discussion Group

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

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.

**Deadline for December Publication
November 1, 1993**

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

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Tudor Ad for Glassware

Project SEED Report

During the summer, eight students at local high schools worked for 8-10 weeks in research laboratories in Research Triangle universities under the supervision of chemistry department faculty and their assistants. Each student who participated in the program for the first time received a \$1,500 stipend award from the American Chemical Society; for students who returned to this program for a second summer the stipend was \$1,700. Participating institutions provided financial support in the form of materials, supplies, and overhead expenses.

The ACS program under which these awards were given is called Project SEED (Summer Educational Experience for the Disadvantaged). This is a career education and social program of the ACS which seeks to expand the career outlook of high school students from families defined as economically disadvantaged by federal poverty guidelines. Only students who have completed Chemistry I in high school and conform to economic guidelines were considered. Altogether more than 300 students representing many states and Puerto Rico participated in the program this summer, and about a quarter were back for a second summer. The names of the eight students from the NC Section are:

Brent Collier	Enloe, Raleigh
Mimi Coker	Hillside, Durham
Jennifer Davis	Enloe, Raleigh
Damon Gooch	Hillside, Durham
Mario Johnson	Hillside, Durham
Adrienne Perry	Broughton, Raleigh
Marsha Ebanks	Riverside, Durham
Lakecia Rochelle	Southern, Durham

The SEED Program ended on Friday, August 6 when the eight students presented reports of their work at a symposium. This symposium was held in the Paul M. Gross Chemical Laboratory at Duke University. The participants went to Chicago on August 25 to attend the 206th National Meeting of the ACS, where they presented their reports together with other 1993 SEED Project high school students. This visit to Chicago was organized as a

special event for 1993 SEED participants as 1993 is the 25th year the SEED Program has been in existence.

The SEED Project of the NC Section, ACS has as its NC Section Local Coordinator Mr. Kenneth A. Cutler. He is also Coordinator of the MSEN (Mathematics and Science Education Network) Pre-College Program, Center for Mathematics and Science Education, School of Education, UNC-Chapel Hill. Before joining the School of Education at UNC-Chapel Hill, Mr. Cutler was a science teacher at Durham High School.

Galbraith Ad for Glassware

Eastern Carolina Meeting in Miniature

In celebration of National Chemistry Week, the Department of Chemistry at East Carolina University, in conjunction with the Eastern North Carolina Section of the American Chemical Society (ENC-ACS), the ECU Chemistry Alumni Society, and the ACS Student Affiliates, is sponsoring a regional research conference for students in all fields of chemistry. Students from undergraduate and graduate programs in schools throughout the East Coast have been invited to participate in this symposium. The event, entitled "Meeting in Miniature", will be held at East Carolina University on November 12, 1993, culminating National Chemistry Week activities in the area. The conference will conclude with a banquet that evening at which time awards will be presented for the oral presentations at both the undergraduate and graduate level. The keynote speaker for the evening will be Dr. Herbert C. Brown, the 1979 Nobel Laureate in Chemistry.

Professor Brown is perhaps best known for his explorations of the role of boron in organic chemistry. He discovered that the simplest compound of boron and hydrogen, diborane, adds with remarkable ease to unsaturated organic molecules to give organoboranes. Dr. Brown's awards and honors include the Nobel Prize in Chemistry in 1979, the Priestley Medal for 1981, the Perkin Medal for 1982, the AIC Gold Medal for 1985, and the National Academy of Sciences Award in Chemical Sciences for 1987.

Further information and directions to ECU can be obtained by contacting Dr. Art Rodriguez, Department of Chemistry, ECU at (919) 757-6228

Area News

Burroughs Wellcome: The Burroughs Wellcome Fund announces grants totaling \$1.5 million to four North Carolina universities. North Carolina State University, East Carolina University, the University of North Carolina at Chapel Hill, and Duke University each received \$375,000 to establish a "Burroughs Wellcome Fund Fellowship in Organic Chemistry." This gift al-

lows each institution to provide research training fellowships for students working toward advanced degrees in chemistry.

In announcing the gift, Dr. Howard Schaeffer, President of The Burroughs Wellcome Fund said: "Organic chemistry is crucial to the discovery and development of chemical compounds which may become our future medicines. It is important that individuals receive good research training to enable them to develop the requisite skills that are needed in our universities, and in our chemical and pharmaceutical industries."

