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ACS SPONSORED SEMINAR

(see Page 11 for
details)



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The TarHelium

Volume 34: Number 4
Keith E. Levine, *Editor*
RTI International
3040 Cornwallis Rd.
P. O. Box 12194
RTP, NC 27709-2194

118th NORTH CAROLINA- ACS SECTIONAL CONFERENCE

Saturday, April 17th, 2004
Duke University
P.M. Gross Building

Oral and poster presentations for the conference will take place between 8:00 AM – 12:00 PM and will be followed by the awards presentations and 2004 NC-ACS Distinguished Speaker's presentation. Dr. Joseph M. DeSimone of the University of North Carolina - Chapel Hill and North Carolina State University is this year's speaker. Lunch follows the presentation. Reservations have been made for presenters; others should register at:

http://www2.ncsu.edu/ncsu/chemistry/outreach/nc-acis/registration_ls_conf.html

All with reservations will be guests of the Section at lunch. Immediately following lunch, starting at about 1:30 PM, a workshop on doing chemical demonstrations at the State Fair, October 15-24, 2004, will be held. Anyone who is considering volunteering at the State Fair is encouraged to attend the workshop. Please bring safety goggles.

Upon arrival at the meeting, please stop by the registration table to pick up a program, registration tag, and lunch ticket. Signs will direct you to the registration table within the P.M. Gross Building. The registration table will open at 7:30 AM.

(continued on page 2)

DESIMONE SELECTED AS 2004 NC-ACS DISTINGUISHED LECTURER

Dr. Joseph M. DeSimone, W.R. Kenan, Jr. Professor of Chemistry at the University of North Carolina at Chapel Hill and Professor of Chemical Engineering at North Carolina State University has been named as the 2004 North Carolina American Chemical Society Distinguished Lecturer. This award is presented annually to a Local Section ACS member



who has made significant and recognized research contributions to the chemical sciences. Dr. DeSimone will present a lecture at the upcoming North Carolina-ACS Sectional Conference at Duke University on April 17th, 2004.

At the beginning of his independent career, Dr. DeSimone invented a process for polymerizing tetrafluoroethylene in supercritical carbon dioxide. This process for making Teflon, currently employed by DuPont in a North Carolina factory, is environmentally clean and improves on previous polymerization techniques in Freon solvents, which are now outlawed. Dr. DeSimone also devised detergents that make hydrocarbons compatible with carbon dioxide. His research has been utilized by dry cleaning establishments, in this region and elsewhere, to clean greasy clothes in liquid carbon dioxide in lieu of environmentally undesirable chloroethylenes. His work in the field was recognized in 1997 when he received the Presidential Green Chemistry Award from the Environmental Protection Agency.

UPDATE YOUR MAILING ADDRESS

With each mailing of the TarHelium, there are always some returned to the section (at a fee) due to an incorrect or obsolete address. To make sure you receive your local section information on time, notify the ACS with any address changes. To update your records online, just log onto

<http://center.acs.org/applications/addrupdate/addrchange.cfm>



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**ACS
Local
Section
Conference**

(continued from page 1)

INSTRUCTIONS TO PRESENTERS

A preliminary version of the program is presented in this issue of the TarHelium. For a complete technical program, with a listing of all presentations and presentation times and locations, please refer to the Local Section website after April 13, 2004: (<http://membership.acs.org/N/NCarolina/>).

Please send program corrections to the program chair, Daniel Morgan (daniel.g.morgan@gsk.com).

ORAL PRESENTATIONS

All oral presentations will be 20 minutes, preferably a 15-minute presentation with 5 minutes for questions. As a professional courtesy, please limit your presentation to the allotted time. The chair of a session will coordinate the session. Each room will be equipped with an LCD projector, overhead projector and a solid pointer. If you prefer a laser pointer, please bring your own.

POSTER PRESENTATIONS

Poster presenters are expected to be at their posters during the session discussion times, which will be listed in the final conference program. The poster boards will be 4 feet wide by 5 feet tall and will be labeled with poster numbers and session headers. Tape will be provided.

DIRECTIONS/PARKING

Detailed driving directions and parking information can be found at the Duke University Department of Chemistry web site: <http://www.chem.duke.edu/about/directions.html>.

From Interstate 40: Take exit 279-B (NC-147 N) towards downtown Durham. Continue for 8 miles until exit 13 (Chapel Hill Street). Turn right on W Chapel Hill Street, which will become Duke University Road after approximately a half-mile. Turn right onto Towerview Road and follow to large gated parking lot behind the Gross Chemistry Building (access from Towerview Road).

