Monthly Meeting
Medicinal Chemistry Symposium, Vendor Fair and Career Services

Education Night
May 11, 2006

National Chemistry Week Events

Local Section Websites
by Don Rickter
National Chemistry Week Events

Celebrating
Your Home – It’s All Built on Chemistry!!

October 22, 2006 – Wellesley College Science Center

Phyllis A. Brauner Memorial Lecture by Dr. Bassam Shakhashiri

Dr. Bassam Shakhashiri is a Professor of Chemistry at the University of Wisconsin-Madison and is the William T. Evjue Distinguished Chair for the Wisconsin Idea. Professor Shakhashiri has captivated audiences with his scientific demonstrations at a variety of locations, including Boston’s Museum of Science, the National Academy of Sciences, and the Smithsonian’s National Air and Space Museum in Washington.

Room 277, 11 am – 12 pm and 2 pm – 3 pm

The Sunday presentations are free and open to the public. Tickets are available on a first come, first serve basis, though reservations are recommended. To reserve tickets, please contact Marilou Cashman either via email mcash0953@aol.com (preferred) or by phone 1-800-872-2054 before October 19, 2006. Tickets will be available for pick-up outside of the Science Center on the 22nd. Parking is free. For directions to Wellesley College, please visit http://www.wellesley.edu/Admin/travel.html. While at Wellesley, a visit to the arboretum and greenhouses (which are open to the public) is a must.

For more information, visit http://www.wellesley.edu/FOH/greenhouse.html.

Kicking off National Chemistry Week 2006 festivities

Join us in a variety of hands-on activities related to the yearly theme. Taking place from 10 am – 3:30 pm on October 22, 2006 inside the Wellesley Science Center. For more information, please visit www.nesacs.org.

October 28, 2006

Boston Children’s Museum

NCW volunteers will be on hand to perform demonstrations and assist in hands-on activities related to the yearly theme.

Museum of Science, Boston

NCW volunteers will be on hand to perform demonstrations and assist in hands-on activities related to the yearly theme.

October 22 – 28, 2006

K-12 students participate in the NCW poster competition. Grades 9-12 may participate in the puzzle contest as well. See www.nesacs.org for detailed information.
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Cover: Dr. Michael Block, AstraZeneca R&D, evening speaker at the September meeting. He will speak on “The Development of Selective Aurora A and B Inhibitors” as part of the symposium on Oncology. (Photo by Lori Perrin.)

Deadlines:  November 2006 Issue: September 15, 2006
December 2006 Issue: October 13, 2006

The Nucleus is distributed to the members of the Northeastern Section of the American Chemical Society, to the secretaries of the Local Sections, and to editors of all local A.C.S. Section publications. Forms close for advertising on the 1st of the month of the preceding issue. Text must be received by the editor six weeks before the date of issue.

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Call for Nominations

Gustavus John Esselen Award for Chemistry in the Public Interest

The Northeastern Section (NESACS) is inviting nominations for its prestigious Gustavus John Esselen Award for Chemistry in the Public Interest. This award is given annually to a chemical scientist whose scientific and technical work has contributed to the public well-being and has thereby communicated the positive values of the chemical profession. The significance of this work should have become apparent within the five years preceding nomination. The awardee shall be an existing resident of the United States or Canada at the time of the nomination.

There is no limitation to the field of chemistry. The selection committee focuses on the general public recognition of the work, as well as its scientific/technical significance.

The Award consists of a bronze medal and the sum of $5,000. Travel expenses incidental to the conferring of the award will be reimbursed. The award will be presented at the April 12, 2007 meeting of the Section. The Awardee is expected to deliver an address related to the work for which the honor is conferred.

Nominations shall include the names of two co-sponsors, a biography of the nominee, a description of the work, which has been recognized as communicating the positive values of the chemical profession, along with copies of pertinent articles and popular news and feature articles indicative of public interest. Joint nominations are acceptable. Further information is available at www.nesacs.org.

Nominations Due October 15, 2006. Award recipients will be notified by February 1, 2007. Nominations shall be directed to: Dr. Robert Langer, c/o Karen Piper 19 Mill Rd., Harvard, MA 01451. Inquiries may be made to Robert Langer, Tel. (617) 253-3107;

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Dishman Pharmaceuticals
And Chemicals Limited
Houghton Chemical Company
Organix, Inc.

