



THE NUCLEUS

October 2010

Vol. LXXXIX, No. 2



Monthly Meeting

*Henry A. Hill Award to Thomas R. Gilbert
Recognition of 50-Year Members*

Symposium

*Advances in Chemical Sciences "Bench to
Pilot Plant" Symposium at the Royal Sonesta Hotel*

Community Colleges

by Mindy Levine

2010 Buyers Guide



2010 Eastern Analytical
Symposium and Exposition
Garden State Exhibit Center
Somerset, New Jersey

Expand Your Analytical Horizons

November 15-18, 2010 Specialists in analytical chemistry or allied sciences — don't miss the East Coast's largest analytical event! Our technical program provides must-see presentations, short courses, and workshops, highlighting analysis trends and challenges faced in the current economic environment. Our exposition showcases the latest and greatest advances in the analytical world, with instruments, software, supplies, and services at 250 booths. Stay open to new ideas and let us expand your analytical horizons. Visit www.eas.org or call (732) 449-2280.

www.eas.org

The Northeastern Section of the American Chemical Society, Inc.

Office: Anna Singer, 12 Corcoran Road,
Burlington, MA 01803
(Voice or FAX) 781-272-1966.
e-mail: secretary@nesacs.org
NESACS Homepage:
http://www.NESACS.org

Officers 2010

Chair:

John McKew
Wyeth Research
200 Cambridge Park Drive
Cambridge, MA 02140
617-665-5603; john.mckew(at)gmail.com

Chair-Elect:

Patrick M. Gordon
1 Brae Circle
Woburn, MA 01801
gordonpa(at)emmanuel.edu

Immediate Past Chair:

Dr. E. Joseph Billo
13 Shattuck Street
Natick, MA 01760
508-653-3074, joseph.billo(at)verizon.net

Secretary:

Michael Singer
Sigma-Aldrich
3 Strathmore Rd, Natick, MA 01760
774-290-1391, michael.singer(at)sial.com

Treasurer:

James Piper
19 Mill Rd, Harvard, MA 01451
978-456-3155, piper28(at)attglobal.net

Auditor:

Anthony Rosner

Archivist:

Myron S. Simon
20 Somerset Rd., Newton, MA 02465
617-332-5273, romysimon(at)mindspring.com

Trustees:

Peter C. Meltzer, Esther A. H. Hopkins,
Michael E. Strem

Directors-at-Large:

Mukund Chorghade, Stephen Lantos, James
Phillips, Ralph Scannell, Myron S. Simon, Al
Viola

Councilors

Term Ends 12/31/2010

Thomas R. Gilbert
Pamela Nagafuji
Robert Lichter
Michael Singer

Alternate Councilors

Timothy B. Frigo
Mark Froimowitz
David Cunningham
Mukund Chorghade

Term Ends 12/31/2011

Doris I. Lewis
Mary Burgess
Morton Z. Hoffman
Michael P. Filosa
Kathi Brown

C. Jaworek-Lopes
Patrick M. Gordon
Lawrence Scott
Donald Rickter
Liming Shao

Term Ends 12/31/2012

Amy E. Tapper
Catherine E. Costello
Patricia A. Mabrouk
Dorothy J. Phillips
Ruth Tanner

Michaeline F. Chen
Jerry P. Jasinski
Gary R. Weisman
Marietta Schwartz
Norton P. Peet

All Chairs of standing Committees, the editor of THE NUCLEUS, and the Trustees of Section Funds are members of the Board of Directors. Any Councilor of the American Chemical Society residing within the section area is an ex officio member of the Board of Directors.



Contents

Henry A. Hill Award to Thomas R. Gilbert _____ **4**

Monthly Meeting _____ **5**

Henry A. Hill Award and recognition of 50-year members at Emmanuel College

Announcements _____ **6,8**

Application reminder for NSYCC-JCF/GDCh exchange, NESACS members named ACS Fellows, Grants-in-Aid to Undergraduates, Call for papers – Undergraduate research poster session

Symposium Announcement _____ **7**

Second Annual Advances in Chemical Sciences “Bench to Pilot Plant” Symposium.

Chemistry Graduation Statistics for 2008-09 _____ **9**

CCAS Seeks Feedback _____ **9**

By Michael Filosa

NESACS Receives ChemLuminary Award _____ **10**

National Chemistry Week Events _____ **11**

Connections to Chemistry 2010 _____ **11**

Community Colleges _____ **12**

By Mindy Levine

October Historical Events in Chemistry _____ **14**

By Leopold May

Annual Nucleus Buyer’s Guide _____ **15**

Cover: 2010 Henry A. Hill Award winner, Dr. Thomas R. Gilbert of Northeastern University. (Photo courtesy of Dr. Gilbert)

Deadlines: January 2011 Issue: November 15, 2010
February 2011 Issue: December 9, 2010



The Nucleus is published monthly, except June and August, by the Northeastern Section of the American Chemical Society, Inc. 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.

Editor: Michael P. Filosa, Ph.D., ZINK Imaging, Inc., 16 Crosby Drive, Building 4G, Bedford, MA 01730 Email: Michael.filosa(at)zink.com; Tel: 508-843-9070

Associate Editors: Myron S. Simon, 20 Somerset Rd., W. Newton, MA 02465, Tel: 617-332-5273, Sheila E Rodman, Konarka Technologies, Inc., 116 John St. Suite 12, Lowell, MA 01852 Email: srodman(at)konarka.com tel 978-569-1414, Mindy Levine, 516-697-9688 (c), mindy.levine(at)gmail.com

Assistant Editors: Stefan G. Koenig

Board of Publications: Vivian K. Walworth (Chair), Mindy Levine, Mary Mahaney

Business Manager: Karen Piper, 19 Mill Rd., Harvard, MA 01451, Tel: 978-456-8622

Advertising Manager: Vincent J. Gale, P.O. Box 1150, Marshfield, MA 02050, Email: Manager-vincegale@mboservices.net; Tel: 781-837-0424

Contributing Editors: Morton Hoffman, Feature Editor; Dennis Sardella, Book Reviews

Calendar Coordinator: Sheila Rodman, email: srodman(at)konarka.com

Photographers: Morton Z. Hoffman and James Phillips

Proofreaders: Donald O. Rickter, Vivian K. Walworth, Mindy Levine

Webmaster: Roy Hagen

Copyright 2010, Northeastern Section of the American Chemical Society, Inc.

2010 Henry A. Hill Award to Thomas R. Gilbert

The 2009 Henry A. Hill Award will be presented at the Northeastern Section of the American Chemical Society (NESACS) October 2010 meeting to Dr. Thomas R. Gilbert, Academic Director of Biotechnology Programs at Northeastern University. The Hill Award is presented annually to a member of NESACS for meritorious service to the Section and to the profession of chemistry.

Dr. Gilbert received his undergraduate degree from Clarkson College of Technology (now Clarkson University) in 1968 and holds a Ph.D. in analytical chemistry from the Massachusetts Institute of Technology (1971). Since 1981 he has been a member of the faculty of Northeastern University. He has published 45 journal articles and one general chemistry textbook (now in its 2nd edition), and holds three patents.

His service to the American Chemical Society began with his selec-

tion as chair of the Northeastern Section's (NESACS) Analytical Discussion Group (1983 – 86). Over the next 24 years his involvement in NESACS continued. He was Program Chair and then Chair of the section in 1987 and 1988. The following year he was Chair of the Nominating Committee. In 1993 he was General Chair of the 23rd Northeast Regional ACS Meeting and Co-Chair of the Organizing Committee of the Analytical Chemistry Division's 46th Summer Symposium. In 1998 he served as Program Chair of the NESACS Centennial Celebration.

Tom has represented the Northeastern Section on the ACS Council since 1990. As a member of Council he was chair of the Council Committee on Meetings and Expositions. He was elected to the Council Committee on Nominations and Elections. He was then elected to the Council Policy Committee, where he is in his second term and currently serves as vice-chair

Corporate Patrons

\$2000 - or more

AstraZeneca Pharmaceuticals
Eisai Pharmaceuticals
EMD Serono
Genzyme Corp.
Novartis
Johnson Matthey
Pfizer Inc.
Schering Corp.
Strem Chemicals, Inc.
Vertex Pharmaceuticals

\$1000-\$1999

Boehringer Ingelheim
GlaxoSmithKline
Irix Pharmaceuticals
Lyophilization Services of NE
Sundia Meditech
Yes Bank

\$300-\$999

Cambridge Major Labs
Girindus
Merrimack Consultants
Organix
PCI Synthesis
Sigma Aldrich
Waters Corp.
Wilmington PharmaTech

STOP WASTING \$\$\$ on vacuum pumps!!

Rebuilding is smart.

A new pump costs **four times** what rebuilding costs.

Rebuilding is easy.

Just call 978 667 2393 for service second-to-none.

Mass-Vac does the job right.

- Factory trained technicians.
- Rebuilt and new pumps in stock.
- No-hassle parts and labor guarantee.
- Complete line of filtration and trap systems.

Because a really old, really healthy vacuum pump is a beautiful thing!



Mass-Vac, Inc.

247 Rangeway Road • PO Box 359 • North Billerica, MA 01862
978 667 2393 Fax 978 671 0014 sales@massvac.com www.massvac.com

and chair of the Subcommittee on Long-Range Planning.

Other ACS activities have included serving on the committee that wrote the 2000 revision of the Analytical Chemistry Examination; the ACS Board of Directors International Strategy Implementation Task Force (2008); the ACS Fellows Presidential Task Force, 2008; and the ACS Awards Review Committee (2008-09). ◇

SURPRISE

our editor by calling and saying you appreciate the quality and content of our newsletter. Our editor works hard to maintain a publication of interest to our membership. Oh, and by the way you could also give credit to our advertisers who financially support us.