The Burroughs Wellcome Fund is a private non-profit foundation. Established in 1955, its mission is to advance medical knowledge through research and for other scientific, scholarly and educational purposes.

Macronex/Boron Biologicals: Macronex Inc. of Morrisville NC has signed a research collaboration agreement with Boron Biologicals Inc. (BBI) of Raleigh NC. The agreement will bring together Macronex's unique, proprietary macrophage technology and BBI's expertise in boron biochemistry. "We are pleased at the prospect of working with BBI," said Dennis D. Burns, Macronex president and CEO. "The fusion of BBI's boron technology with our macrophage technology will benefit both companies by identifying and evaluating promising new drug compounds."

Under the agreement, BBI will provide boron reagents to Macronex. These reagents will be combined with several of Macronex's promising peptide compounds, which have already demonstrated potent anti-inflammatory activity. The new boronated compounds will then be evaluated through Macronex's comprehensive bioassay-based screening system, which uses human macrophages. The objective of the boronation process is to increase the effectiveness of the compounds by increasing their stability, solubility, bioavailability and potency.

"By combining our technology with that of Macronex," said Charles R. Krause, BBI president and CEO, "we will multiply the benefits to both companies. We hope this collaboration, by combining Macronex's lead compounds and our boron technology, will lead to the creation of promising drugs."

NCSU/UNC-CH: The August 23 issue of *C&EN* reported that the University of North Carolina, Chapel Hill rose from 43rd to 41st in R&D funding in 1991, the most recent year reported. UNC-CH moved from 32nd to 31st in federal support for R&D. During the same period, North Carolina State University Chemical Engineering moved from 8th to 7th in chemical engineering R&D funding.

RTI: Dr. F. Ivy Carroll has received a 1993 Pacesetter Award from the National Institute on Drug Abuse for outstanding achievement. The prestigious Pacesetter Awards acknowledge the contributions and accomplishments of individuals and organizations in the areas of drug-abuse research, prevention and treatment. Since 1976, when the awards program began, Pacesetter Awards have been presented to 35 individuals. Dr. Carroll, now director of RTI's Center for Organic and Medicinal Chemistry, joined RTI in 1960 and has worked there during his entire research career. In receiving his award, Dr. Carroll was recognized for exceptional achievement and productivity in cocaine chemistry and in the synthesis of cocaine analogs with potential as medications. He was also cited for elucidating the structure activity relationships of cocaine receptors in the brain. Dr. Carroll has produced a vast number of cocaine analogs and has provided the drug-abuse research field with a large number

of novel tools to explore psychostimulant mechanisms. He has also assisted in patenting and licensing many of the compounds that are useful agents for imaging cocaine receptors in humans. Dr. Carroll holds a BS in chemistry from Auburn and a PhD in chemistry from the University of North Carolina at Chapel Hill.

UNC-Chapel Hill: Dr. Joseph M. DeSimone, assistant professor in the department of chemistry was one of three faculty members to receive the 1993 Philip and Ruth Hettleman Prizes for Artistic and Scholarly Achievement by Young Faculty. The Hettleman awards honor achievement by junior tenure-track or recently tenured faculty members. The prizes were established through a gift by the late Philip Hettleman, a New York investment broker and a UNC-CH alumnus.

Beckman Ad must be rescaled

High School Teacher Award

Nominate your favorite high school chemistry teacher/colleague for the North Carolina ACS High School Chemistry Teacher Award. Please send a curriculum vitae highlighting relevant information such as work experience, honors and recognitions received, professional memberships, and publications. A letter of support should address quality of teaching and methodology, ability to motivate and inspire students, extra-curricular work,

attendance and presentations at professional meetings, and formal work towards self-improvement which may address willingness to remain up-to-date in the field. This information should be mailed directly to: Dr. Robert Morrison, Chair, Burroughs Wellcome Co., 3030 Cornwallis Rd., PO Box 12700, Research Triangle Park, NC 27709-2700. Submit by Dec.31, 1993.

1994 Dues Bill Reminder

If you have not received your 1994 dues bill, contact the ACS Dept. of Member and Subscriber Services at (800) 333-9511.