Save the Date!
The 5th Annual New England Environmental Research Symposium
Saturday, November 11, 2006
9:00 am – 3:00 pm
Bridgewater State College

Undergraduate and graduate student research posters in all environmental disciplines are welcome.

Please email Ed Brush (ebush(at)bridgew.edu) to add your name to our email distribution list. A formal “Call for Abstracts” will be sent electronically in mid-September.

e-mail: rlanger(at)mit.edu
or Karen Piper: Tel. (978) 456-8622
e-mail:piper28(at)attglobal.net

New Members

Invitation to attend a meeting

You are cordially invited to attend one of our upcoming Section meetings as a guest of the Section at the social hour and dinner preceding the meeting.

Please call Marilou Cashman at 800-872-2054, 508-653-6329 or: Mcash(at)aol.com by noon of the first Thursday of the month, letting her know that you are a new member.

Northeastern Section–American Chemical Society Vendor Fair

The Northeastern Section of the American Chemical Society will hold a vendor fair jointly with the Medicinal Chemistry Symposium on Thursday, September 21, 2006 3-7 pm at the Holiday Inn Select, 15 Middlesex Canal Park Road, Woburn, MA. If your business provides technical products or services for pharmaceutical, medicinal, analytical chemists, biochemists or other related technical disciplines, this is your chance to network with over one hundred qualified prospects. This is a chance to meet face-to-face with existing customers, to generate new business opportunities and to introduce new products and services.

If you are interested in this vendor fair please contact: Marilou Cashman, NESACS Office 1-800-872-2054, mcash0953@aol.com
Cost: $400 per 6-foot table (address checks to NESACS).
Monthly Meeting

The 871st Meeting of the Northeastern Section of the American Chemical Society organized by the Medicinal Chemistry Section of NESACS

Symposium: NEW TRENDS IN ONCOLOGY (Part II)

Thursday - September 21, 2006

Holiday Inn Select Hotel, 15 Middlesex Canal Park Road, Woburn, MA

2:30:4:30 p.m.: In conjunction with the Symposium: Career Services Program and Resume Reviews. Presentations by Mukund Chorghade, Jennifer Sass and Megan Driscoll of Pharmalogics Corporation. Please bring a copy of your CV.

3:00:7:00 p.m.: NESACS Vendor Fair

Symposium Program:

2:45 pm Refreshments
3:00 pm Welcome
   Raj (SB) Rajur, Program Chair
3:05 pm Introductory Remarks
   Norton Peet, North Andover, MA
3:15 pm TBA
4:00 pm TBA
4:45 pm Toward Improved Topoisomerase I Inhibitor Anticancer Agents; Beverly A. Teicher, PhD, Vice President, Oncology Research, Genzyme Corporation, Framingham, MA.
5:30 pm Novel Small-Molecule Inhibitors of Oncogenic Protein Kinases: Tackling Selectivity and Resistance; Tomi Sawyer, Senior-Vice President, Drug Discovery, ARIAD Pharmaceuticals, Cambridge, MA.
6:15 pm Social Hour
6:45 pm Dinner
7:45 pm The Development of Selective Aurora A and B Inhibitors, Michael Block, Director of Chemistry, Cancer Research Center, AstraZeneca R&D, Boston, MA.

Dinner reservations should be made no later than 12:00 noon on Thursday, September 14, 2006. If you prefer to pay at the door, please contact MariLou Cashman at (800) 872-2054 or (508) 653-6329 or mcash0953@aol.com. Reservations not canceled at least 24 hours in advance must be paid. Members, $28.00; Non-members, $30.00; Retirees, $15.00; Students, $10.00. Anyone who needs handicapped services/transportation, please call a few days in advance so that suitable arrangements can be made.

Directions to Holiday Inn Hotel (http://www.radisson.com/woburnma)

A. From Boston - Cambridge - Points North: Take Route I-93 to Route 95/128 West. After 1 mile, take Exit 35 South to Route 38 (Main Street). *After about 500 feet at the traffic light, turn right into Middlesex Canal Street to the hotel entrance.
B. From the West: Take Route 95/128 North to Exit 35 South (Route 38 - Main Street. Follow directions from * above.

THE PUBLIC IS INVITED

Beverly Teicher
Toward Improved Topoisomerase I Inhibitor Anticancer Agents.