What exactly goes on at NESACS' monthly Board meetings?

www.nesacs.org/reports

Monthly Meeting

The 908th Meeting of the Northeastern Section of the American Chemical Society

Henry A. Hill Award

Presentation and Recognition of the 50-year members

Thursday, October 14, 2010

Emmanuel College

400 The Fenway, Boston, MA 02115
Administration Building, The Auditorium

4:30 pm Board Meeting

5:30 pm Social Hour

6:15 pm Dinner

7:15 pm Presentation of 50-Year Members

7:30 pm Award Meeting, Dr. John McKew, NESACS Chair, Presiding
Henry A. Hill Award for Outstanding Service to the Northeastern Section, presented by Dorothy J. Phillips to Thomas J. Gilbert
Evening Lecture: *Show Me the Chemistry!*, Dr. Al Hazari, Director-Undergraduate Chemistry Labs and Lecturer, University of Tennessee at Knoxville

Dinner reservations should be made no later than noon, Thursday, October 7, 2010. Please call Anna Singer at (781) 272-1966 or e-mail at secretary@nesacs.org. Reservations not cancelled at least 24 hours in advance must be paid. Members, \$30; Non-members, \$35; Retirees, \$20; Students, \$10.

THE PUBLIC IS INVITED.

Directions to Emmanuel College:

(http://www.emmanuel.edu/Tools_Navigation/Maps_and_Directions.html)

Via MBTA

Option 1: Take the MBTA's Green Line "Riverside" Branch/D Train to Fenway stop. The campus is a short walk across Park Drive.

Option 2: Take the MBTA's Green Line Huntington Branch/E Train to Museum stop. The campus is a short walk up The Fenway, just beyond the Isabella Stewart Gardner Museum and Simmons College.

From the West/Massachusetts Turnpike

Head east on the Massachusetts Turnpike (I-90). Take exit 18, Allston, Cambridge (left exit). Stay in right lane after toll. Bear right toward Double Tree Guest Suites, getting in far right lane. At traffic light, take right toward Downtown Boston, Storrow Drive. Follow Storrow Drive to Fenway 1S exit. Stay in right lane on exit ramp; bear right toward Boylston Street, Outbound, Riverway 1. After the Boylston Street split, get in the left lane and bear left at the first traffic light onto Park Drive. Follow Park Drive, staying in left lane, until the Exxon Station. Proceed through the lights, crossing over Brookline Ave. Bear sharp left, through two lights, looping back towards Brookline Ave. Proceed through the intersection at Brookline Avenue and turn right into Emmanuel College.

Abstract:

Show Me the Chemistry !

Chemistry is for everyone, is everywhere, and is happening every day. Come and experience several exciting activities (experiments) that ignite curiosity, and inspire the lifelong discovery, learning and enjoyment of the science of chemistry. Common and familiar substances will be used in this presentation. ◇

Biography

A native of Lebanon, Dr. Hazari received a B.S. degree in Chemistry from the American University in Cairo. He also holds a M.S. degree in Chemistry from Youngstown State University in Ohio and a doctorate in Science Education from the University of Tennessee, Knoxville (UTK). Al has taught science and chemistry for several years at UTK and at the college level in the United States and overseas. Currently, he is the Director of the Undergraduate Chemistry Labs and a Lecturer in Chemistry at the UTK. In addition, he regularly teaches science education courses in the College of Education. He has received several grants from government agencies, industry, and various organizations to improve undergraduate chemistry lab instruction and also to support K-16 hands-on science and chemistry outreach activities.

In 2000 he was the recipient of the ACS Helen M. Free Award for Public Outreach. Al is a very active ACS member. He is a former chair of the ACS Committee on Chemical Safety, an ACS tour speaker, and councilor for the ACS - East Tennessee Section. Recently, he became the President of East Tennessee's Southern Appalachian Science and Engineering Fair.

Al is an affiliate of the Institute for Chemical Education and a member of the National and the Tennessee Science Teachers Associations. He has made several presentations and given talks at local, regional, national, and international chemical and science education conferences. ◇

Application Reminder

NSYCC/NESACS–JCF/GDCh Exchange to Germany

March 20–27, 2011

Applications are welcome from graduate and undergraduate students of chemistry, biochemistry, and chemical engineering (including material science) at colleges and universities within the Northeastern Section (NESACS) for the eleventh Exchange to Germany between the Younger Chemists Committee of the Section (NSYCC) and the *Jungchemikerforum* (Young Chemists Committee; JCF) of the *Gesellschaft Deutscher Chemiker* (German Chemical Society; GDCh), which will take place on March 20–27, 2011, in Nürnberg, Germany. Prospective applicants should note that the next ACS national meeting is scheduled for March 27–31, 2011, in Anaheim, CA.

Application forms and more details are available on the NSYCC <<http://www.nsycc.org>> and NESACS <<http://www.nesacs.org>> websites.

The deadline for the submission of applications (electronic only) to <mstrem@strem.com> is **November 5, 2010, at 5:00 p.m.** ◇

NESACS Members Named ACS Fellows

ACS President Joseph Francisco announced the 2010 class of ACS Fellows, which included the following NESACS members among the 192 named:

Mukund S. Chorghade, Thinq Pharma
Cynthia M. Friend, Harvard University
Peter A. Jacobi, Dartmouth College
Dorothy J. Phillips, Waters Corp.
Michael E. Strem, Strem Chemicals, Inc.

Also named was NESACS lifetime member Bassam Z. Shakhshiri, University of Wisconsin, Madison.

The new ACS Fellows received their pins and certificates at the National Meeting in Boston at a ceremony on August 23. ◇



Can EMD Chemicals be the solution I'm looking for?

You bet!

We have all the pieces...Solvents, Acids, Solutions, Salts and Chromatography.

Solve the puzzle of your chemicals needs with our broad range of quality products.

That's what's in it for you. EMD Chemicals

For more information visit www.emdchemicals.com



**2nd Annual
Advances in Chemical Sciences
“Bench to Pilot Plant” Symposium**

sponsored by NESACS and RSC-US

**Royal Sonesta Hotel
Cambridge, MA
www.sonesta.com/boston**

**October 22, 2010
9:00 am**

This day-long scientific conference will focus on:
Process R&D Chemistry Organic Synthesis New Synthetic Methodology

Eminent scientists from industry and academia will deliver plenary lectures.
Confirmed Lecturers include:

Eric Bercot, Amgen
Joseph Fortunak, Howard University
Adam Looker, Vertex
Richard Pariza, Cederberg – Hauser
Brian Stolz, California Institute of Technology
Steve Weissman, Concert Pharmaceuticals

Lunch will be provided for conferees; a vendor exhibition is also scheduled.
For more information please visit www.acssymposium.com

Symposium registration fee: \$50.00 (students: \$25.00)
Attendance is Limited – Advance Registration is REQUIRED

Please send a conferee registration form along with your check made payable to NESACS to:

Anna Singer
Administrative Secretary, NESACS
12 Corcoran Road
Burlington, MA
(800)-872-2054; (781)-272-1966

For additional details, please contact any member of the Symposium's Organizing Committee.

Luigi_Anzalone@vrtx.com

RKramss@yahoo.com

RRajur@creagenbio.com

Chorghade@comcast.net

Katherine.Lee@pfizer.com

ASaha@chembiotek.com

Kenneth_Drew@hotmail.com

John.McKew@gmail.com

Donald.Walker@biogenidec.com

Srinivasa.Karra@EMDSerono.com

Leslie.Mcquire@novartis.com

Announcement

Grants-in-Aid to Undergraduates to Attend the 241st ACS National Meeting Anaheim, California, March 27-31, 2011

The Northeastern Section of the American Chemical Society (NESACS) will provide *Grants-in-Aid* of \$350 to each of four undergraduates to attend the 241st ACS National Meeting in Anaheim, California and to present a paper at the Undergraduate Research Poster Session in the Division of Chemical Education. The institutions of the successful applicants are expected to match the award.

Eligibility: Applications will be accepted from students at colleges and universities within the Northeastern Section of the ACS. The undergraduate student must be a chemistry, biochemistry, chemical engineering, or molecular biology major in good standing with at least junior status, and must be currently engaged in undergraduate research.

Application: Application forms may

be obtained from the NESACS web site at <http://www.nesacs.org>. The deadline for *receipt* of completed applications by Professor Marietta Schwartz, the Chair of the Education Committee, is October 8, 2010. Completed applications are to be sent to:

Professor Marietta Schwartz
Department of Chemistry
University of Massachusetts Boston
100 Morrissey Boulevard
Boston, MA 02125-3393

Phone: 617.287.6146
Fax: 617.287.6030
e-mail: marietta.schwartz@umb.edu

Notification: Applicants will be notified of the results by e-mail on October 12, 2010.

The deadline for electronic submission of abstracts to the American Chemical Society in Washington, D.C. is November 1, 2010 (11:59 pm EST). ◇

Call for Papers

Undergraduate Research Poster Session

at the 241st National Meeting of the American Chemical Society

Anaheim, California
March 27-30, 2011

The ACS invites undergraduate students to submit abstracts of their research papers for presentation at the Undergraduate Research Poster Session (URPS), which will be part of the extensive programming for undergraduates at this national meeting. Submit your abstract electronically by **November 1, 2010** (11:59 pm EST) to www.acs.org/meetings. Click on the CHED division and then select the URPS site that is appropriate to the subject of your paper. Please follow the directions carefully.

For further information, contact:

Nancy Bakowski
ACS Student Affiliates Program
1155 Sixteenth Street, NW
Washington, DC 20036

Tel: (800) 227-5558, ext. 6166
e-mail: SAprogram@acs.org ◇

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 Anna Singer at 781-272-1966, 508-653-6329 or email: [secretary\(at\)nesacs.org](mailto:secretary(at)nesacs.org) by noon of the first Thursday of the month, letting her know that you are a new member. ◇

 Five Decades of Vacuum Innovation

The Vacuum Solution for Lab Renovations

VACUU-LAN®
local vacuum networks

The convenience of central vacuum...