Galbraith Ad for Microanalysis

Increase in Local Section Dues

by Bob Morrison, ACS Local Section Chairman

I strongly encourage you to vote in favor of a modest increase in your local section dues from \$3/yr. to \$5/yr. and to elect to pay local section dues when you receive your annual bill from the ACS if you are not doing so now. Your *TarHelium* alone costs a little over \$5/yr. per member, and only 60% of the section is currently electing to pay local section dues.

What are some things this money supports? As examples, your local section is providing a needed communication network for professional chemists and the four subspecialty discussion groups in our area and is promoting chemistry to our youth through its high school committee and National Chemistry Week. This past summer, your local section supported the most impressive Project Seed program in recent years--second largest program in the country. Eight local high school students worked in triangle area research labs and presented their work at the recent national ACS meeting in Chicago. Yes, all eight! This program was costly to the local section, and it has now opened the doors for additional outside funding next year. We believe this initial investment in these talented youth will reward the profession well in the future. And the list could go on further.

Bottom line: YOU are the local section, and we are asking that you vote in favor of this requested dues increase so we can continue to serve our chosen profession appropriately.

Ballot

North Carolina local section ACS dues shall be increased from \$3.00 to \$5.00 per year.

- Yes
 No

Note: The Executive Committee strongly supports the recommended dues increase and asks your support. If approved, the increase will take effect for the 1995 dues which will be billed in September 1994.

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: Job Line at (919) 315-8347.

Duke: THEORETICAL CHEMISTRY POSTDOCTORAL POSITION in density-functional theory of large molecules with parallel computers. Strong theoretical and computational background required. Send CV and three reference letters to Prof. Weitao Yang, Department of Chemistry, Duke University, Box 90346, Durham, NC 27708-0346 or yang@chem.duke.edu. Duke University is an Affirmative Action/Equal Opportunity Employer.

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/II/III G0073 70A BS/BA or MS in Chemistry with experience in trace metal analysis. Experience in clean room techniques and operation of graphite furnace AA or ASV preferred. Experience with GLP's helpful. Will perform research and analysis in inorganic analytical chemistry and methods development for graphite furnace AA and ASV. (GC) Chem. Eng./Env. Eng./Env. Sci. II/III J0245 94A BS/MS in Engineering/Environmental Science with good written/oral communication skills essential. Experience with computer spreadsheet and database mgmt. and in pollution prevention/waste mgmt., and the ability to travel to industrial facilities required. Will conduct environmental research tasks assigned by and under the supervision of project leader. (GC) Chemist I F0415 63A BS in Chemistry with training or experience in organic synthesis. Will synthesize, purify and analyze organic compounds. (GC) For. An. Tox. III/Res. For. An. Tox. I F0414 64A BS/BA in Chemistry or related discipline with at least 1-2 yrs. experience in the review and certification of GC/MS and immunoassay data, QC procedures and chain of custody. Will review laboratory inspection reports, SOP's, data, remedial action submissions, assist in determining laboratory status and other duties as required. (GC) Postdoctoral Chemist (Term) F0409 63A PhD in Organic Chemistry with training in organic synthesis. Will conduct research to synthesize novel organic compounds. (Term) (GC) Postdoctoral Chemist (Term) F0417 60A PhD in Organic Chemistry with synthetic chemistry research experience. Will synthesize phosphonates and protein conjugates with some metabolism and kinetics work possible. (Term) (GC) Postdoctoral Chemist (Term) F0422 63A PhD in Chemistry with research experience in organic synthesis. Will conduct research in the synthesis of organic compounds. (Term) (GC) Postdoctoral Chemist (Term) F0423 63A PhD in Organic Chemistry. Duties include organic synthesis. (Term) (GC) Postdoctoral Chemist (Term) F0424 63A PhD in Organic Chemistry plus experience with organic synthesis. Duties include radiosynthesis. (Term) (GC) Postdoctoral Chemist (Term) F0426 63A PhD in Chemistry with experience in organic synthesis. Will synthesize novel organic compounds. (GC) Quality Assurance Specialist I/II F0425 60D BS/BA in Chemistry/Biology with experience in analytical chemistry, pharmacokinetics, GLP audits and inspections. Will perform audits and inspections of toxicology and analytical chemistry procedures and reports. (GC) Res. Analytical Chemist II/III G0071 72A PhD in Analytical Chemistry with 2-5 years of experience in an-