Topoisomerase I is a nuclear enzyme involved in unwinding DNA during replication. The Topo I enzyme binds directly to DNA and produces a single strand-break allowing strand passage and then relegation to restore the duplex DNA. Topo I is essential for cell proliferation but is very difficult to over-express in cells. Camptothecin is a natural product that inhibits Topo I in such a way that the cleaved DNA/enzyme/camptothecin complex forms a stable unit which is called the “cleavable complex,” thus trapping the cell with DNA strand breaks, a lethal event. Two camptothecin derivatives, topotecan and irinotecan, are approved anticancer drugs. A limitation of these agents results from pH-sensitive opening of the lactone ring of the camptothecin structure. The ring-opened form of the molecules is toxic to normal tissue but is not an effective Topo I inhibitor. We are exploring the possibility that non-camptothecin Topo I inhibitors can be developed with an improved therapeutic index and increased broad spectrum anticancer activity.

Beverly A. Teicher is Vice President of Oncology Research at Genzyme Corporation, Framingham, MA. Upon completion of her Ph.D. in Bioorganic Chemistry at the Johns Hopkins University, Dr. Teicher accepted a postdoctoral position at Yale University School of Medicine. Her postdoctoral training focused on the development of models to study the response of hypoxic cells to anticancer therapies and synthesis of potential hypoxic cell selective cytotoxic agents. Dr. Teicher joined the staff of the Dana-Farber Cancer Institute as an Assistant Professor of Pathology and rose to the rank of Associate Professor of Medicine and Radiation Therapy, Harvard Medical School at the Dana-Farber Cancer Institute and Joint Center for Radiation Therapy. Dr. Teicher pioneered the application of perfluorochemical and hemoglobin oxygen delivery agents in cancer therapy and

Continued on page 8
Inorganic Colloquium at UMass Dartmouth

The 11th Boston Regional Inorganic Colloquium (BRIC-11) will be held on Saturday, October 14, 2006 at UMass Dartmouth, North Dartmouth, MA.

Invited speakers are: Ms. Katherine Lovejoy (MIT), Professors Zhifeng Ren (Boston College), Dwight Sweigart (Brown University), and Klaus Theopold (University of Delaware). Registration will be at 9:00 am and talks will run from 9:30 am – 4:15 pm. Lunch will be served at noon. Driving instructions as well as a campus map can be found on the UMass Dartmouth homepage (http://www.umassd.edu/directions)

Individuals interested in attending are asked to please contact Jgolen(at)umassd.edu (508-999-8245) or Mguo(at)umassd.edu (508-999-8871) before October 4th. The colloquium is sponsored in part by BRIC, EPIX Pharmaceuticals, STREM Chemicals, and UMASS Dartmouth.

Local Section Websites

by Don Rickter

Which local section of the American Chemical Society had the first website? Websites are now a powerful tool for communication by individuals and all kinds of organizations, but they have been around only for a decade or so. My memory is that the Cincinnati Section and the Virginia Blue Ridge Section were among the pioneers. These two were up and running by August 1995. This was at a time in the primitive past when most companies did not have web sites and very few individuals did. The number of web sites of local sections doubled by November 1995 with the addition of Ole Miss and NE Oklahoma. There was another doubling, to eight sections, in a few weeks. There were sixteen by June 1996. Now most of the 189 local sections (and the 33 ACS Divisions) have at least one website each. Their styles vary, but all are useful, valuable resources for communication within our chemical society and related sites.

Our NESACS site was first up on 16 September 1996. We can celebrate its tenth anniversary this month. We are grateful to Arthur Obermayer for his vision, showing what internet presence can do for our members. He and Betty Solbjor created our first website at a time when it was a difficult pioneering project. There were no templates available. Arthur was aided by a task force chaired by Doris Lewis. Its members included Myke Simon, Don Rickter, and the late Stan Israel. The Board of Publications at that time was chaired by Joe Billo. He was aided by Joe Lima, Doris Lewis, Myke Simon, and the late Arno Heyn.

I found in my archives the content of our first loading of our website. Today it looks primitive — just twelve pages of text like that published in The Nucleus — with no pictures or graphics. The officers were listed (with Pat Samuel as Chair and Marty Idelson as Chair-elect). The big event was the October meeting at Regis College, with Dr. James Thackeray of Shipley Company speaking on Photoresists.