- one pump supports up to 8 vacuum workstations
- conserves precious bench space
- whisper-quiet without sound-proofing

The performance of dedicated pumps!

- vacuum to 1.5 Torr;
optional electronic control
- minimizes interference between workstations



VACUUBRAND, INC.
Tel 860-767-5341 Cust. Service 888-882-6730

www.vacuubrand.com
info@vacuubrand.net

Your one-stop source to career-related
links in the Chemical Sciences

WWW.NESACS.ORG/CAREERS

Chemistry Graduation Statistics for 2008-09

The following information for colleges and universities within NESACS was taken from the article in *C&EN* (Vol. 68; pp. 44-54; August 23, 2010), in which the data that chemistry departments with approved bachelor's degree programs had reported to the ACS Committee on Professional Training (CPT) for 2008-09 were tabulated. Certified bachelor's degrees are those that conform to the CPT guidelines, and are designated by the chairs/heads of the chemistry departments, not by ACS. ACS does not approve master's or doctoral programs nor certify their graduates.

Institution	Bachelor's		Master's	Ph.D.
	Total	Certified		
Boston College	34	8	3	20
Boston University	22	14	19	15
Brandeis University	12	0	8	6
Bridgewater State College	20	14	-	-
Dartmouth College	28	0	1	8
Framingham State College	4	1	-	-
Harvard University	48	0	18	28
M.I.T.	26	26	3	43
U. Mass Boston	26	3	2	2
U. Mass Dartmouth	8	8	9	-
U. Mass Lowell	9	9	14	3
Merrimack College	16	6	-	-
U of New Hampshire	11	6	5	2
Northeastern U	19	19	22	12
Salem State College	6	1	-	-
Simmons College	27	8	-	-
Stonehill College	6	3	-	-
Suffolk University	19	0	-	-
Tufts University	29	0	4	7
Wellesley College	38	4	-	-
Wheaton College	18	2	-	-

CPT notes that more than 90% of the bachelor's degrees conferred in chemistry in the U.S. come from colleges and universities with departments that offer ACS-approved programs. The total number of chemistry graduates with bachelor's degrees in 2008-09 was 14,577, representing a 4.7% increase over the previous year. Among the top 25 producers of master's graduates nationally were Northeastern, B.U., and Harvard; M.I.T. was #6 among the institutions that offer Ph.D. degrees in chemistry.◇

Committee on Chemical Abstracts Service (CCAS) Seeks Feedback

By Michael Filosa, CCAS Associate Member-2010

The Committee on Chemical Abstracts Service (CCAS) met at the Spring meeting in San Francisco under the leadership of the new Chair, Spiro Alexandratos of Hunter College. CCAS meets twice annually in conjunction with the Spring and Fall National ACS Meetings. The CCAS meetings are attended by committee members, associates, liaisons and key CAS staff, led by CAS President, Bob Massie. The mission of the committee is to act as an information conduit between ACS members and CAS management and vice-versa. We wish to solicit the opinions of ACS members on Chemical Abstracts Service so that we can evaluate those opinions and concerns and present them to CAS management. Similarly, CCAS will also help CAS communicate with ACS members.

CAS is the largest operating division within the ACS. It plays an important role both in fulfilling one of the Society's key objectives – the dissemination of chemical information – as well as providing a financial surplus to fund Society programs. CAS employs more than 600 chemists in Ohio, and others around the globe. Despite a difficult economy in 2009, CAS met its financial targets for the ACS. This reflects a continued investment in technologies and content acquisition, as well as the exceptional value that CAS services bring to academic, patent office, and private sector research. CAS wishes to continue to improve its services, and your feedback is highly valued. Please contact any CCAS representative. We want to hear from you.

Since the Spring Meeting, CCAS has established a group on the ACS Network, thanks to the efforts of CCAS member Grace Baysinger of Stanford University. You can read about current activities of the CCAS, as well as questions presented by ACS members and answered by CAS staff led by marketing Vice-President, Chris McCue. The CCAS Group is open to guest access at <https://communities.acs.org/groups/chemical-abstracts-service-committee>. ACS Network registration is not necessary to access this resource.

You are free to contact me at michael.filosa@zink.com with any of your questions or concerns or any of the other CCAS members, including CCAS Chair, Prof. Alexandratos at alexsd@hunter.cuny.edu. A complete listing of current CCAS members is available at the CCAS Group on the ACS Network. To quote Professor Alexandratos from his most recent report from the Fall CCAS meeting, "I can assure you that CAS president Bob Massie and his entire staff are committed to being responsive to the issues you

continued on page 21

NESACS Receives ChemLuminary Award

By Morton Z. Hoffman

The award for the Most Original National Chemistry Week (NCW) Hands-On Activity during 2009 was presented to the Northeastern Section by the Committee on Community Activities on Tuesday, August 24, during the ACS meeting in Boston. In addition to NESACS, the finalists in this category were the Cleveland and Savannah River local sections. The activity that was cited in the award was held at the Boston Children's Museum and was designed to relate chemical elements to everyday life. Samples of elements were paired with real-world examples of where those elements may be found. According to Christine Jaworek-Lopes (Emmanuel College), the NESACS NCW coordinator, "In addition to the elemental samples, we had three bags of beads, each containing 100 beads. The bags represented the elemental composition of the earth's crust, the earth's atmosphere, and the human body. We provided information to each visitor regarding the composition of the systems in question, as well as a key relating bead color to element. We then asked them to match the bag to the proper system. Children and parents loved this visual!" ◇



Christine Jaworek-Lopes (Emmanuel College), at right, with Patrick Gordon (Emmanuel College), NESACS Chair-Elect, at the ChemLuminary Award poster. Photo by M.Z. Hoffman



photo courtesy of C. Jaworek-Lopes



Christine Jaworek-Lopes (Emmanuel College) receiving the ChemLuminary Award for NESACS flanked by Lynn Hogue (Miami University), chair of the ACS Committee on Community Activities, at left, and Tom Lane (Dow Corning), ACS Past-President.

Photo by M.Z. Hoffman

National Chemistry Week Events



Celebrating Behind the Scenes with Chemistry
October 17 - 23, 2010

October 17, 2010 – Museum of Science Boston

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.

Taking place in Cahners Theatre (2nd floor, Blue Wing) at 1:00 pm and 4:00 pm. Admission to the museum is required. Free tickets to Dr. Shakhashiri's show will be available on a first come, first served basis. Tickets are available via advance reservation. To reserve tickets, please contact the NESACS secretary either via email secretary@nesacs.org (preferred) or by phone 1-781-272-1966 before October 14, 2010. Tickets will be available for pick-up in the lobby of the museum at the ACS table.

Kicking off National Chemistry Week 2010 festivities:

Join us in a variety of hands-on activities related to the yearly theme. Taking place from 1:00 pm - 5:00 pm on October 17, 2010 throughout the Museum.

October 23, 2010 – Boston Children's Museum

From 11 am – 4 pm, NCW volunteers will be on hand throughout the museum to perform demonstrations and assist in hands-on activities related to the yearly theme.

September 1 – October 10, 2010

K-12 students participate in the NCW poster competition. Visit www.nesacs.org and http://portal.acs.org/portal/acs/corg/content?nfpb=true&pageLabel=PP_TRANSITIONMAIN&node_id=1033&use_sec=false&sec_url_var=region1&uuid=9f5daa85-50f8-4707-b39b-e2ad814f3021 for more information.

October 1 – 31, 2010

Grades K-12 may participate in the puzzle contest. See www.nesacs.org for the puzzles and contest information.



Connections To Chemistry 2010

A Preliminary Announcement

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 13th, 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. Four simultaneous hands-on workshops will illustrate these resources:

- Polymers in the K-12 Curriculum (Al Hazari, U. Tennessee, Knoxville)
- How Science Can Inform the Art of Teaching - Helping Students to Become Better Quantitative Problem Solvers. (Fred Garafolo, Mass College of Pharmacy)
- Chemistry Behind the Crime Scene (Faina Ryvkin, Emanuel College)
- Smart Pens (Alan Crosby, Newton South High School)

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 (Dr. Al Hazari, University of Tennessee/Knoxville)

The deadline for registration is Friday, October 9, 2010. The registration fee is \$20 and is non-refundable after October 4th. 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.

The detailed program and registration form can be obtained on the NESACS website (<http://www.nesacs.org>) under *Connections to Chemistry 2010*.

For additional information, contact Dr. Marietta Schwartz, Chair, Education Committee, NESACS: 617-287-6146 or marietta.schwartz@umb.edu. ◇

Community Colleges

By Mindy Levine

Most people do not think of midnight as a time to be in class. They would rather be sleeping, partying, eating, or doing most anything else. But for a select group of students at Bunker Hill Community College (BHCC), class runs from 11:45 pm to 2:30 am. BHCC started their “Burning the Midnight Oil” program in the Fall of 2009 with two course offerings. They expanded the program during the current Fall 2010 semester, offering 5 courses in a variety of subjects. This popular program, which comes with complimentary coffee for students, is designed to fit the schedules of busy and over-extended community college students.

Although BHCC does not offer a midnight chemistry course, they (as well as other local community colleges) offer a variety of chemistry courses at other times of day. Most of the colleges offer an introductory course for students with weak science backgrounds. For example, Professor Stacey Olson of Roxbury Community College (RCC) teaches “General Sci-

ence,” which introduces key topics in biology, chemistry, and physics.

Middlesex Community College (Middlesex) offers three levels of chemistry: “Introduction to Chemistry,” for students with very weak science backgrounds; “College Chemistry,” for pre-health students (dental, nursing, etc); and “Chemistry for Engineering and Science Majors,” for students who are majoring in STEM disciplines (science, technology, engineering, and math).