alytical/environmental chemistry. Experience conducting independent research programs. should have good communication and management skills. Develop independent research programs, write proposals and grants, manage projects, interact with clients. (GC) Res. Forensic An. Toxicologist I/II F0407 64A PhD or equivalent in Chem., Toxicology, Pharm. or related discipline with experience in the technical direction of a forensic urine drug testing laboratory or as an inspector of FUD laboratories. Must have excellent communication skills. Will review laboratory applications, inspection reports; SOP's; laboratory data & other information; determination of lab. cert. status; performance testing & results. (GC) Res. Nat. Prod. Sci. III/Sr. NPS I/II/III F0413 60A PhD with experience in the isolation and structure determination of natural products. (Experience in synthesis and testing of natural products will be considered). Will be responsible for leading natural products research programs; writing successful grant/contract proposals; managing research projects and supervising laboratory staff. (GC) Research Chemist I/II F0410 66A PhD in Polymer Chemistry with 3-5 years of postdoctoral research experience in polymer chemistry or material science. Will be responsible for developing R&D proposals to generate external funding and to carry out funded research in the area of polymer science. (GC)

The Glaxo-UNC Fifth Annual Frontiers In Chemistry And Medicine Symposium

Sunday, November 7 - Tuesday November 9, 1993

Friday Continuing Education Center

University of North Carolina at Chapel Hill

Program:

"Studies in the Synthesis of Biologically Active Natural Products: The Carbohydrate Connection", Samuel Danishefsky, Yale University

"The Chemistry Revolution", Harry Gray, California Institute of Technology

"Marine Natural Products: A Rich New Source of Targets for Synthesis", Clayton H. Heathcock, University of California at Berkeley

"Quinoproteins As New Catalysts", Judith P. Klinman, University of California at Berkeley

"New Opportunities at the Interface of Chemistry and Biology", Peter G. Schultz, University of California at Berkeley

"Ribonucleotide Reductase: Radical Enzymes with Suicidal Tendencies", Joanne Stubbe, Massachusetts Institute of Technology

"Molecular Studies on Protein Tyrosine Phosphatases", Christopher T. Walsh, Harvard University

Registration Fee:

\$25 includes lunch (students \$10)

\$60 includes lunch and banquet (students \$30)

For Registration and Additional Information Call or Write:

(919) 941-3400: Glaxo/Wanda Satterwhite

(919) 962-2172: UNC/Becky Smith

Ms. Becky Smith

Symposium Coordinator/UNC, CB #3290

University of North Carolina at Chapel Hill

Chapel Hill, North Carolina 27599-3290

Micron Ad

Area Seminars

- Nov 1 E. Yueng, Iowa State University, "Laser Based Fluorescence Measurements", UNC
- Nov 4 E. Bernstein, University of Colorado, "To Be Announced", UNC
- Nov 5 James E. McGrath, Virginia Polytechnic Institute and State University, "Synthesis and Characterization of New Phosphorus-Containing Macromolecules", Duke
- Nov 7 -Nov 9, "The Glaxo-UNC Fifth Annual Frontiers In Chemistry And Medicine Symposium, Center", UNC Friday Center; see p. 5
- Nov 9 H. Gray, California Institute of Technology, "Long-Distance Electron Transfer in Proteins and Model Complexes", UNC-Minisymposium
- Nov 10 G. Brudvig, Yale University, "The Mn Cluster in Photosystem II", UNC-Minisymposium
- Nov 11 Vassilios Galiatsatos, University of Akron, "Molecular Modeling of Polymers", *Polymer*
- Nov 11 C. R. Cornman, North Carolina State University, "Biologically Relevant Vanadium Complexes", UNC-Minisymposium
- Nov 11 T. M. Mayer, Sandia National Laboratories, "Ion Bombardment Effect On Surface Structure", UNC
- Nov 12 Ernesto Freire, Johns Hopkins University, "Molecular Basis of Cooperativity in Protein Folding", Duke
- Nov 16 Jeffrey Skolnick, Scripps Research Institute, "De Novo Simulations of Globular Protein Folding, Structure, and Dynamics", Becton-Dickinson O. E. Millner Memorial Lecture at 8:15 P.M. in Room 107
- Nov 18 D. Turner, University of Rochester, "RNA Folding and Unfolding", Glaxo Lecture at NCSU Bio
- Nov 18 M. Burk, Duke University, "A New Class of Chiral Phosphines for Asymmetric Catalysis", UNC