All of our Websters, Webmasters, and Web Divas — including Sathish Rangarajan, Samuel P. Kounaves, Rachel Schindler, Frank R. Gorga, Michele Mandrioli, Marietta Schwartz, and, of course, Arthur Obermayer and Betty Solbjor, deserve big thanks from all of us for keeping our website interesting, accurate, and timely.

I thank Prof. Emel Yakali of the University of Cincinnati for sharing the history of the website of the Cincinnati Section. Their March 15, 1995, meeting was the first one to be placed on the website meeting archives. Their newsletter CINTACS

Continued on page 7
Brandeis Chemists Honored
Brandeis University chemists Dagmar Ringe and Greg Petsko received the Abram L. Sachar Award on June 8, 2006. Dagmar Ringe is the Lucille P. Markey Professor of Biochemistry and Chemistry. Greg Petsko is the Gyula and Katica Tauber Professor of Biochemistry and Molecular Pharmacodynamics. The award is presented by the Brandeis University National Women’s Committee and honors individuals who have made outstanding contributions to education and to the advancement of knowledge.

Ringe and Petsko are the first Brandeis faculty members to receive the Sachar Award and Petsko is the first man to be so honored.

Established in 1968, the Sachar Award is the highest honor bestowed by the Brandeis University National Women’s Committee. Past recipients include opera director Sarah Caldwell, actress Helen Hayes, medical physicist and Nobel laureate Rosalyn S. Yalow, and former Surgeon General M. Jocelyn Elders.

Conjunction of Phoenixes
By Don Rickter
Has anyone else noticed the conjunction of phoenixes this year? Our national meetings in 2006 are held in two great cities with interesting histories. Atlanta rose from the ashes of war and adopted the phoenix as its symbol in 1888. San Francisco has had a city flag since 1900, which pictures the bird rising from the flames — not of 1906, which was in the future, but of the disastrous fire of 1852.

Of course, we chemists use the phoenix as a symbol of the interconversion of matter and energy, and as the emblem of the American Chemical Society.

NOTE ADDED:
New Orleans, where we had our 2003 Spring National Meeting, also uses the phoenix as a symbol of its renewal after Katrina.

Dreyfus Foundation Award to Northeastern Professor
Penny Beuning, Assistant Professor of Chemistry & Chemical Biology at Northeastern University has been named as a recipient of the prestigious 2006 Camille and Henry Dreyfus Foundation New Faculty Award. Penny joined Northeastern July 2006 following postdoctoral research with Professor Graham Walker (MIT Biology) and received her doctorate in chemistry from the University of Minnesota in 2000, working with Professor Karen Musier-Forsyth. Professor Beuning’s research group is investigating repair pathways linked to DNA polymerase enzymes and uncovering new mechanisms of resistance to DNA damage. Outside of the laboratory, Penny has served as President of the Boston chapter of Graduate Women in Science [GWIS] since 2002.

Local Section Sites
Continued from page 6
came out quarterly at the time. The Spring 1995 issue had a statement by the then chair, Jim Hershberger, that the section already had a website, created by Jeff Nauss. The Virginia Blue Ridge Section home page goes back to 1995. The current webmaster, Gwen Sibert, has records going back to 1998, but we have been unable to document the beginning of the website.

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tumor imaging. Dr. Teicher also elucidated mechanisms by which solid tumors are resistant to antitumor agents, especially antitumor alkylating agents. Dr. Teicher hypothesized that tumors growing in a host would develop drug resistance through mechanisms involving the host and established a model system where drug resistance in a solid tumor was developed in vivo. Dr. Teicher went on to incorporate antiangiogenic agents into solid tumor treatment paradigms. In July 1997, Dr. Teicher was appointed Research Advisor in Cancer Drug Discovery at Lilly Research Laboratories. While there she founded and chaired the Tumor Microenvironment Action Group, chaired the Cell Cycle Action Group, and headed the In Vivo Tumor Models Group. Dr. Teicher joined Genzyme Corporation in January 2002. Dr. Teicher is a very active member of the international scientific community. She has authored or co-authored more than 400 scientific publications, has edited seven books, is senior editor for the journal Clinical Cancer Research and is series editor for the Cancer Drug Discovery and Development book series.