Community college students also benefit from small class sizes and substantial interaction with their professors. For example, BHCC chemistry classes are capped at 18 students for those courses with corresponding laboratory sessions. Students also benefit by having the same instructor for both the lecture and the laboratory, so that there is “no gap between the two,” said Professor Karen Atkinson of BHCC.

Professor Olson added, “There are no teaching assistants. Professors do everything.”

Community college students tend to be remarkably self-motivated, explained Professor Bill Griffin of BHCC. “Friends of mine who are at four-year schools often complain about lazy and unmotivated students,” said Professor Griffin. “They talk about how sheltered and non-responsive the students are.” In contrast, “when I give them an assignment and ask them to jump, they ask ‘How high?’”

Community college students, according to Professor Atkinson are “time-starved.” They often work full-time, have families, and are taking a full-time course load at the college. “They are almost trying to do too much,” she said.

There are many examples of exceptional students who attend community colleges. Dean Linda Young of Middlesex Community College recalled that a recent graduation speaker at Middlesex was a grown woman with three sons. After graduating with a degree in Life Sciences, this woman continued her studies with a full tuition scholarship to Wellesley College.

Another example of an outstanding student was last year’s Biotechnology Student of the Year awardee, who was a fast-food worker with a GED before he began his studies at Middlesex. “There are tremendous success stories,” Dean Young said.

“I had a student last summer who told me that he was old enough to be my father,” said Professor Olson. “He had been working in the food preparation industry,” and decided to go back to school to pursue a career in nursing.

Much of the teaching at community colleges is performed by adjunct faculty members. Even though BHCC has 12 full-time faculty members in the STEM disciplines, the increasing enrollment at community colleges requires that the majority of the classes are taught by adjunct faculty members, explained Professor Atkinson.

These faculty members are hired by the dean of the college, with input from the department chair. Fortu-



Eastern Scientific

www.easternsci.com

781-826-3456

Vacuum Pump Problems?

Eastern Scientific specializes in the repair and precision rebuilding of all makes of mechanical vacuum pumps.

*Free pick-up & delivery
Restrictions apply*



Community Colleges

Continued from page 12

itously, the current dean of BHCC has a background in science, which is “very comforting when he observes the lectures,” said Atkinson. “We’re very happy to have him.”

Professor Griffin explained that most adjunct faculty are either people who have taught previously at the high school level or people with industrial careers who have a “second career” in community college teaching. There are also some post-doctoral fellows at Tufts University who teach courses at BHCC. “Teaching is a very rewarding career,” said Professor Olson. “A lot of the adjunct faculty are motivated by that fact.”

Several community colleges run other science-related activities outside of the formal classroom setting, although the scope of these activities tends to be limited by the students’ busy schedules. For example, Middlesex has a “STEM club” that facilitates study groups for students in science courses. The STEM club has a Facebook page where they advertise STEM-related events and activities. “The goal is to get more students involved,” explained Dean Young, “by combining fun and educational aspects.”

RCC recently hosted a biotechnology workshop in collaboration with the University of Massachusetts. Students at the workshop spent two weeks learning crucial laboratory techniques, such as DNA isolation, PCR analysis, and protein purification assays. “I think it’s really important for community colleges to become embedded in this field [biotechnology workshops],” said Professor Olson. “My biotechnology students can get a leg up.”

Professor Griffin acknowledged that community colleges sometimes get a bad reputation, for example, for their low graduation rates. Such a reputation, however, fails to account for students who successfully transferred to Ivy League “bumper-sticker” schools without finishing their associate’s degree. “What really upsets me is our response to that [criticism],” Professor Griffin said. “We have an oppor-

tunity to challenge the notion that graduating with an associate’s degree is not a measure of success.” Instead, the administration may be more likely to focus on improving graduation rates, instead of trying to keep track of people who transfer to better schools.

“I think that, because of the economy, people are more understanding of the importance of community colleges,” said Professor Olson, adding that many people in the current economic climate decide to go back to school for retraining in order to improve their career prospects.

Dean Young, who prefers to characterize community colleges as “undiscovered or under-discovered, rather than unappreciated,” pointed out that the Obama administration has been particularly supportive of community colleges. In July of 2009, President Obama unveiled a 10-year, \$12 billion initiative called the “American Graduation Initiative,” which will invest heavily in community colleges. The president explained that “jobs requiring at least an associate degree are projected to grow twice as fast as jobs requiring no college experience.”

continued on page 21

NESACS VOLUNTEER

An exciting new opportunity

**As AV coordinator
You will**

- Oversee recording of NESACS presentations and events
- Recruit members to make recordings
- Distribute recorders as needed
- Obtain speaker's permission and copies of Power Point slides
- Manage transmission of recorded material to webmaster

contact -- Vivian Walworth
Board of Publications
Phone-978-369-3735

Email vwalworth@comcast.net

The Chromatography Solutions Experts



Chiral Purifications by SFC

Rilas Technologies is your partner for all your chiral separations needs, from analysis to purification. Our services are fast, flexible and highly affordable.

We Offer:

- * Chiral Analysis, enantiomeric excess determination within 1-3 days
- * Purifications of enantiomers from milligram to gram scale within 3-5 days
- * Free sample pick up and delivery within Boston Metro area

The Advantage of Working with Rilas:

- * We offer over 25 years of experience
- * There is no need to disclose structural information
- * Simple pricing with no lengthy quoting and negotiating process

For more information:
www.rilastech.com
info@rilastech.com
857-231-2078

**RILAS**
Technologies

October Historical Events In Chemistry

by Leopold May, The Catholic University of America, Washington, DC

October 1, 1867

One hundred years ago, in 1910, Wilder D. Bancroft served as President of the American Chemical Society. He made the first systematic study of oxidation cells, and did research on heterogeneous equilibria, emulsions, and the theory of dyeing. In 1896 he founded the Journal of Physical Chemistry. He was born on this date.

October 5, 1872

Emil Votocek, who was born on this date, was a researcher in sugars. He introduced the concept of epimerism and was a chemist-composer.

October 7, 1885

One hundred and twenty-five years ago, Niels Bohr was born. In 1913, he proposed the "solar system" model of the atom based upon Planck's quantum law and received the Nobel Prize in Physics in 1922 for his investigations of the structure of atoms and the radiation emanating from them.

October 8, 1917

Rodney R. Porter, who was born on this date, researched the structure of antibodies. In 1972, he shared the Nobel Prize in Physiology or Medicine with Gerald M. Edelman for their discoveries concerning the chemical structure of antibodies.

October 12, 1865

Arthur Harden, a researcher on enzymes and fermentation, was born on this date. He also demonstrated the structure of zymase. In 1929 he shared the Nobel Prize in Chemistry with Hans Euler-Chelpin for their investigations on the fermentation of sugar and fermentative enzymes.

October 14, 1840

Friederich W. G. Kohlrausch was a researcher on electrical conductivity, dilution of strong electrolytes, and conductivity (Kohlrausch's equation). He was born on this day.

October 18, 1799

Christian F. Schönbein was born on

this date. He discovered ozone in 1840 and collodion in 1846 and did research on hydrogen peroxide and gun-cotton (cellulose nitrate).

October 20, 1891

Born on this date, James Chadwick received the Nobel Prize in 1935 for his discovery of the neutron in 1932.

October 21, 1660

Three hundred and fifty years ago on this date, Georg E. Stahl was born. He was a researcher on oxidation and reduction and prepared glacial acetic acid. He and Johann J. Becher were responsible for phlogiston theory.

October 23, Any Year

Mole Day, 6:02 a.m. through 6:02 p.m. (Mole time); Mole Moment: 50.453 s after 6:42 p.m.

October 27, 1894

John E. Lennard-Jones, who was born on this date, was a researcher in surface chemistry, the chemistry

continued on page 21

Nacalai USA
Innovations for Life Sciences

COSMOSIL HPLC Columns

- Since 1979



New Phases Now Available!

HILIC (Triazole bonded)

- Unique stationary phase for highly polar compounds

piNAP (Naphthylethyl group bonded)

- Enhanced π - π interactions for unsaturated compounds

Cholester (Cholesteryl group bonded)

- New stationary phase for structural isomers

Nacalai USA, Inc. 6640 Lusk Blvd. Suite A200 San Diego CA 92121

Tel: 858-404-0403 Email: info@nacalaiusa.com

www.nacalaiusa.com

Annual Nucleus Buyers Guide 2010

1. How to use this Guide. First look at the PRODUCTS & SERVICES DIRECTORY, which is on page 20. Find the Category in which you are interested. Categories are shown in bold letters. Then, under the Category look for the specialized Product/ Service area that you want and copy the companies that are shown there.

Then go to the Company Directory (on page 15) and locate the companies that provide the Product/Services that interest you. Complete contact information is available for each company listed in the Buyers Guide.

2. This Guide is distributed to the 7,500 ACS members in the greater Massachusetts area. It has been estimated that this audience purchases \$350,000,000 of products and services each year.

If you wish to be in next year's Guide or are interested in other American Chemical Society advertising opportunities please contact Vince Gale, 781-837-0424 or vincegale@mboseervices.net.

COMPANY DIRECTORY

2mag-USA

Gary Sander
Manager
PO Box 214769
Daytona Beach, FL 33121-4769
FON-386-761-6131
FAX-386-760-0960
www.2magUSA.com
sales2mgUSA@aol.com
97, 119

AABSPEC Instrumentation Corp

Val Rossiter
President
135 Sutton Drive
Plainview, NY 11803
(800)783-9380 (voice)
(800)781-4934 (fax)
www.aabspec.com
val@aabspec.com
171

AAPPTec

Bill Bennett
Marketing Coordinator
6309 Shepherdsville Rd.
Louisville, KY 40228
(502)968-2223 (voice)
(502)968-3338 (fax)
www.aapptec.com
bill_bennett@aapptec.com
25A

Accelerated Technology Lab

Kim Waters
Sr. Product Specialist
496 Holly Grove School Rd
West End, NC 27376
(910)673-8165 (voice)
(910)673-8166 (fax)
www.atlab.com
info@atlab.com
56

Alconox Inc.