Nov 18 R. Levy, Rutgers University, "Thermodynamics and Dynamics of Solvation: From TICT Molecules to pKa's in Proteins", UNC

Nov 19 Joseph M. DeSimone, University of North Carolina at Chapel Hill, "Homogeneous and Heterogeneous Polymerizations in Environmentally Benign Supercritical Carbon Dioxide", Duke

ACS-American Chemical Society general meeting. Call Bill Switzer (919) 515-2945 (NCSU). Voice Mail (919) 541-7183, box 10

MS-Mass Spectrometry Discussion Group. Call Carol Haney (919) 515-3746. Voice Mail (919) 541-7183, box 53

NMR-NMR discussion Group. Call Stephen Brown (919) 941-3207 (Glaxo), Voice Mail (919) 541-7183, box 52

Polymer-ACS Polymer Discussion Group. Call Walter Pawlowski (919) 543-2243 (IBM-RTP). (919) 541-7183, box 11

TCDG-Triangle Chromatography Discussion Group. Call John Hines, RTI 541-6647. (919) 541-7183, box 54

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.

Quantitative Technologies

Nominations Sought for Research Award

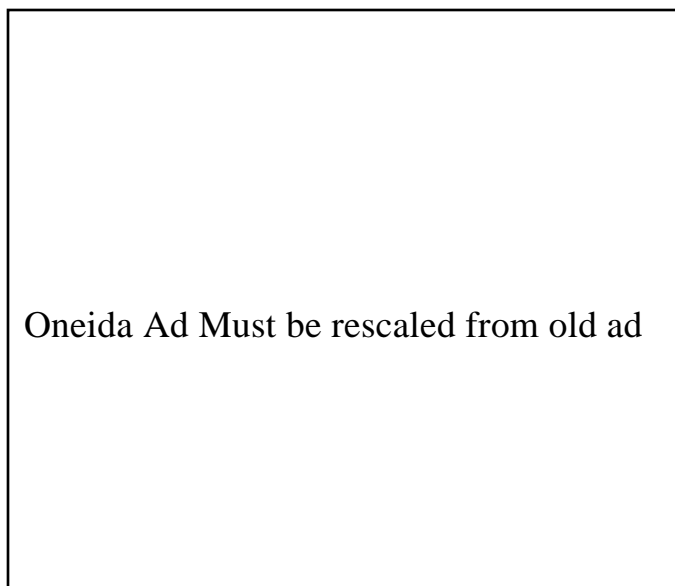
Iota Sigma Pi is soliciting nominations for its Agnes Fay Morgan Research Award for excellence in research by a woman chemist not over 40 years of age. The deadline for submission is December 1, 1993. The nomination shall be for research achievement, and the specific research for which the candidate is named must be designated by the nominators. The field must be chemistry or biochemistry. The nominee need not be a member of Iota Sigma Pi. Each active chapter shall be entitled to make one nomination, but individual members or chemists or groups of chemists may make independent nominations, if properly documented. The nomination dossier must contain:

- name and address (home and business) of nominee
- a biography of the candidate, including date of birth
- a description of the research achievements
- a list of publications
- letters of recommendation from nominator and seconder

Six copies of the dossier should be sent to the Senior National Director no later than December 1, 1993. Send to: Jeanne M. Buccigross, PhD, 6 O'Connor St., Armidale, NSW 2350, Australia.

(Editor's Note: Copies of the announcement are available from the editor. Also, available are fliers describing other Iota Sigma Pi awards such as: the Anna Louise Hoffman Award for Outstanding Achievement in Graduate Research, the Undergraduate

Award for Excellence in Chemistry, and the Gladys Anderson Emerson Scholarship.)