From I-85: Take exit 174B (US-15 BYP S/US-501 BYP S) towards Chapel Hill. Continue for 2 miles until exit 107 (NC-751) and turn left onto NC-751/Cameron Boulevard. Turn left onto Science Drive after approximately a half-mile. Turn right onto Towerview Road and follow to large gated parking lot behind the Gross Chemistry Building (access from Towerview Road).

ACKNOWLEDGEMENTS

The NC-ACS Local Section gratefully acknowledges Duke University for hosting this event, and Dr. Richard A. Palmer and Matt Cubstead for coordinating the use of Duke University Facilities.

Daniel G. Morgan
NC-ACS Program Chair
daniel.g.morgan@gsk.com

GENERAL SESSION

Preliminary Session Schedule

Darrell S. Coleman, NC-ACS Chair, Presiding

- Presentation of 2004 Marcus E. Hobbs Awards
- Presentation of NC-ACS Chair's Award to Amanda Harper for NCW activities
- Recognition of 50-year ACS Members
- Presentation of 2004 NC-ACS Distinguished Lecturer Award

ANALYTICAL CHEMISTRY

Preliminary Oral Presentations

Characterization of Nanoparticle Bioconjugates for Intracellular Trajectory. **Huan Xie**, Stefan Franzen and Dan L. Feldheim; NCSU.

Attenuating Negative Differential Resistance in an Electroactive Self-Assembled Monolayer-Based Junction. **Ronald A. Wassel**, G. M. Credo, R. R. Fuierer, D. L. Feldheim and C. B. Gorman; NCSU.

A Probe Technique for FTIR Spectroscopy Utilizing Photothermal Beam Deflection. **Angela M. Gillikin** and Richard A. Palmer; Duke University.

Iterative Accumulation Multiplexing for Proteomics Applications. **Connell Cunningham, Jr.**, Kenneth L. Ray and Gary L. Glish; UNC-Chapel Hill.

ANALYTICAL CHEMISTRY**Preliminary Poster Presentations**

Do b3 Ions Have the Same Structure as Other b Ions? **Julia M. Allen** and Gary L. Glish; UNC-Chapel Hill.

Investigation of Solute Partitioning Into Lipid Aggregates Using Liposome Electrokinetic Chromatography. **Jason A. Barker** and Morteza G. Khaledi; NCSU.

FTIR Methodologies for the Analysis of Contaminants Removed from Polychrome Statues with an Erbium. **Sarah E. Pierce**, Peter Ingram, Myron L. Wolbarsht, Adele de Cruz and Richard A. Palmer; Duke University.

Thermodynamic Analysis of Protein-Protein Interactions using a new H/D Exchange and MALDI Mass Spectrometry-Based Method. **Petra L. Roulhac** and Michael C. Fitzgerald; Duke University.

BIOCHEMISTRY/ORGANIC CHEMISTRY**Preliminary Oral Presentations**

Oxidation of 2'-Deoxyguanosine and 8-Oxo-2'-deoxyguanosine by DMDO. **Diana E. Degen**, Louise Ball, Avram Gold, Ramiah Sangaiah and Yutai Li; UNC-Chapel Hill.

Platinum(II)-Catalyzed Intramolecular Hydroalkylation of 4-Pentenyl α -Dicarbonyl Compounds. **Cong Liu**, Xiang Wang and Ross A. Widenhoefer; Duke University.

BIOCHEMISTRY/ORGANIC CHEMISTRY**Preliminary Poster Presentations**

Extraction of DNA from Various Sources. **James F. Evans, III** and M. Storms; UNC-Pembroke.

CHEMICAL EDUCATION**Preliminary Poster Presentations**

The Department Chemical Storeroom: Experience in Outsourcing in the University Department. **John J Beres** (1), C. Schauer (1), D. Forbis (1), J. Tornow (1) and Ellen Mitchell (2); (1) UNC-Chapel Hill, (2) Fisher Scientific.

INORGANIC CHEMISTRY**Preliminary Oral Presentations**

Ruthenium Mediated C-H Activation of Heteroaromatics. **Karl A. Pittard** (1), T. Brent Gunnoe (1), Cynthia S. Day (2), Jeffrey L. Petersen (3) and Thomas R. Cundari (4); (1)

NCSU, (2) Wake Forest University, (3) West Virginia University, (4) University of North Texas.

Intramolecular Carbon-Nitrogen Bond Formation Mediated by a Ruthenium Anilido Complex. **Jubo Zhang** and T. Brent Gunnoe; NCSU.