Janis Bolbrock
Director of Special Projects
30 Glen Street
White Plains, NY 10603
(914)948-4040 (voice)
(914)948-4088 (fax)
www.alconox.com
cleaning@alconox.com
29

Allen Datagraph Inc.

Debby Elliott
Vice President
2 Industrial Way
Salem, NH 03079
(603)893-1983 (voice)
(603)893-9042 (fax)
www.allendatagraph.com
info@allendatagraph.com
114

Alliance Technologies LLC

Leslie Lukas
Dir of Sales, Mktg & Comm
1 Deer Park Drive Ste D
Monmouth Junction, NJ 08852
(732)355-1234 (voice)
(732)438-8265 (fax)
www.alliancetechgroup.com
llukas@alliancetechgroup.com
23

Alliance Technologies, LLC

Jonathan Chun, PhD
Director of Technology
1 Deer Park Drive Ste D
Monmouth Junction, NJ 08852
(732)355-1234 (voice)
(732)438-8265 (fax)
www.alliancetechgroup.com
info@alliancetechgroup.com
23

American Inst. of Chemists Inc

Shane Danielson
Communications Manager
1620 I Street NW
Washington, DC 20006
(202)833-1838 (voice)
(202)463-8498 (fax)
www.theaic.org
aicoffice@TheAIC.org
179B

American Instrument Exchange

Marion Long
Sales
1023 Western Avenue
Haverhill, MA 01832
(978)521-2221 (voice)
(978)521-8822 (fax)
www.americaninstrument.com
marion@americaninstrument.com
114

Anamet Laboratories, Inc.

Kenneth Pytlewski, PE
Dir, Engineering & Lab Testing
26102 Eden Landing Rd. Ste. 3
Hayward, CA 94545-3811
(510)887-8811 (voice)
(510)887-8427 (fax)
www.anameticinc.com
info@anameticinc.com
23

Anresco Inc

Charleene Min
Marketing Director
1370 Vank Dyke Avenue
San Francisco, CA 94124
(415)822-1100 (voice)
(415)822-6615 (fax)
www.anresco.com
info@anresco.com
80B

Arendt Associates IP Group

Jacqueline M. Arendt, Esq.
Principal
1740 Massachusetts Avenue
Boxborough, MA 01719-2209
(978)897-8400 (voice)
(978)582-5547 (fax)
www.arendtpatentlaw.com
jacquelinearendt@aol.com
59

Ash Ingredients Inc.

Richard Field
VP Sales & Marketing
65 Harristown Road
Glen Rock, NJ 07452
(201)689-1322 (voice)
(201)689-1344 (fax)
www.ashingredients.com
rfield@ashingredients.com
35A

ATS RheoSystems

Steven Colo
President
231 Crosswicks Road
Bordentown, NJ 08505
(609)298-2522 (voice)
(609)298-2795 (fax)
www.atsrheosystems.com
info@atsrheosystems.com
12

Avery Filter Co.

Larry Avery
Technical Director
99 Kinderkamack Road
Westwood, NJ 07675
(201)666-9664 (voice)
(201)666-3802 (fax)
www.averyfilter.com
larry@averyfilter.com
110

Banner & Witcoff, Ltd.

Ernie Linek
Senior Partner
28 State Street, 28th Floor
Boston, MA 02109-1775
(617)720-9600 (voice)
(617)720-9601 (fax)
www.bannerwitcoff.com
Elinek@bannerwitcoff.com
59

Bedoukian Research

Izzy Heller
Sales Manager
21 Finance Dr.
Danbury, CT 06810
(203)830-4000 (voice)
(203)830-4010 (fax)
www.bedoukian.com
izzy@bedoukian.com
28

Bio-Rad Labs, Informatics Div

Deborah Kernan
Marketing Communications Mgr
2 PennCtr. 1500 JFK Blvd Ste 800
Philadelphia, PA 19192
(267)322-6931 (voice)
(267)322-6932 (fax)
www.knowitall.com
deborah_kernan@bio-rad.com
56

Bioremediation Consulting Inc.

Sam Fogel
Vice President
39 Clarendon St
Watertown, MA 02472
(617)923-0976 (voice)
(617)923-0959 (fax)
www.bcilabs.com
bioremediation@bcilabs.com
17

COMPANY DIRECTORY

Bodycote Testing Group-WCAS

Skip Jones
General Manager
9240 Santa Fe Springs Road
Santa Fe Springs, CA 90670
(510)492-4242 (voice)
(510)492-4242 (fax)
www.bodycotetesting.com
skip.jones@bodycote.com
65A

Bonna-Agela Technologies Inc.

Jian Wei
Regional Sales Manager
625 Dawson Drive Ste #A
Newark, DE 19713
(617)852-5672 (voice)
(302)235-1833 (fax)
www.agela.com
jwei@agela.com
12

Boston Analytical

Robert McBride
Operations Manager
8 Industrial Way—#D3
Salem, NH 03079
(603)893-3758 (voice)
(603)893-1268 (fax)
www.bostonanalytical.com
info@bostonanalytical.com
12C

BrandTech Scientific Inc.

Christian Petrilli
Director of Marketing & Dist.
11 Bokum Road
Essex, CT 06426-1476
(860)767-2562 (voice)
(860)767-2563 (fax)
www.brandtech.com
cpetrilli@brandtech.com
98,114,119A,133,137,171

Branson Ultrasonics Corp

Ed Topolski
Director - Commercial Products
41 Eagle Rd
Danbury, CT 06813-1961
(203)796-0532 (voice)
(203)796-2240 (fax)
www.sonifier.com
etopolski@bransonultrasonics.com
16

Brookfield Engineering Lab Inc

Robert McGregor
Sales/Marketing Manager
11 Commerce Blvd
Middleboro, MA 02346-1031
(508)946-6200 (voice)
(508)946-6262 (fax)
www.brookfieldengineering.com
sales@brookfieldengineering.com
12

Brookhaven Instruments

Irene Mueller
Marketing Manager
750 Blue Point Road
Holtsville, NY 11742-1832
(631)758-3200 (voice)

(631)758-3255 (fax)
www.bic.com
imueller@bic.com
4,6A,9,12,12BA,12DA,21B,42A,
46A,77

Bulbtronics, Inc.

Barbara Kaplan
Director Sales & Marketing
45 Banfi Plaza N
Farmingdale, NY 11735
(631)249-2272 (voice)
(631)217-4483 (fax)
www.bulbtronics.com
bk@bulbtronics.com
120

Cambridge Isotope Laboratories

Tasha Agreste
Marketing Specialist
50 Frontage Road
Andover, MA 01810
(978)749-8000 (voice)
(978)749-2768 (fax)
www.isotope.com
tashaa@isotope.com
13,25A,28,29,35,35A,38,39,149,
181

Cargille Laboratories

Dorothy Schneider
Advertising Administrator
55 Commerce Road
Cedar Grove, NJ 07009
(973)239-6633 (voice)
(973)239-6096 (fax)
www.cargille.com
CargilleAdv@aol.com
3,9,12,68,114,119A,144

Castagna Consulting Group LLC

Michael Castagna
Principal
Wall St Tower, Suite #808
Manchester, NH 03101
(603)625-1912 (voice)
(603)641-6493 (fax)
www.castagnaconsultinggroup.com
michael@castagnaconsultinggroup.com
66

Chemir Analytical Services

Laura Rainey
Marketing Manager
2672 Metro Blvd.
Maryland Heights, MO 63043
(314)291-6620 (voice)
(314)291-6630 (fax)
www.chemir.com
lrainey@chemir.com
23

Chrom Tech Inc.

Michelle Izerson
Marketing Manager
P.O. Box 2428
Apple Valley, MN 55124
(800)822-5242 (voice)
(952)431-6345 (fax)
www.chromtech.com
michelle@chromtech.com
41

Chromatography Forum Del Val

Bill Reuter
Publicity Chairman
14 Shoal Drive
Barnegat, NJ 08005
(609)607-9630 (voice)
(609)607-9723 (fax)
ewilliamsen@ursinus.edu
179B

Clark Solutions

Don Tyler
Marketing Manager
10 Brent Drive
Hudson, MA 01749
(978)568-3400 (voice)
(978)568-0060 (fax)
www.clarksol.com
sales@clarksol.com
138

Complete Analysis Laboratories

Dr. Zvi Blank
President
1259 Route 46, Bldg. #4
Parsippany, NJ 07054
(973)335-2254 (voice)
(973)335-0556 (fax)
www.calilabs.com
calilabs@earthlink.net
21A

Consolidated Stills&Sterilizer

George Lowe
Vice President
P O Box 297
Boston, MA 02134
(617)782-6072 (voice)
(617)787-5865 (fax)
www.consteril.com
info@consteril.com
95

Creagen

Raj Rajur
CEO
23 Rainin Road
Woburn, MA 01801
(781)938-1122 (voice)
(781)938-1123 (fax)
www.creagenbio.com
rrajur@creagenbio.com
23

CryoGas International

Agnes Horigan Baker
Editor
5 Militia Drive
Lexington, MA 02421
(781)862-0624 (voice)
(781)863-9411 (fax)
www.cryogas.com
abaker@cryogas.com
179

D-Star Instruments

Tom Finn
VP of Marketing
8424 Quarry Road
Manassas, VA 20110
(703)335-0770 (voice)
(703)335-9952 (fax)

www.d-star.com
Dstarlnstr@aol.com
46

Dendritic Nanotechnologies, Inc

Ryan Hayes PhD
Director Business Development
2625 Denison Drive
Mount Pleasant, MI 48858
(989)774-6565 (voice)
(989)774-2322 (fax)
www.dnanotech.com
sales@dnanotech.com
38

DuPont Analytical Solutions

Larry Ryan
Business Manager
POB#80323,ExpStaBldg302,Rm211
B
Wilmington, DE 19880-0323
(302)695-3953 (voice)
(302)695-1717 (fax)
larry.m.ryan@usa.dupont.com
65A

EDAX Inc.