**Tomi Sawyer**

**Novel Small-Molecule Inhibitors of Oncogenic Protein Kinases: Tackling Selectivity and Resistance**

Oncogenic protein kinases are key therapeutic targets for drug discovery. X-ray crystallographic, biochemical and cellular studies have revealed both structural and mechanistic properties of several oncogenic protein kinases. In an increasing number of cases, resistance to inhibition has been shown to involve critical amino acid mutations in the ATP or proximate binding sites for small-molecule inhibitors. These challenges are being addressed by both chemical biology and drug design strategies. A case example is T315I mutation of Bcr-Abl kinase and drug discovery campaigns focused on the generation, optimization and development of novel small-molecule inhibitors of Bcr-Abl kinase and mutants thereof. The clinical significance of selectivity and resistance will be discussed in terms of future directions.

Tomi Sawyer received a B.Sc. degree in Chemistry at Moorhead State University (now Minnesota State University–Moorhead) and Ph.D. in Organic Chemistry at the University of Arizona. His research has integrated synthetic chemistry, drug design, structural biology, chemoinformatics, biochemistry, cell biology and in vivo disease models with a focus on cancer. Tomi’s drug discovery track record includes contributions to clinical candidates and/or noteworthy molecular tools for several therapeutic targets, including GPCR receptors (melanocortin), aspartyl proteases (renin and HIV protease), and protein kinases (Src and Abl). He has published more than 200 scientific articles, reviews, commentaries, monographs and books. Tomi is an inventor with more than 50 issued patents and patent filings. He worked at Upjohn Company and Parke-Davis/Warner-Lambert (now both Pfizer Global Research & Development), and is currently Senior-Vice President, Drug Discovery, at ARIAD Pharmaceuticals. He is concurrently Adjunct Professor, Chemistry, as well as Biochemistry & Molecular Biology, University of Massachusetts and also Adjunct Professor, Cancer Biology, at University of Massachusetts School of Medicine. Tomi has served on the highlights advisory panel of Nature Reviews Drug Discovery and the editorial advisory boards of Trends in the Pharmacological Sciences, Expert Reviews in Molecular Medicine, Expert Opinion on Investigational Drugs, Journal of Medicinal Chemistry, Chemistry and Biology, Current Medicinal Chemistry (Anti-Cancer Agents), Current Organic Synthesis, Expert Reviews in Molecular Medicine, Expert Opinion on Therapeutic Patents (Oncology), Drug Design and Discovery, Pharmaceutical Research, Molecular Biotechnology, and Biopolymers (Peptide Science). Most recently, he has been appointed Editor-in-Chief, Chemical Biology & Drug Design.

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Continued from page 5

Continued on page 11
Interested in starting an ACS-Sponsored High School Chemistry Club?

The History
In the Fall of 2006, the Education Division of the American Chemical Society (ACS), decided to further its role in cultivating interest in chemistry among high school students by piloting ACS-Sponsored High School Chemistry Clubs. Almost 40 self-selected high school teachers from all over the country were accepted as sponsors for the High School Chemistry Clubs pilot program for 2005-2006.

The Mission
ChemClub invites, motivates, and encourages high school students who are fascinated by the many ways that chemistry connects to their world. Supported by the American Chemical Society, ChemClub provides fun, authentic, and hands-on opportunities for members to:

- experience chemistry beyond what is taught in the classroom;
- learn about study and career opportunities in the many and varied fields of chemistry;
- provide service for the betterment of their communities.

ACS-Support
The club sponsor and the students are directly in charge of shaping the character and direction of their clubs, as there are many ways to operate a High School Chemistry Club successfully. However, some support can make the establishment and continuation of these clubs an easier process.

Each Club receives a handbook with startup materials that include a charter application, sample bylaws, information about ACS-sponsored activities such as Chemists Celebrate Earth Day and NCW, ideas for service-learning activities, protocol for inviting speakers, safety documents, and fun laboratory investigations. The materials also include documents that provide tips regarding "How to Organize Your High School Chemistry Club" and "Steps to Establishing Your High School Chemistry Club." The handbook also includes information detailing how a High School Chemistry Club can contact an ACS Local Section or Student Affiliate Chapter at a college or university.

Clubs can expect to receive subsequent packets throughout the school year with additional activities and tips for activities.