National Chemistry Week

The ACS and the Museum of Life and Science will be sponsoring National Chemistry Week events throughout the month of November. We are looking for volunteers who would like to share their enthusiasm for chemistry through these events. There are a variety of ways in which you could become involved.

Volunteers are still needed for the various activities for National Chemistry "Week", which will be celebrated all month at the Museum of Life and Science in Durham. Help is especially needed for the **Family Science Day at the Museum** on Sunday, November 7. Chemists are needed to lead forty-five minute informative hands-on chemistry activities. This program is designed to reach approximately 400 disadvantaged individuals. A second event, **Family Science Encounters**, will be held on November 27. Leaders are needed for 30 minute "Wonder-Science" workshops for groups of 20. Training and material for both of these events will be provided. There will be an orientation and training workshop on October 30 from 1:00-2:30 p.m.

For those of you who are interested in less structured activities, the "**ChemLab: Open House With a Chemist**" will be held on November 20. The Museum's ChemLab will be open to the public and we hope that some of you will be willing to talk informally with visitors about your jobs as chemists.

Other opportunities during the month include demonstrations on the museum floor and **Science-On-A-Cart**. If you would like to participate or would like more information regarding any of these opportunities please call Erin Keating at 220-5429 x367.

Also three sites are planning to host the satellite seminar: "**Teaching Introductory Chemistry**" from 6:00 p.m.-8:00 p.m. on Monday, November 8. This interactive seminar will be of interest and benefit to high school, community college and university teachers of General Chemistry. There is a \$25 registration fee to cover the cost of the ACS Seminar manual and broadcast. 1) **MCNC** in the RTP: The Research Triangle Park Club of

Sigma Xi is sponsoring the program with the Triangle Science and Mathematics Partnership as an associate sponsor. Mailing address: RT Science and Math Partnership, 410 Oberlin Rd, Raleigh, NC. 27605, (919) 733-4745 or (800) 972-0429. 2) **Pembroke State University**: Enrollment is limited, contact Paul A. Flowers at Pembroke State (919) 521-6247 or by e-mail at paul@nat.pembroke.edu. Limited funds have been provided by the PSU Office of Continuing Education to cover registration fees for a number of early registrants. 3) **North Carolina State University**: Contact Cynthia Martin at NCSU (919) 515-2546 or by e-mail at martin@chemdept.chem.ncsu.edu.

Chemical Career Insights 1993

A chemical career conference for undergraduate and graduate students and their faculty.

Thursday, November 4, 1993
North Carolina Museum of Life and Science
433 Murray Avenue, Durham NC

Industrial and government chemists will present an all-day program to describe:

- What it's like to work as a chemist.
- Traditional and nontraditional careers for chemists.
- How to look for jobs, prepare a resume and interview for a job.
- What employers look for in new employees.
- Making the transition from academe to industry.

Join us, beginning at 8:15 a. m., for a day of talks and discussions about your career.

Sponsored by the Younger Chemists Committee of the American Chemical Society, the North Carolina Section and the Central Carolina Section.

Registration fee \$3.00. Coffee and donuts will be provided during registration and a luncheon will be provided at no extra charge. To register, complete the coupon below and mail with your check to the address listed. Advance registration is highly recommended; attendance may be limited by lecture hall seating capacity. Contact Ms. Brenda Memering (919) 493-3002 for further information.

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Registration Form For Chemical Career Insights 1993

Name: _____

Address: _____

School: _____

Major: _____ Grad Year: _____ Degree: _____

Make checks payable to ACS. Mail form to Mr. Pat McCain, CIBA Plant Protection, E-1, PO Box 18300, Greensboro, NC 27419-8300.

Faculty Grants and Contracts

EPA: "Emission Characteristics of Oxygenated Fuels", P. K. Lim and G. W. Roberts, NCSU

NSF: "Young Investigator Award: Electronic Interactions in Radicals, Biradicals, and Spin-Correlated Biradicals," Malcolm D. E. Forbes, UNC-CH; "Thin Film Growth and Deposition Studies under Energetic Conditions", Eugene A. Irene, UNC-CH; "Presidential Young Investigator Award", H. H. Lamb, NCSU; "Mechanism of Protein Biosynthesis in Animal Mitochondria," Linda L. Spremulli, UNC-CH; "Presidential Young Investigator-Research in Bioinorganic Chemistry", H. Holden Thorp, UNC-CH