Judy O'Loughlin
Americas Sales Manager
91 McKee Drive
Mahwah, NJ 07430
(800)535-3329 (voice)
(201)529-3156 (fax)
www.edax.com
christine.meehan@ametec.com
89

Elemental Analysis Corp

Mark Stauffer
Marketing Manager
101 Venure Ct., Ste.B-1
Lexington, KY 40511
(859)254-5115 (voice)
(859)254-5150 (fax)
www.elementalanalysis.com
MStauffer@ElementalAnalysis.com
80B

EMD Chemicals

Leslie Ferguson-Harris
Marketing Manager
480 South Democrat Road
Gibbstown, NJ 08027
(800)222-0342 (voice)
(856)423-4389 (fax)
www.emdchemicals.com
leslie.ferguson-harris@emdchemicals.com
37

Fisher Global Chemical

Marketing Manager
1 Reagent Lane
Fair Lawn, NJ 07410
(617)515-6062 (voice)
(817)549-6062 (fax)
www.fisherchem.com
fsuk.sales@thermofisher.com
79

Flow Sciences Inc.

Steve Janz
VP Mktg & Strategic Busi Devt

COMPANY DIRECTORY

2025 Mercantile Drive
Leland, NC 28451
(800)695-3429 (voice)
(910)763-1220 (fax)
www.flowsciences.com
SJanz@flowsciences.com
107A

Frinton Laboratories, Inc.

Dr. George Inglessis
Marketing Manager
P.O. Box 2428
Vineland, NJ 08362
(856)722-7037 (voice)
(856)439-1977 (fax)
www.frinton.com
sales@frinton.com
35B

Front Run Organx, Inc.

Mallory F. Loewe, Ph.D.
President
17 Hayward St
Ipswich, MA 01938
(978)356-7133 (voice)
(978)356-7449 (fax)
www.frontrunorg.com
Frontrun@sprynet.com
28

G. Finkenbeiner Inc.

Thomas Hession
Vice President
33 Rumford Avenue
Waltham, MA 02453
(781)899-3138 (voice)
(781)647-4044 (fax)
www.finkenbeiner.com
thession@finkenbeiner.com
116

Gentech Scientific Inc.

Marketing Manager
23 Mill Street
Arcade, NY 14009
(585)492-1068 (voice)
(585)492-0383 (fax)
www.GenTechScientific.com
www.GenTechScientific.com
42A

Glas-Col

James Jacso
Dir. Sales & Engineering
711 Hulman Street
Terre Haute, IN 47802
(812)235-6167 (voice)
(812)234-6975 (fax)
www.glascol.com
jjacso@glascol.com
114

Goodfellow Corporation

Stephen Aldersley
Marketing Manager
800 Lancaster Ave
Berwyn, PA 19312-1780
(610)640-1612 (voice)
(610)993-8065 (fax)
www.goodfellow.com
info@goodfellow.com
38

GOW-MAC Instrument Co.

Sales Dept.
277 Brodhead Rd.
Bethlehem, PA 18017
(610)954-9000 (voice)
(610)954-0599 (fax)
www.gow-mac.com
sales@gow-mac.com
42A,43,84A,85,86,87A

Headwall Photonics Inc.

David Bannon
Sales and Marketing
601 River Stree
Fitchburg, MA 014200
(978)353-4100 (voice)
(978)348-1864 (fax)
www.HeadwallPhotonics.com
dbannon@headwallphotonics.com
174

High-Purity Standards

Darlene Yon
Customer Service Manager
P O Box 41727
Charleston, SC 29423
(843)767-7900 (voice)
(843)767-7908 (fax)
www.highpuritystandards.com
info@highpuritystandards.com
39

HORIBA Jobin Yvon, Inc.

Stephen Cohen
Advertising Manager
3880 Park Avenue
Edison, NJ 08820
(732)494-8660 (voice)
(732)549-5125 (fax)
www.jobinyvon.com
stephen.cohen@horiba.com
166

HT Laboratories, Inc.

Albert Chong
COO
9823 Pacific Heights Blvd, Ste F
San Diego, CA 92121
(858)677-9432 (voice)
(858)677-0240 (fax)
www.HT-LABS.COM
info@HT-Labs.com
19

Huffman Laboratories, Inc.

William Huffman
Vice President
46300 Indiana Street
Golden, CO 80040-3-18
(303)278-4455 (voice)
(303)278-7012 (fax)
www.huffmanlabs.com
billhuffman@huffmanlabs.com
21A

ICET Inc.

Dr. Shantha Sarangapani
President
916 Pleasant Street Unit #12
Norwood, MA 02062
(781)769-6064 (voice)
(781)762-8204 (fax)

www.icetinc.com
icetinc@attglobal.net
77

ICON (Isotope) Services Inc.

John Kilby
Marketing Manager
19 Ox Bow Lane
Summit, NJ 07901
(908)273-0449 (voice)
(908)273-2956 (fax)
www.iconisotopes.com
iconisot@uno.com
35

Impact Analytical, Div. of M.M.I

Eric Hill
Marketing Development Manager
1910 West St. Andrews Road
Midland, MI 48640-2696
(989)892-5555 (voice)
(989)832-5560 (fax)
www.impactanalytical.com
hill@impactanalytical.com
23

Impandex Inc.

Stanley Goldberg
Manager
220 Delawanna Avenue
Clifton, NJ 07014
(973)777-0777 (voice)
(973)777-0070 (fax)
www.glenmills.com
staff@glenmills.com
97

Inorganic Ventures

Brian Brolin
Director of Sales & Marketing
300 Technology Drive
Christiansburg, VA 24073
(540)585-3030 (voice)
(540)585-3012 (fax)
www.inorganicventures.com
info@inorganicventures.com
39

International Crystal Labs

Robert Herpst
Managing Director
11 Erie Street
Garfield, NJ 07026
(973)478-8944 (voice)
(973)478-4201 (fax)
www.internationalcrystal.net
iclmail@internationalcrystal.net
133

International Equip Trading

Sara Schell
Sales Manager
960 Woodlands Parkway
Vernon Hills, IL 60061
(847)913-0777 (voice)
(847)913-0785 (fax)
www.ietitd.com
info@ietitd.com
172

JASCO

Harriet Mills
Marketing Manager

28600 Mary's Court
Easton, MD 21601
(410)822-1220 (voice)
(410)822-7526 (fax)
www.jascoinc.com
hmills@jascoinc.com
174

Kimble Chase

Kelly Williams
Advertising Manager
1022 Spruce Street P.O.Box1502
Vineland, NJ 08360
(856)692-8500 (voice)
(856)692-3242 (fax)
www.kimble-chase.com
K.Williams@kimble-chase.com
116

KNF Neuberger, Inc. (USA)

Richard Rauth
Manager Mktg. Communications
2 Black Forest Road
Trenton, NJ 08691-1810
(609)890-8600 (voice)
(609)890-8323 (fax)
www.knf.com/usa.htm
knfusa@knf.com
114,129,137

Kopella Analytical Services

Scott Moe
President & CEO
365 Boston Post Rd., Unit 247
Sudbury, MA 01776
(774)232-0673 (voice)
(508)251-1423 (fax)
www.gcmsanalysis.com
scotttmoe@yahoo.com
146

Laboratory Compliance Services

Stephen Chace
Consultant & Analytical Chem
645 N. Central
Winchendon, MA 01475
(978)235-2075 (voice)
() - (fax)
labcompliance@verizon.net
80B

Mallinckrodt Baker, Inc.

Patrick Riley
Global Marketing Mrg. Lab Prod
222 Red School Lane
Phillipsburg, NJ 08865
(800)582-2537 (voice)
(908)859-6905 (fax)
www.mallinckrodt.com
patrick.riley@covidien.com
38

Mass-Vac, Inc.

David Rolph
Sales Manager
PO Box 359
North Billerica, MA 01862
(978)667-2393 (voice)
(978)671-0014 (fax)
www.massvac.com
drolph@massvac.com
137

COMPANY DIRECTORY

Matreya LLC

Gary Walker
VP of Manufacturing
168 tressler Street
Pleasant Gap, PA 16823
(800)342-3595 (voice)
() - (fax)
www.matreya.com
customerservice@matreya.com
38

Metabolic Solutions Inc.

Martin Baker
Vice President
460 Amherst Street
Nashua, NH 03063
(603)598-6960 (voice)
(603)598-6973 (fax)
www.metsol.com
info@metsol.com
12D

Micron Inc.

James Ficca Jr.
President
3815 Lancaster Pike
Wilmington, DE 19805
(302)998-1184 (voice)
(302)998-1836 (fax)
www.micronanalytical.com
micronanalytical@compuserve.com
23

Molecular Knowledge Systems

Dr. Kevin Joback
Marketing Manager
P.O. Box 10755
Bedford, NH 03110-0755
(603)472-5315 (voice)
(603)472-5359 (fax)
www.molknow.com
info@molknow.com
56

Nacalai USA Inc.

Ono Toshi
Vice President
6640 Lusk Blvd. Ste: A200
San Diego, CA 92121
(858)404-0403 (voice)
(858)404-0408 (fax)
www.nacalaiusa.com
info@nacalaiusa.com
44

New Era Enterprises, Inc.

Robert Sviha
Product Manager
P.O. Box 747
Vineland, NJ 08362-0747
(856)799-2005 (voice)
(856)697-8727 (fax)
www.newera-spectro.com
cs@newera-spectro.com
133

New Jersey Inst. of Technology

Larisa Krishtopa
Laboratory Director
138 Warren Street
Newark, NJ 07102
(973)596-5858 (voice)
(973)642-7170 (fax)

www.ycees.njit.edu/labs
larisa.g.krishtopa@njit.edu
12H

Northeastern University

Richard Pumphrey
Treasurer
360 Huntington Ave, Hurtig Hall
Boston, MA 02115
(617)373-8879 (voice)
(617)373-8795 (fax)
www.chem.neu.edu
r.pumphrey@neu.edu
179B

Northern Analytical Laboratory

Dick Guidoboni
President
13 Delta Drive
Londonderry, NH 03053
(603)434-8400 (voice)
(603)434-8500 (fax)
www.northernanalytical.com
nalabs@northernanalytical.com
24

NuMega Resonance Labs.