Interested?
Contact Steve Lantos, Brookline (MA) High School at <Steve_Lantos@brookline.k12.ma.us> or the American Chemical Society Education Division at <education@acs.org> for more information and details about joining the 2006-2007 ACS-Sponsored High School Chemistry Clubs program. We look forward to hearing from you soon!
Book Prizes

Book Prizes of the Northeastern Section

By M.S. Simon

The Phyllis Brauner Memorial Book Prize:
The prize is a memorial to an outstanding member of the Northeastern Section, Dr. Phyllis Brauner. She served in many offices of the Section, in 1974 became the first woman Chair of the Section, and contributed to the activities of the Section with her bold, innovative ideas and practical ways of carrying them out. She taught at Simmons College and Framingham State College and was an inspiring teacher. Her research and education interests are mirrored in the prize, which is given to a student who excels in the undergraduate oral presentation at the Northeast Student Chemistry Research Conference (NSCRC).

The students are judged by the Education Chair and a committee of the Conference judges. A book is chosen by members of the Education Committee to reflect the broad topic of science. A presentation bookplate inside the cover honors both Dr. Brauner and the awardee. The book is presented at the Conference and the awardee is acknowledged at the May Meeting of the Section.

The Arno Heyn Memorial Book Prize
The prize is a memorial to Dr. Arno Heyn, a distinguished, long-serving...
Michael Block
The Development of Selective Aurora A and B Inhibitors

Aurora kinases are viewed as attractive potential targets for anti-cancer therapy. The three human sub-types, Aurora A, B and C, are serine/threonine kinases that are only expressed during mitosis and play a role in chromosome segregation and cytokinesis. Aurora A and B are over-expressed in parallel in multiple tumor types, whereas Aurora C is not. The presentation will outline the identification and optimization of quinazoline based inhibitors that are selective for either Aurora A or Aurora B.

Michael Block began his career with a 1st class honors degree in Chemistry from the University of Edinburgh in 1982 and then moved to the University of Cambridge to study for his Ph.D. with Professor Alan Battersby, working on the synthesis of Vitamin B12 biosynthetic precursors. From 1985 to 1987 he held a NATO Postdoctoral Fellowship, working with Professor David Cane at Brown University on synthesis of labeled biosynthetic precursors of the polyether antibiotic Monensin. In 1988 he joined ICI Pharmaceuticals as a medicinal chemist and has remained with the company as it first became Zeneca and then through a merger became AstraZeneca. He has worked in a number of different disease areas, focusing in the early part of his career on cardiovascular and antibacterial therapy, and including two years in process research and development. From 1997 to 2002 he was involved in building research at AstraZeneca in the area of diabetes and obesity. In March 2002 he moved to Boston to help lead the newly established Oncology research group, and formally took up the position of Director of Chemistry for Cancer at the AstraZeneca R&D site in Boston in January 2004.

Connections To Chemistry 2006

The Northeastern Section of the American Chemical Society (NESACS) and the Education Committee of the Northeastern Section invite high school chemistry teachers to a program at Burlington High School (Burlington, MA) on Wednesday, October 18th, 3:30 – 8:00 PM. This program will help connect high school teachers with the numerous education resources that are available from the American Chemical Society. Five workshops will be offered that involve hands-on activities in computer programs for quantum properties that determine molecular behavior, in using probes for data collection and analysis in the laboratory, using engineering in traditional chemical topics, exploring the National Chemistry Week theme Your Home: It’s All Built on Chemistry, and starting an ACS sponsored high school chemistry club, as a partner with the ACS Student Affiliates Program for college students.

Program
3:30 – 4:00 Registration and Refreshments
4:00 – 4:25 Welcome and Overview
4:30 – 6:10 Workshops
6:15 – 8:00 Dinner and Keynote Address

The deadline for registration is Friday, October 13th. The registration fee is $18.00 and is non-refundable after October 11th. Workshop and program-related materials, dinner, a one-year subscription to ChemMatters, and a certificate for three hours of Professional Development will be provided to all workshop participants.

For additional information, contact Dr. Ruth Tanner, Chair, Education Committee, NESACS: 978/934-3662 or Ruth_Tanner@uml.edu

Connections To Chemistry
Continued from page 8

Your one-stop source to career-related links in the Chemical Sciences
WWW.NESACS.ORG/CAREERS
The Nucleus September 2006

Education Night, May 11, 2006

Awards Meeting at Northeastern University

Forty-Eighth Annual Avery A. Ashdown
High School Chemistry Contest

STUDENT SCHOOL TEACHER/ADVISOR
First Place-The Simmons College Award
Erbo Xu Lexington H. S. Judith Scott