Metal Binding Studies of α -Synuclein C-Terminal Fragment. **Lucy L. Liu** and Katherine J. Franz; Duke University.

Kinetics of Iron Release from Bacterial Transferrin. Suraj Dhungana, **D. S. Anderson** and Alvin L. Crumbliss; Duke University.

A Reductive Mechanism for Iron Release from Ferrioxamine B Facilitated by the Presence of an Fe(II) Chelator. **Kassy A Mies** and Alvin L. Crumbliss; Duke University.

INORGANIC CHEMISTRY

Preliminary Poster Presentations Synthesis and Reactivity of Ru Aryloxo and Amido Complexes. **Yuee Feng**, David M. Conner and T. Brent Gunnoe; NCSU.

Synthesis and Characterization of Electronically-Labile Molecules. **Sofi Bin-Salomon**, Kathryn E. Preuss, Marty Lemaire, Simon Lappi, Scott Brewer, Daniel L. Feldheim, Stefan Franzen and David A. Shultz; NCSU.

Late Metal Nitrogen Bonds: Synthesis and Reactivity of CU(I) Amido Complexes and Aziridination Catalysis. **Elizabeth D. Blue**, Amelia Davis and T. Brent Gunnoe; NCSU.

Synthesis and Reactivity of Octahedral and Coordinatively Unsaturated Ruthenium Amido Complexes. **David Conner** (1), T. Brent Gunnoe (1) and Tomas R. Cundari (2); (1) NCSU, (2) University of North Texas.

Details of Catalytic Olefin Hydroarylation using a Ru(II) Catalyst. **Marty Lail** (1), T. Brent Gunnoe (1), and Thomas R. Cundari (2); (1) NCSU, (2) University of North Texas.

In Silico Design and Rationale for Ferric Binding Protein Mutants. **Katherine D. Weaver** and Alvin L. Crumbliss; Duke University.

Assignment of C-13 Resonances in Cobalt Complexes Containing Triethylenetetramine, Tris(2-aminoethyl)amine, and Ethylenediamine. **ChaMarra Saner** and Mark R. McClure, UNC-Pembroke.

Platinum-Catalyzed Asymmetric Intramolecular Alkylation of Indoles with Unactivated Olefins. **Xiaoqing Han** and Ross A. Widenhoefer; Duke University.

**ACS
Local
Section
Conference**

NUCLEAR MAGNETIC RESONANCE***Preliminary Oral Presentations***

Structural Insights into Recognition of a Conserved Stem-loop at the 3' UTR of Histone mRNA by SLBP. **Roopa Thapar** (1), E.P.Nikonowicz (2), and W.F.Marzluff (1); (1) UNC-Chapel Hill, (2) Rice University.

Nuclear Magnetic Resonance Studies of Stereospecific Structural Perturbations Arising from Butadiene Adducts in Duplex DNA. **W. Keith Merritt** (2), Lubomir V. Nechev (1), Tandace A. Scholdberg (2), Constance M. Harris (2), Thomas M. Harris (2), R. Stephen Lloyd (3) and Michael P. Stone (2); (1) Transgenomics, Inc. (2) Vanderbilt University, (3) Oregon Health and Science University.

Generalization of Projection-Reconstruction NMR to n-D Spectra, and Evaluation of Reconstruction Algorithms. **Brian E. Coggins**, Ronald A. Venters and Pei Zhou; Duke University.

In-Cell Protein NMR. **Julie E. Bryant**, B. McNulty, L. Whitlow, G. Young and G. Pielak; UNC-Chapel Hill.

Strand Association of DNA Quadruplex Entities Through GpC Steps: Versatile New Folding Topology. **Mateus Webba da Silva**; DUMC.

Phage Like it HOT: Solution Structure of the Bacteriophage P1-encoded HOT Protein, a Homolog of the Theta Subunit of E. coli DNA Polymerase III. **Eugene DeRose**, Thomas W. Kirby, Geoffrey A. Mueller, Anna K. Chikova, Roel M. Schaaper and Robert E. London; NIEHS.

NMR Studies of Antimetabolite-Substituted DNA. **William H. Gmeiner**; WFUHS.

PHYSICAL CHEMISTRY***Preliminary Oral Presentations***

Protein Backbone Contributions to 4-Oxalocrotonate Tautomerase Catalysis. **G. Andres Cisneros**, M. Wang, P. Silinski, M.C. Fitzgerald and W. Yang; Duke University.