Frances Shen
Vice President
11526 Sorrento Valley Rd, Ste B2
San Diego, CA 92121
(858)793-6057 (voice)
(858)793-2607 (fax)
www.numegalabs.com
numegalab@numegalabs.com
12H

On Assignment Lab Support

Daniel McGowan
Senior Account Executive
One New Eng Exec Park, Ste#101
Burlington, MA 01803
(781)229-2505 (voice)
(781)229-1902 (fax)
www.onassignment.com
boston@labssupport.com
57A

Organix Inc.

Howard Sard
Vice President
240 Salem Street
Woburn, MA 01801
(781)932-4142 (voice)
(781)933-6695 (fax)
www.organixinc.com
sard@organixinc.com
12C, 12D, 12H, 28, 35A, 65, 146

Organomed Corporation

James Jacob
President
11 Grandview St., Unit 8
Coventry, RI 02816
(401)826-7240 (voice)
(401)826-7315 (fax)
www.organomed.com
info@organomed.com
28

PCI Synthesis

Melissa Huang
Manager New Business Devt

9 Opportunity Way
Newburyport, MA 01950
(508)533-5012 (voice)
(508)533-5012 (fax)
www.pcisynthesis.com
Melissa.Huang@pcisynthesis.com
146

PDR-Chiral

Gary Yanik
President & CEO
1331A South Killian Drive
Lake Park, FL 33403
(561)841-4195 (voice)
(561)841-4196 (fax)
www.pdr-chiral.com
gwyunik@pdr-chiral.com
46

Photonics Spectra/Laurin Publ.

Nancy Lamontagne
2 South St. Berkshire Common
PO Box 4949
Pittsfield, MA 01202
(413)499-0514 (voice)
(413)442-3180 (fax)
www.Photonics.com
photonics@laurin.com
179

pION Inc.

Melanie Dohoda
Administrative Asst.
5 Constitution Way
Woburn, MA 01801-1024
(781)935-8939 (voice)
(781)935-8938 (fax)
www.pion-inc.com
mdohoda@pion-inc.com
65

Poly(Chem-Tech)

Daniel Kruh, Ph.D.
President
8 Braddock
East Brunswick, NJ 08816
(732)238-3182 (voice)
(732)238-3182 (fax)
dankruh@aol.com
65, 75, 76

Polyinsight Llc

Mike Mallamaci
Director
526 S. Main Street Ste#414
Akron, OH 44311
(330)777-0025 (voice)
(330)777-0025 (fax)
www.polyinsight.com
mike@polyinsight.com
21B

Q-Glass Co Inc.

Dan Dotterweich
Vice President
624 Rt 202
Towaco, NJ 07082
(973)335-5191 (voice)
(973)335-2057 (fax)
www.qglass.com
dan@qglass.com
116

Qorpak, Div Berlin Packaging

Karen Brooks
Division, VP
1195 Washington Pike
Bridgeville, PA 15017
(412)257-3100 (voice)
(412)257-3001 (fax)
www.berlinpackaging.com
karen.brooks@berlinpackaging.com
119

Quartz Plus Inc.

Joseph Thomas
Vice President
27 Westview Road
Brookline, NH 03033
(603)673-5774 (voice)
(603)673-5766 (fax)
www.quartzplus.com
jthomas@quartzplus.com
116

Richman Chemical, Inc.

Linda Tedeschi Miller
Marketing Manager
768 N. Bethelham Pike
Lower Gwynedd, PA 19002
(215)628-2946 (voice)
(215)628-4262 (fax)
www.richmanchemical.com
ltm@richmanchemical.com
38

Robertson Microlit Labs

Rudolf Oeckinghaus PhD
President
PO Box 927, 29 Sampson Ave.
Madison, NJ 07940
(973)966-6668 (voice)
(973)966-0136 (fax)
www.robertson-microlit.com
admin@robertson-microlit.com
20

Rudolph Instruments

Patrick O'Keefe
Vice President
Denville TechPk, 400 Morris Av
Denville, NJ 07834
(888)478-3657 (voice)
(973)983-6290 (fax)
www.rudolphinstruments.com
sales@rudolphinstruments.com
8, 9, 12C, 24, 148

Sartorius Mechatronics Corp.

Kathleen Carullo
Administrative Asst.
5 Orville Drive
Bohemia, NY 11716
(800)368-7178 (voice)
(631)253-5421 (fax)
www.sartorius-mechatronics.com
Kathleen.Carullo@Sartorius-Ste-
dim.com
12B

Scientific Asset Management, L

Christopher McManemin
Marketing Manager
99 Lurline Drive
Basking Ridge, NJ 07920
(908)604-1417 (voice)

COMPANY DIRECTORY

(908)604-1417 (fax)
www.gotosam.com
gotosam@gotosam.com
114

Scientific Bindery

Nancy McDonald
Administrative Asst.
P.O. Box 377
Highland Park, IL 60025
(773)267-1129 (voice)
(773)267-1218 (fax)
www.scientificbindery88yrs.com
skybind@att.net
158,159,160,161,162,163

Shimadzu Scientific Instrument

Robert Buco
Mass Spectrometry Specialist
126 Longwater Dr.
Norwell, MA 02061
(800)396-4943 (voice)
(781)878-7212 (fax)
www.ssi.shimadzu.com
rebucos@shimadzu.com
172

Shimadzu Scientific Instruments

Kevin McLaughlin
Sr. MarComm Coordinator
7102 Riverwood Drive
Columbia, MD 21046
(800)477-1227 (voice)
(410)381-1222 (fax)
www.ssi.shimadzu.com
webmaster@shimadzu.com
6A,12B,43,46,164,169,172,177A,
178

Siemens Water Technologies

Julie Mulligan
Marketing Communications Mgr.
10 Technology Drive
Lowell, MA 01851
(800)875-7873 (voice)
(978)453-5821 (fax)
www.water.siemens.com
labproducts.water@siemens.com
90

Smiths Detection-Danbury

Dana Knox-Gower
Marketing Manager
21 Commerce Drive
Danbury, CT 06810
(203)207-9700 (voice)
() - (fax)
www.smithsdetection.com
dana.knox-
gower@smithsdetection.com
156

SOCMA

Liesa Brown
Business Development Manager
1850 M. Street, NW, Suite 700
Washington, DC 20036
(202)721-4156 (voice)
(202)296-8120 (fax)
www.socma.com
info@socma.com
60

Sorbent Technologies, Inc.

Danielle Downs Trott
Public Relations
2377 John Glenn Drive, Ste#106
Atlanta, GA 30341
(678)222-0288 (voice)
() - (fax)
www.sorbtech.com
dtrott@sorbtech.com
42A

Spectrix Analytical Svcs LLC

Marie D'Andrea
President
P.O. Box 234
Middleton, CT 06457
(860)346-5582 (voice)
(860)343-9350 (fax)
www.spectrixservices.com
mdandrea@spectrixservices.com
12D

Strategic Diagnostics

Boyle:Sheila
Regional Sales Representative
111 Pencader Drive
Newark, DE 19702
(302)753-4017 (voice)
() - (fax)
www.sdix.com
sales@sdix.com
23

Strem Chemicals, Inc.

Peter Chu, PhD
Sales & Marketing Manager
7 Mulliken Way Dexter Inds. Pk
Newburyport, MA 01950-4098
(978)499-1600 (voice)
(978)465-3104 (fax)
www.strem.com
info@strem.com
27

Supercritical Fluid Tech. Inc.

Kenneth Krewson
VP Sales & Marketing
1 Innovation Way, Suite 303
Newark, DE 19711
(302)738-3420 (voice)
(302)738-4320 (fax)
www.supercriticalfluids.com
ken.krewson@supercriticalfluids.com
127

Taylor Technologies Inc.

Jody O'Grady
Manager Customer & Technical
31 Loveton Circle
Sparks, MD 21152
(800)837-8548 (voice)
(410)771-4291 (fax)
www.taylor technologies.com
customerser-
vice@taylor technologies.com
12A

Techne Inc.

Christian Dyott
Product Manager
3 Terri Lane Suite #10
Burlington, NJ 08016

(609)589-2560 (voice)
(609)589-2571 (fax)
www.techneusa.com
cdyott@techneusa.com
114

The Catalyst Group Resource

Jeanne Drahos
Director Sales Marketing
P.O. Box 680
Spring House, PA 19477
(215)628-4447 (voice)
(215)628-2267 (fax)
www.catalystgrp.com
jmd@catalystgrp.com
64

The Chem Show

Clay Stevens
President/Show Director
15 Franklin Street
Westport, CT 06880
(203)221-9232 (voice)
(203)221-9260 (fax)
www.chemshow.com
cstevens@iecshows.com
179B

Thermo Fisher Scientific

Boyd:Denise
Marketing Communications Mgr.
25 Nimble Hill Road
Newington, NH 03801
(603)436-9444 (voice)
(603)436-8411 (fax)
www.thermo.com.tc
info.tc.us@thermofisher.com
96

Toxikon Corporation

Fred Deckert
Dir Analytical & Toxicology
15 Wiggins Avenue
Bedford, MA 01730
(781)275-3330 (voice)
(781)271-1137 (fax)
www.toxikon.com
fred.deckert@toxikon.com
13A

TRI/Princeton

Eleanor Lehman
Marketing Manager
601 Prospect Ave., PO Box 625
Princeton, NJ 08540
(609)430-4820 (voice)
(609)683-7149 (fax)
www.triprinceton.org
info@triprinceton.org
65

U.S. Services, Inc.