NC Biotechnology Center: "Instrumentation Grant for Biochemistry Teaching Laboratories", Drs. C. C. Hardin, J. A. Knopp, *et al.*, NCSU

NIH/PHS: "Development of Instrumentation for Biomolecule Analysis," Gary L. Glish, UNC-CH; "National Research Service Award" to James K. McCusker and T. J. Meyer, UNC-CH; "National Research Service Award" to Mary A. Farwell and Linda L. Spremulli, UNC-CH; "Red Cell Ferritin mRNA and Protein: Structure and Function", Elizabeth C. Theil, NCSU

ONR: "Passivation Studies of Selected Semiconductor Surfaces and Novel Optical-Optical Switching Concepts," Eugene A. Irene, UNC-CH

Packard Foundation: "David & Lucile Packard Fellowships for Science and Engineering," H. Holden Thorp, UNC-CH

Pharmacia P-L Biochemistry, Inc.: "Nucleic Acid-Modifying Enzymes from Thermophilic Micro (SA)", R. M. Kelly, NCSU

University of Texas, San Antonio: "Microsomal Electron Transport in the Liver and Heart", James D. Otvos, NCSU

University of Tokyo-Human Frontier Science Program: "Studies in Mitochondrial Protein Synthesis," Linda L. Spremulli, UNC-CH

New Members:

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HARRIS, JAY E
 HE, HAIYIN/DR
 HENRY JR, KENNETH JAMES
 HOGLEN, JAMES C
 HUANG, LI-CHUNG
 HUBER, SCOT K
 HUMMEL, CONRAD W
 INGRAM, ROYCHELLE SHENEEN
 INHOF, CHRISTINA
 LEE, JEFFREY ROBERT
 LEVINE, SOLOMON LEON/DR
 LIANG, ZHI-WEI
 LIN, JUN
 LYNCH, MICHAEL PATRICK
 MA, HONG
 MABELLOS, JESSE C/DR
 MACNAIR, JOHN E
 MAGAT, EUGENE E/DR
 MAKOUS, MARGARET J
 MALEK, AMIR
 MANITSAS, REBECCA K
 MANTZ, ROBERT ALLEN
 MARTINEZ, JOSE P
 MILLS CRANE, HEIDI ELIZABETH
 NANTHAKUMAR, SUGANTHINI

Catalyst Awards

Twenty-four outstanding teachers of science, chemistry and chemical engineering will be honored by the Chemical Manufacturers Association's Catalyst Awards program in 1994. To date, 436 leaders in chemical and science education from the United States and Canada have been recognized by the program throughout its 38-year history.

The following awards will be given in 1994:

NATIONAL AWARDS: \$5000, medal and citation to:

- Four professors of chemistry/chem. eng. in four-year colleges
- One professor of chemistry in a two-year college.
- One high school chemistry teacher.
- One middle school science teacher.
- One elementary school science teacher

REGIONAL AWARDS: \$2500, medal and citation to:

- Four professors of chemistry in two-year colleges.
- Four high school chemistry teachers.
- Four middle schools science teachers.
- Four elementary school science teachers.

Nomination information available from the Editor. Deadline is January 28, 1994.

Huffman Ad

NEWQUIST, MARCY LYNN
 NILSSON, MELANIE
 NOE, ROBERT A
 OREILLY, STACY ANNE
 ORISKOVICH, TRACY A
 PANCOAST, DORIAN A
 PERKINSON, UOANNA LEAH
 PONDER, DAWN
 POWELL, STEVEN CRAIG
 RAMASWAMY, MUTHUKUMAR
 REMAR, GLENN J
 RICHARDSON, MICHAEL HENRY
 SANDBERG, KAY AYCOCK
 SCHNEIDER, HOWARD A/DR
 SHREVE, DAVID SCOTT/DR
 SNYDER, ANGELA L
 SUMCAD, FLORENCE
 TEMPEL, DANIEL O
 URBAN, JAMES JOSEPH
 VERNROY, CHARLES A
 WILLIAMS, ALFRED LEE
 WILLIAMS, JONATHAN DAVID
 WU, MING
 YU, UIANZHEN
 ZUBER, TERESA