Second Place
Patrick Wu Acton-Boxborough H.S. Carol Murphree

Third Place(tie)
Vivek R. Sant Andover H. S. Leo Lafond
Michael J. Shu Andover H. S. Leo Lafond
Matthew Arsenault Burlington H.S. Peter Nassiff

Honorable Mention – First Year
Daniel Fudenberg Lexington H.S. Jeffrey Shorter
Woosuk Hong Groton School Sandra Kelly
James Pelletier Attleboro H.S. Catherine Botsford-Milhe
Warren Tai Lexington H.S. Jim Wood
Janice He Groton School Sandra Kelly
Jennifer Schloss Concord-Carlisle H.S. Michael Vela
Winston S. Hill Belmont H.S. Kathy McGraw

Honorable Mention – Second Year
Andrew Feldman Framingham H.S. Ronne Krashes
John T. Cheng Andover H.S. Leo Lafond
Zara Seibel Wayland H.S. Jay Chandler
Jeffrey Yuan Wayland H.S. Jay Chandler
Russell Wolf Wayland H.S. Jay Chandler
Anandh Swaminathan Acton-Boxborough H.S. Carol Murphree
George Hong Acton-Boxborough H.S. Carol Murphree

The Phillip Levins Memorial Prize
Xiaoxuan Shen University of New Hampshire Prof. Sterling A. Tomellini, Advisor

2006 Undergraduate Research Scholars

James Flack Norris and Theodore William Richards Scholars

Boston College
Kerry Heinzelman Prof. Evan Kantrowitz, Advisor
Synthesis of New Inhibitors of Dihydroorotase

Harvard College
Chayasith Uttamapinant Prof. Gregory Verdine, Advisor
Synthesis of 4'-fluorinated Oligonucleotides and Their Use as RNA Glycosylase Inhibitors

Massachusetts Institute of Technology
Jessica Lynch Prof. Timothy Swager, Advisor
Engineering a Monovalent Avidin with Femtomolar Affinity

University of Massachusetts Dartmouth
Todd Andrade Prof. Donald W. Boerth, Advisor
DNA adduct formation in plants by interaction with phenoxy and carbamate pesticides

The Theodore Williams Richards Award for Excellence in Teaching
Arthur Giovannangeli, Jr. Contoocook Valley Regional H.S., Peterborough, NH
Gary Sypteras Minuteman Regional H.S., Lexington, MA

Aula Landis Society
Leo Lafond Andover High School, MA
Cathleen Little Pinkerton Academy, NH
Kathy Liu Walnut Hill School, MA
Ralph Sherwood Chelmsford High School, MA

Brandeis University
Jessica C. DeMott Prof. Oleg V. Ozerov, Advisor
Hypercoordinate Main Group PNP Pincer Complexes

Simmons College
Tania M. Cabrera Prof. Richard Gurey, Advisor
Controlling the size, orientation, density, and nucleation of calcium oxalate monohydrate crystals using self-assembled monolayers

Stonehill College
Jessica N. Falco Prof. Louis J. Liotta, Advisor
The Synthesis of Vinyl Pyrrolidine and Subsequent Synthesis of Polyhydroxylated Pyrrolidines from Commercially Available Sugars

Dr. Phyllis A. Brauner Memorial Book Award
Harvard University
Alisa A. Mueller Prof. Gregory Verdine, Advisor

Project SEED
Boston University
Mentor: Prof. John Snyder 
Chernita Sprinkle Boston 
Rafael Vega-Constabile Brighton 

Northeastern University
Mentor: Dr. Patricia A. Mabrouk
Rui Qiao (Cindy) Guan Boston 
Yingxian (Sammantha) Lu Dorchester

Stonehill College
Mentor: Dr. Cheryl Schnitzer
Diane Deng Randolph 
Kevin Deane Brockton 
Ryan P. Lake Brockton 
Nathan Joe Macedo New Bedford 
John Sirois North Easton
Education Awards

Left to right, new inductees into the Aula Landis Society, Cathleen Little of Pinkerton Academy, NH; Kathy Liu, Walnut Hill School, MA; Vivek R. Sant receiving the award for Leo Lafond, Andover High School, MA; and Ralph Sherwood, Chelmsford High School, MA.

Alisa Mueller of Harvard University, Winner of the Dr. Phyllis A. Brauner Memorial Book Award with Susan Brauner, sister of Phyllis Brauner.