PHYSICAL CHEMISTRY***Preliminary Poster Presentations***

Probing Lipid-Protein Interactions by Si

te-Directed Spin Labeling Electron Paramagnetic Resonance. **Shanna M. May** and Tatyana I. Smirnova; NCSU.

Proton Transport within Lipid Nanotubes. **Andres Ruuge**, Alex Smirnov and Maxim Voynov; NCSU.

Phospholipid Transport by Sec14p Protein: A Spin Labeling EPR Experiment. **Grey Chadwick** and Tatyana I. Smirnova; NCSU.

pH-Sensitive Nitroxides for Site-Directed Spin Labeling. **Maxim Voynov**, Alex Smirnov and Andres Ruuge; NCSU.

Protein Interaction Energies Studied with Atomic Force Microscopy: Novel Studies of Amyloid Fibrillogenesis. **Chad J Ray**, Boris B. Akhremitchev and Dmitri Prytkov; Duke University.

POLYMERS***Preliminary Poster Presentations***

Dielectric Studies of Polymer Chains in Cyclodextrin Inclusion Compounds. **Brad J. Busche** and C. M. Balik; NCSU.

Structure and Stability of Columnar gamma-Cyclodextrin Hydrate. **Marcus A. Hunt**, C. Rusa, T. Uyar, A. Tonelli and C. M. Balik; NCSU.

Continuous Temperature-Dependent Dynamic Infrared Linear Dichroism Study on Plasticized Poly(ester urethane). **Yanqia Wang** and Richard A. Palmer; Duke University.



21st Triangle Chromatography Symposium and Instrument Exhibit

Thursday, May 20, 2004

TCDG



McKimmon Conference and Training Center
North Carolina State University
Raleigh, NC

Sponsored by
Triangle Chromatography Discussion Group
& North Carolina Section of ACS

The Symposium will feature state-of-the-art presentations in diverse areas of chromatography by nationally known experts in these areas. Attendees will have the opportunity to interact with symposium speakers on specific chromatography issues and laboratory problems as well as receive GLP-training and continuing education to maintain essential laboratory skills. A registration certificate will be provided for GLP training files.

The Instrument Exhibit features the area's largest vendor concentration for chromatographic instruments and supplies. You will have the opportunity to exchange ideas and communicate with local colleagues on trends in chromatography and related areas. There were fifty-five exhibitors at the 2003 Symposium.

Other activities include:

Exhibitors Seminars where presentations will be made on state-of-the-art topics

Poster Sessions for local university and industry research and vendor developments, including a Poster Contest competition for students

Free Lunch which is served on-site as part of the registration fee

Prize Drawings (contributed by many of the TCDG exhibitors and a Grand Prize contributed

by the TCDG); and the TCDG election of 2004 officers.

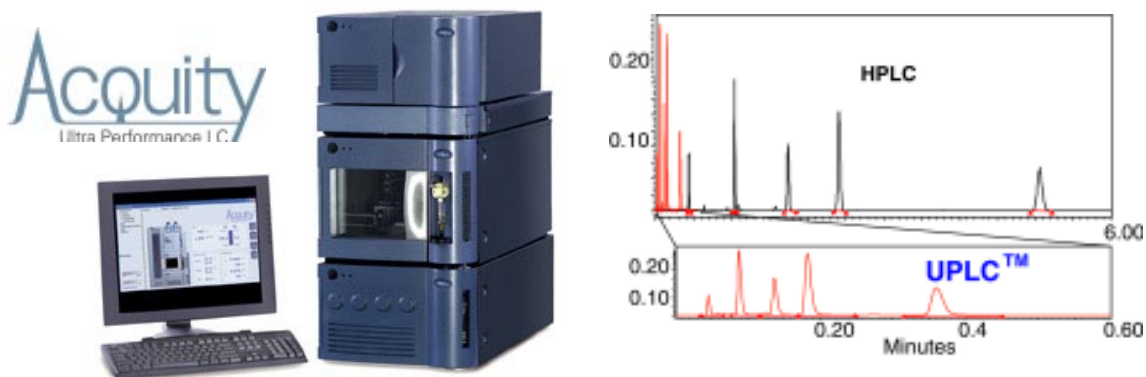
21st Symposium Keynote Speakers:

- * **Scott McLucky**, Purdue University
"Protein Identification/Characterization via Ion Trap Analysis of Whole Protein Ions"
- * **Pierre Monet**, Scynexis Chemistry and Automation, Inc
High-Throughput Purification and Characterization (HTPC) of Compound Libraries
- * **Steve Castellino**, GlaxoSmithKline
The Matrix Loaded: Finding Drug Metabolites in Biological Fluids
- * **Jonathan Sweedler**, University of Illinois – Urbana Champaign
"Understanding Neurochemistry Neuron by Neuron: Separation Tools for Single Cell Analysis"
- * **Tim Croley**, Center for Disease Control
"Chemical Warfare Agents: From Event to Analysis"
- * **David Hage**, University of Nebraska – Lincoln
"Chromatographic Immunoassays & Biointeraction Analysis: New Approaches for the Study of Biological & Environmental Agents"

For further information for potential attendees and vendors, visit the TCDG web site at: <http://www.RTPnet.org/tcdg>.

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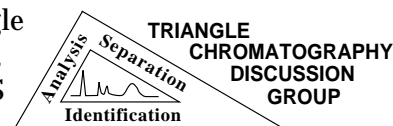
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Please visit us at Booths 36, 37, & 38 at the 21st Triangle Chromatography Symposium and Instrument Exhibit, Thursday, May 20, 2004 to see the latest in LC and MS



CHAO REPORTS ON RECENT NEWS FROM THE COMMITTEE ON PATENTS AND RELATED MATTERS – PART II

James L. Chao, as one of the North Carolina Section councilors, serves at the National level on the ACS CPRM (Committee on Patents and Related Matters). Jim works at IBM to help identify and promote emerging technologies from IBM's worldwide R&D laboratories for commercialization through www.ibm.com/alphaworks.



ACS Nominee Selected for National Inventors Hall of Fame

- Norbert Rillieux, an African-American sugar chemist, was recently selected for the National Inventors Hall of Fame. He was responsible for improving the efficiency of sugar refining through the successful application of his "evaporation in multiple effect" invention in 1845. This process, still widely used throughout the food industry, has also been applied to waste liquid recovery in factories. This invention catapulted the U.S. into a leading role in global sugar production and helped to transform sugar from a luxury item to a commonplace one.

A National Historic Chemical Landmark honoring Norbert Rillieux was established in New Orleans in 2002, where the multiple-effect evaporator under vacuum was invented. The Awards Committee

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CHAO
Report
Part II

recommended this nomination to the ACS Board of Directors. A second chemist inventor, Dr. Lloyd Hall, was also named for his pioneering work with food preservatives.

Patent Fee Diversion - Earlier this year, Congress passed H.R. 1561, which addresses the USPTO patent fee diversion concerns of inventors. Collected fees have been by Congress for items not related to improving the patent process and reducing long pending periods. Under the new plan, fees collected beyond the Congressional appropriation will be returned as rebates. The ACS has taken a long-standing position criticizing this fee diversion.

European Patent Treaty and Worldwide Harmonization

- U.S. Patent Law differs in several very important ways from similar laws in many other countries around the world. Major differences include the patent process itself, the determination of what is patentable, the First to invent (U.S.) vs. First to file question, the separate (European) search and examination process, and the treble damages (U.S.) awarded. These differences beg the question of why harmonization wouldn't lead to better protections in an increasingly global economy. The U.S. Congress is apparently holding off on action until many of these differences become more resolved, but the general prediction is that the U.S. will be best served from Patent Law harmonization.

Software Patents - Europe is currently revisiting the issue of whether software patent protection encourages or stifles innovation from smaller companies. This heated debate positions larger software corporations against the many smaller companies that create new software products. The smaller companies feel that corporations that hold a large number of patents can successfully block the commercialization of patents held by companies with a much smaller patent portfolio, particularly when cross-licenses are generally negotiated. The U.S. has fairly recently allowed software patents with some limitations.

Prescription Drug Costs - The debate continues between generic drug makers and major pharmaceutical companies. The Committee on Patents and Related Matters has been following this battle closely, as much of it has been fought on the basis of patent and other legal rights. On one hand, the long established patent framework has served the U.S. extremely well by granting inventors the rights to their novel inventions for a fixed period of time, in exchange for teaching the

art to the general public. While this is a simple idea, the definitions of prior art, novelty, etc. continue to evolve as science and technology change in ways never imagined before. This has led to recent discussions on the patentability of software, biological organisms, and business processes from the free Internet. Drug companies have succeeded in extending their rights through continuances, new applications for drug treatments, analog differences, derivatives, and the lengthy FDA approval process.