Gary Sypteras of Minuteman Regional High School, Lexington, MA, recipient of the Theodore William Richards Award for Secondary School Teaching, with Dr. Tim Rose, Brandeis University, member of the T. W. Richards Award Committee.

Left to right, Wally Gleekman, retired Brookline HS, Chair of T. W. Richards Award Committee, Chris Doona, Army Materials Laboratory, Natick, member T. W. Richards Award Committee, and Arthur Giovannangeli, Jr., from Contoocook Valley Regional High School, Peterborough, NH, recipient of the Theodore William Richards Award for Secondary School Teaching.

Left to right, new inductees into the Aula Landis Society, Cathleen Little of Pinkerton Academy, NH; Kathy Liu, Walnut Hill School, MA; Vivek R. Sant receiving the award for Leo Lafond, Andover High School, MA; and Ralph Sherwood, Chelmsford High School, MA.
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Book Prizes

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member of the Northeastern Section. Arno occupied most of the offices of the Section at various times, but his most lasting contributions were made when he was the Editor of the NUCLEUS of the Northeastern Section. Under his guidance this publication became the outstanding newsletter among all those published by Sections of the American Chemical Society.

The prize is awarded annually to a person or persons deemed to have made the most important contribution(s) to publications of the Northeastern Section. The awardee is chosen by the Arno Heyn Book Prize Committee which is chaired by the Chair of the Publications Committee. Other Committee members include the Editor of the Nucleus, two members of the Board of Directors appointed by the Section Chair, the Chair of the Awards Committee and the Section Chair, ex officio. The prize is a book selected by the awardee, who is asked to choose a book that will have long time meaning and value to her/him. A bookplate mounted inside the book cover honors both the award recipient and the memory of Dr. Heyn. Presentation of the award(s) takes place at the November meeting of the Section.

Calendar

Check the NESACS Homepage for late additions: http://www.NESACS.org

Note also the Chemistry Department web pages for travel directions and updates. These include:
- http://chemserv.bc.edu/seminar.html
- http://www.bu.edu/chemistry/events/
- http://www.chem.brandeis.edu/colloquium.shtml
- http://www-chem.harvard.edu/events/
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- http://www.unh.edu/chemistry/seminars.html

SEP 7
Dr. Jianshu Cao (MIT) “Statistical Analysis of Single Molecule Measurements” Boston College, Merkert 130 4:00PM

SEP 13
Dr. James Golen (Univ. of Mass., Dartmouth) “So, You Want a Job” U. Mass Dartmouth, Building Group II, Rm 115 4:00 PM

SEP 14
Dr. Christopher Murray (IBM, T. J. Watson Research Center) “Preparation and Properties of Multicomponent Nanocrystal Superlattices: Building with Artificial Atoms.” Boston College, Merkert 130 4:00PM

SEP 20
Dr. Jeff Salisbury, Mayo Clinic, “Centrin-based Regulation of Centriole Duplication” U. Mass Dartmouth, Building Group II, Rom 115 4:00 PM

SEP 21
Dr. Norbert Scherer (Univ. of Chicago) Title: TBA Boston College, Merkert 130 4:00PM Prof. Eugene Barry (Univ. of Mass, Lowell) “The Capillary Column in Gas Chromatography: It Keeps Getting Better” Univ. of New Hampshire, Iddles Auditorium, Rm. L103 11:10AM

SEP 19
Dr. Colin Nuckolls (Columbia University) Title: TBA Boston College, Merkert 130 4:00PM

SEP 26
Dr. Nicola Pohl (Iowa State University) Title: TBA Boston College, Merkert 130 4:00PM

SEP 27
Dr. Gary Weisman, Univ. of New Hampshire, Durham, “Cross-Bridged Tetraamine Ligands: Synthesis, Coordination Chemistry, and Biomedical Utility” U. Mass Dartmouth, Building Group II, Rm 115 4:00 PM

SEP 28
Dr. Nicola Pohl (Iowa State University) Title: TBA Boston College, Merkert 130 4:00PM

Prof. Roger Giese (Northeastern Univ.) “Measurement and Meaning of DNA Adducts” Univ. of New Hampshire, Iddles Auditorium, Rm L103 11:10 AM

Notices for the Nucleus Calendar should be sent to: Sheila E Rodman 250 Kennedy Drive Unit #403, Malden, MA 02148 E-MAIL: serodman(at)hotmail.com