On the other hand, generic manufacturers are poised to introduce their products as soon as patent protection is lifted, and can offer the public blockbuster drugs at a far lower cost. The FDA, which regulates the drug industry, is also sensitive of the need to make high-cost drugs more accessible to the general public. In the end, the battle for money to support research costs vs. adequate profits for the industry is truly a social question. The battlefield is with legislatures that make the laws and will be fought by way of the patent court and with FDA regulators.

Closing - As much as the committee tracks current legislation and debates the pros and cons of patents and their impact on the chemical enterprise, the membership is very much like the dichotomy of the American public, with those that hold very strong opinions one way or the other on what is best for the Society. Hence, it is rare that we recommend that ACS take a position, except where it is obvious that our vested interest in Chemistry or Science could be harmed. Instead, we tend to report the pros and cons to our Board of Directors, other committees, and the membership at large. I am happy to report this to all of you and remind you that the ACS Division of Chemistry and the Law serves chemists who have an interest in the legal and intellectual property ramifications of chemical innovation. Finally, I would like to let you know that I am involved in organizing an invited symposium at SERMACS 2004 in RTP in November on Current Developments in Intellectual Property.

METABOLON AIDS DRUG DISCOVERY AND EARLY DISEASE DIAGNOSIS

As part of a new series, each issue of the TarHelium will spotlight a company that employs Local Section ACS members. The

**Metabolon
Aids Drug
Discovery**

**ACS
National
Historic
Chemical
Landmark**

objective of these spotlight articles will be to inform the membership of the breadth of chemistry in our Section. If you are interested in submitting a spotlight article, please contact Keith Levine (levine@rti.org).

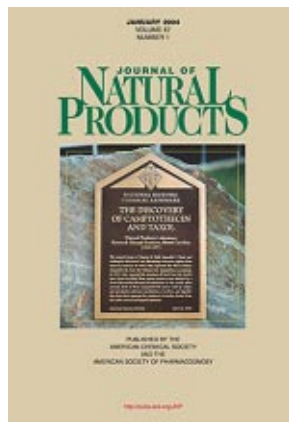
Since its inception in 2000, Metabalon has specialized in applying the field of metabolomics, the study of the metabolites (glucose, ATP, etc.) contained in human cells, tissues, or organs, to facilitate the drug development process and early diagnosis of disease. The company analyzes samples using a variety of mass-spectrometry based instrumentation and then processes the collected data with proprietary software and algorithms. Chris Beecher, Vice-President of Technology and Biochemistry and 20-year ACS member, said that this method of analysis is more quantitative than proteomics and genomics because of the relatively limited number of human metabolites. "There are less than 3,000 metabolites in the human body," he said, "and this limited number of compounds makes metabolomics a more quantitative method of analysis and allows us to compile more complete sample profiles."

Metabalon has applied its technology to expedite various stages of pharmaceutical product development by clarifying biochemical changes that occur from disease and disease treatments. The company's technology has also been utilized to support biomarker research. In a recent collaboration with the Day Neuromuscular Research Center at Massachusetts General Hospital, Metabalon identified biomarkers for Amyotrophic Lateral Sclerosis (Lou Gehrig's disease) that may be used to diagnosis and treat the condition before its onset. Metabalon is also currently participating in biomarker research for Alzheimer's disease and Parkinson's disease.

For additional information about Metabalon, visit its website at <http://www.metabalon.com>.

MORE RECOGNITION FOR ACS NATIONAL HISTORIC CHEMICAL LANDMARK

As many readers know, the North Carolina Section of the American Chemical Society nominated RTI International for a National Historic Chemical Landmark for the discoveries of camptothecin and Taxol by Drs. Monroe E. Wall, Mansukh C. Wani, and colleagues. Thanks to the Section's efforts, RTI received one of these prestigious landmarks in April 2003. More information on these fewer than 50 sites around the world is available at <http://center.acs.org/landmarks/about2.html>.



The Journal of Natural Products, co-published by the American Chemical Society and the American Society of Pharmacognosy, is honoring Dr. Wani and the memory of the late Dr. Wall by featuring a photograph of the landmark on the journal's cover for the six issues from January through June 2004. The February issue is dedicated to Drs. Wall and Wani, and features several review papers, with one based in part on the original application for the RTI landmark and highlighting the importance of the two compounds.

Submitted by Sharla Flora
RTI International



Morrison, Sturgeon Named 2004 Marcus E. Hobbs Award Recipients

Marcus E. Hobbs awards will be presented to Robert W. Morrison, Jr. and Bradley E. Sturgeon at the 118th North Carolina – ACS Sectional Conference at Duke University on April 17th, 2004. This award was established in 1988 to recognize members who have made significant, long-term contributions to the Local Section of the American Chemical Society.

Since receiving his Ph.D. in organic chemistry from Princeton University, Robert W. Morrison, Jr. has worked in chemistry for nearly 40 years in the Triangle area. He retired in 1995 after five years with Chemstrand Research Center, Inc. (Monsanto) and 26 years with Burroughs Wellcome, where he was Vice-President of Bioanalytical Sciences and Director of the Division of Organic Chemistry. Since his retirement, Dr. Morrison has served North Carolina State University in several capacities, including Executive Officer for the Department of Chemistry and the Department of Marine, Earth, and Atmospheric Sciences.

Dr. Morrison has served the Local Section of the ACS as Chair (1993), Councilor (1996-present), and as a member of the Steering Committees for the 1998 and the upcoming 2004 Southeastern Regional ACS Meetings in the Research Triangle Park. The organization of topical discussion groups under the Local Section ACS umbrella as the primary local ACS meetings was initiated during his tenure as Chair. He currently serves on the Local Section Executive Committee and the Membership Affairs Committee for the ACS National Council.

Since moving to the Triangle area in the mid 1990's, Dr. Bradley E. Sturgeon held a post-doctoral fellowship at NIEHS for several years before accepting teaching

positions at the North Carolina School of Science and Math and the University of North Carolina at Chapel Hill.

Dr. Sturgeon was actively involved in planning the 1998 Southeastern Regional ACS Meeting, working on organizing exhibits and local transportation. He served as the Local Section Chair in 2000 and chaired the 113th Local Section Conference, where he started the tradition of making the program book a resource for the membership. Dr. Sturgeon was also the local coordinator for the 116th Local Section Conference, hosted by the North Carolina School of Science and Math.



Bradley E. Sturgeon

Near the end of his term as Chair, he started his service as editor of the TarHelium. Dr. Sturgeon regularly worked as a volunteer for the Local Section at the North Carolina State Fair and served on the ad hoc committee that oversaw the Project SEED Program.

**Marcus E.
Hobbs
Awards**

**Recruiting
Opportunities**

RECRUITING OPPORTUNITIES AT THE ACS SOUTHEAST REGIONAL MEETING

Looking to recruit chemical professionals in your region? Plan to participate in the RECH Employment Center at the ACS



Southeast Regional Meeting in Durham, NC, November 10-11, 2004, where you can post your position(s) and interview potential job candidates.

For information on registration and fees, please contact the Department of Career Services at 1-800-227-5558, ext. 6209, or visit www.chemistry.org/careers.

Call for
Nominations
NC ACS
Scholarship
Awards

CALL FOR NOMINATIONS – NC ACS 2004 SCHOLARSHIP AWARDS



Scholarships of up to \$1,000 will be awarded to undergraduate students who will actively be conducting research in the chemical sciences. The exact scholarship amount will depend on the number of awards. Only undergraduate students within the North Carolina Section of the ACS are eligible.

Scholarship money can be used to supplement the needs of the student's work in the laboratory in the form of research reagents, copies, books, and computer software. The scholarship money can not be used for tuition or housing costs! The scholarship grant becomes available for work beginning as early as the summer of 2004, and expires at the end of the spring semester in 2005.

Application Deadline: *April 23, 2004.*

Applicants are strongly encouraged to use the on-line scholarship application form found at the following URL:

<http://membership.acs.org/N/NCarolina>

or contact Bryce Chaney
(Bryce_Chaney@bd.com) for application instructions.

NC SECTION TO HOST ACS SPONSORED SEMINAR

The North Carolina Section will be hosting an upcoming seminar as part of the American Chemical Society's speaker service. Food will be provided for ACS members and guests.

Date: Tuesday, April 13, 2004

Speaker: Dr. Robert Bates
University of Florida

Topic: Pitfalls and Pleasures of
Southeastern Winemaking

Time: 6:00 pm

Location: GlaxoSmithKline, 5 Moore Dr.
RTP

For additional information about this seminar, please contact Darrell Coleman
(dscoleman@lilly.com).



NATIONAL CHEMISTRY WEEK—GETTING THE BALL ROLLING



National Chemistry Week (NCW) will be here sooner than you think, and planning is already underway for local and national activities. The theme for NCW 2004 is "Health and Wellness" and the unifying event is hosting a "health fair." Bayer Pharmaceuticals is aiding in this effort by donating Clinistix and Multistix (urine test strips) for use by local sections. The ACS Office of Community Activities (OCA) staff is writing activities which use these strips to demonstrate how diseases like diabetes are detected. OCA is currently researching groups that can help us to host a health fair. With the current emphasis that health and wellness is getting in the media, this will be an ideal opportunity for us to contribute to our community with pertinent activities and relevant information. Anyone with ideas related to the NCW celebration is invited to email ncw@acs.org. Information is currently on the (chemistry.org/ncw) and new information will be posted as it becomes available.

Theme: **Health and Wellness**

Date: **October 17-23, 2004**

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**SERMACS 2004 AT RTP,
NOVEMBER 10th – 13th**

<http://membership.acs.org/S/SERM2004>



The 2004 Southeastern Regional Meeting of the ACS (SERMACS 2004), hosted by the North Carolina Section, will be held in Research Triangle Park at the Sheraton Imperial Hotel from November 10th – 13th. As a new feature for the Region, this will be a joint meeting with the 2-Year College Chemistry Committee (2YC3).

The planning committee has intensified its activities as the meeting rapidly approaches. To date, there are 31 invited symposia and each is planned to have a corresponding general session. The topics are wide ranging and include the GlaxoSmithKline Frontiers in Chemistry and Medicine Symposia, chemical education, laboratory automation, environmental chemistry, protein chemistry, and nanoscale materials. Highlights also include sessions and a banquet honoring Ernest Eliel for his many contributions to chemistry, to the ACS and to our local section, as well as a plenary lecture by Nobel Laureate John Fenn. In addition, there are several mixers, luncheons, banquets and a number of workshops, including an ACS short course.

Included in the plans are a **COMMERCIAL EXHIBITION** (for information, contact John Hines),

hines@rti.org

and a meeting in miniature for undergraduates that will include a **GRADUATE SCHOOL FAIR** (contact Art Rodriguez),

rodriguez@mail.ecu.edu

There is still time to sponsor one of these sessions or events; just contact Sol Levine, **GENERAL CHAIR**
serm2004@mindspring.com.

Abstract submission and registration will be on-line beginning sometime in April. Check the website shown above for continuing information. If you would like to be involved in helping with this meeting, contact Sol at the email address above.

**NEW CAREER MANAGEMENT
TOOLS ONLINE**

Need to give your job search a shot in the arm? Visit chemistry.org/careers and explore Advanced Career Tools (ACT), a new Department of Career Services program that offers a range of ways to help you manage your career.

For example, if you are considering changes in your career, planning the next steps in your career, or just feeling stuck in your current role, take advantage of the Behavioral Style Inventory and get a one-paragraph summary analysis at no charge. This assessment takes just 10 minutes to complete. Understanding your strengths provides you with greater confidence in interviews and enhances your ability to communicate in the workplace.

The fee-based tools are discounted for members. They include personal career coaching that can provide one-on-one assistance in areas such as: learning to succeed in performance reviews, developing skills in negotiating salary, and obtaining a detailed, online analysis of how you typically react to problems and challenges at work.

Other benefits to members are e-mail access to a career expert for prompt answers to career issues. ACT also provides automatic e-mail alerts on topics of specific interest to the member. Whether you're facing a career transition, interview, performance review, relocation, pending retirement or other life-changing career challenge, ACT will help you understand the issues involved.

**SERMACS
2004**

The TarHelium Volume 34: Number 4

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Dated Material - Please Deliver Promptly

THE TARHELIUM

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.

NC Section Electronic Communications

The NC Section of the ACS offers two services which may be of interest to members: 1) a listserver and 2) a web page: <http://membership.acs.org/N/NCarolina/>.

The listserver is used for ACS meeting announcements and for job announcements. Unlike some lists, the number of postings is quite limited--usually no more than 3 or 4 a month. This list is moderated, which means that all messages must be approved by the list owner before they are posted. If you have a valid opening within the NC Section, please mail an appropriate announcement to bill_switzer@ncsu.edu. Very occasionally openings outside of the NC Section are posted. If you wish to subscribe, address mail to: mj2@lists.ncsu.edu. The subject field is ignored, but in the message field type: subscribe NCACS. Your return address becomes your subscription address. These instructions as well as those for removing your name are linked to the web page.

If you have not looked at the web page recently, please do so. The Executive Committee is committed to making this page a useful resource. It is constantly being updated to include new information. Please feel free to suggest additional links and PLEASE offer to take responsibility for maintaining one or more of the local links. Contact: bill_switzer@ncsu.edu. ■