John Kilby
Marketing Manager
19 Ox Bow Lane
Summit, NJ 07901
(908)273-0440 (voice)
(908)273-2956 (fax)
www.iconisotopes.com
iconisot@juno.com
38

United Electric Controls Co.

K. Kotwal
Marketing Comm Specialist
180 Dexter Ave.
Watertown, MA 02472
(617)926-1000 (voice)
(617)926-4354 (fax)
www.ueonline.com
kkotwas@ueonline.com
128

University of Wisconsin Press

Kirt Murray
Advertising Manager
1930 Monroe Street, 3rd Floor
Madison, WI 53711-2059
(608)263-0733 (voice)
(608)263-1132 (fax)
kdmurray@wisc.edu
179

VHG Labs

Michael Travers
VP Marketing & Sales
276 Abby Road
Manchester, NH 03103
(603)622-7660 (voice)
(603)622-5180 (fax)
www.vhglabs.com
mike@vhglab.com
24

Wilmad/Lab Glass

Glenda Marinelli
Marketing Support
P.O. Box 688, 1002 Harding Hwy
Buena, NJ 08310-0688
(856)697-3000 (voice)
(856)697-0536 (fax)
www.wilmad.com
glenda.martinelli@spindustries.com
116

XenoBiotic Laboratories, Inc.

Neil J. Lewis PhD
Vice Pres Pharmaceutical Div
107 Morgan Lane
Plainsboro, NJ 08536
(609)799-2295 (voice)
(609)799-7497 (fax)
www.xbl.com
njlewis@xbl.com
19

**PRODUCTS
& SERVICES
DIRECTORY
on page 20**

PRODUCTS & SERVICES DIRECTORY

ANALYTICAL EQUIPMENT

- 3-Densitometers**
Cargille Laboratories
- 4-Molecular weight analyzers**
Brookhaven Instruments
- 6A-Particle size**
Brookhaven Instruments
Shimadzu ScientificInstruments
- 8-Polarimeters**
Rudolph Instruments
- 9-Refractometers**
Brookhaven Instruments
Cargille Laboratories
Rudolph Instruments
- 12-Viscometers**
ATS RheoSystems
Bonna-Agela Technologies Inc.
Brookfield Engineering Lab Inc
Brookhaven Instruments
Cargille Laboratories
- 12A-Water test kits**
Taylor Technologies Inc.
- 12B-Weighing balances & scales**
Sartorius Mechatronics Corp.
Shimadzu ScientificInstruments
- 12BA-Zeta potential**
Brookhaven Instruments

ANALYTICAL SERVICES

- 12C-HPLC**
Boston Analytical
Organix Inc.
Rudolph Instruments
- 12D-Mass Spectrometry**
Metabolic Solutions Inc.
Organix Inc.
Spectrix Analytical Svcs LLC
- 12DA-SEC/GPC size excl chromatography**
Brookhaven Instruments
- 12H-NMR Spectroscopy**
New Jersey Inst. of Technology
NuMega Resonance Labs.
Organix Inc.

BIOTECHNOLOGY

- 13-Biochemicals**
Cambridge Isotope Laboratories
- 13A-Biology/toxicology analysis**
Toxikon Corporation
- 16-Cell disruption**
Branson Ultrasonics Corp
- 17-Microbiology**
Bioremediation Consulting Inc.

CHEMICAL ANALYSIS

- 19-Bioanalytical service LC/MS**
HT Laboratories, Inc.
XenoBiotic Laboratories, Inc.
- 20-Certificates of analysis**
Robertson Microlit Labs
- 21A-Elemental Microanalysis**
Complete Analysis Laboratories
Huffman Laboratories, Inc.
- 21B-Polymer analysis**
Brookhaven Instruments
Polyinsight Llc
- 23-Testing laboratory**
Alliance Technologies LLC
Alliance Technologies, LLC
Anamet Laboratories, Inc.
Chemir Analytical Services
CreaGen
Impact Analytical,Div.of M.M.I
Micron Inc.
Strategic Diagnostics
- 24-Trace element analysis**
Northern Analytical Laboratory
Rudolph Instruments
VHG Labs

CHEMICALS

- 25A-Amino acids**
AAPPTec
Cambridge Isotope Laboratories
- 27-Chiral catalysts**
Strem Chemicals, Inc.
- 28-Custom synthesis**
Bedoukian Research
Cambridge Isotope Laboratories
Front Run Organx, Inc.
Organix Inc.
Organomed Corporation
- 29-Detergents**
Alconox Inc.
Cambridge Isotope Laboratories
- 35-Isotopes**
Cambridge Isotope Laboratories
ICON (Isotope) Services Inc.
- 35B-Organic Compounds**
Frinton Laboratories, Inc.
- 35A-Pharmaceutical intermediates**
Ash Ingredients Inc.
Cambridge Isotope Laboratories
Organix Inc.
- 37-Reagents**
EMD Chemicals
- 38-Research Chemicals**
Cambridge Isotope Laboratories
Dendritic Nanotechnologies,Inc
Goodfellow Corporation
Mallinckrodt Baker, Inc.
Matreya LLC
Richman Chemical, Inc.
U.S. Services, Inc.

- 39-Solutions, standard**
Cambridge Isotope Laboratories
High-Purity Standards
Inorganic Ventures

CHROMATOGRAPHY

- 41-Accessories & supplies**
Chrom Tech Inc.
- 42A-Chromatography**
Brookhaven Instruments
Gentech Scientific Inc.
GOW-MAC Instrument Co.
Sorbent Technologies, Inc.
- 43-Gas**
GOW-MAC Instrument Co.
Shimadzu ScientificInstruments
- 44-HPLC columns**
Nacalai USA Inc.
- 46-Liquid**
D-Star Instruments
PDR-Chiral
Shimadzu ScientificInstruments
- 46A-Size exclusion**
Brookhaven Instruments

COMPUTER APPLICATIONS

- 56-Software**
Accelerated Technology Lab
Bio-Rad Labs, Informatics Div
Molecular Knowledge Systems

CONSULTING, MANAGEMENT

- 57A-Executive Search**
On Assignment Lab Support
- 59-Patents**
Arendt Associates IP Group
Banner & Witcoff, Ltd.
- 60-Research**
SOCMA

CONSULTING SERVICES

- 64-Chemical Process**
The Catalyst Group Resource
- 65-Contract research**
Organix Inc.
pION Inc.
Poly(Chem-Tech)
TRI/Princeton
- 65A-Contract testing laboratory**
Bodycote Testing Group-WCAS
DuPont Analytical Solutions
- 66-Engineering**
Castagna Consulting Group LLC
- 68-Forensic analyses**
Cargille Laboratories
- 75-Polymers**
Poly(Chem-Tech)
- 76-Product formulation**
Poly(Chem-Tech)

- 77-R & D**
Brookhaven Instruments
ICET Inc.

- 79-Safety**
Fisher Global Chemical

- 80B-Testing Laboratory**
Anresco Inc
Elemental Analysis Corp
Laboratory Compliance Services

DETECTORS

- 84A-Discharge ionization**
GOW-MAC Instrument Co.
- 85-Flame ionization**
GOW-MAC Instrument Co.
- 86-Gas leak**
GOW-MAC Instrument Co.
- 87A-Thermal conductivity**
GOW-MAC Instrument Co.

ELECTRON MICROSCOPY

- 89-Electron Microscopy**
EDAX Inc.

ENVIRONMENTAL ANALYSIS

- 90-Environmental analysis**
Siemens Water Technolgies

GENERAL EQUIPMENT

- 95-Autoclaves**
Consolidated Stills&Sterilizer
- 96-Baths**
Thermo Fisher Scientific
- 97-Blenders, mixers, stirrers**
2mag-USA
Impandex Inc.
- 98-Burets & accessories**
BrandTech Scientific Inc.
- 107A-Ductless fume hoods**
Flow Sciences Inc.
- 110-Filters**
Avery Filter Co.
- 114-General laboratory equipment**
Allen Datagraph Inc.
American Instrument Exchange
BrandTech Scientific Inc.
Cargille Laboratories
Glas-Col
KNF Neuberger,Inc. (USA)
Scientific Asset Management, L
Techne Inc.
- 116-Glassware**
G. Finkenbeiner Inc.
Kimble Chase
Q-Glass Co Inc.
Quartz Plus Inc.
Wilmad/Lab Glass

PRODUCTS & SERVICES DIRECTORY

119-Lab stirrers

2mag-USA
Qorpak, Div Berlin Packaging

119A-Labware

BrandTech Scientific Inc.
Cargille Laboratories

127-Pressure vessels

Supercritical Fluid Tech. Inc.

128-Process controls

United Electric Controls Co.

129-Pumps

KNF Neuberger, Inc. (USA)

133-Spectrophotometer cells

BrandTech Scientific Inc.
International Crystal Labs
New Era Enterprises, Inc.

137-Vacuum equipment

BrandTech Scientific Inc.
KNF Neuberger, Inc. (USA)
Mass-Vac, Inc.

138-Valves

Clark Solutions

MICROSCOPES & SERVICES

144-Microscope accessories

Cargille Laboratories

ORGANIC SYNTHESIS

146-Organic synthesis

Kopella Analytical Services
Organix Inc.
PCI Synthesis

POLLUTION CONTROL

148-Instruments

Rudolph Instruments

149-Standards

Cambridge Isotope Laboratories

SAFETY

156-Equipment

Smiths Detection-Danbury

DOCUMENTATION

158-Custom lab books

Scientific Bindery

159-Notebooks and stockbooks

Scientific Bindery

160-Production control books

Scientific Bindery

161-Quality control books

Scientific Bindery

162-Quantitative control books

Scientific Bindery

SPECTROMETERS

164-Atomic absorption instruments

Shimadzu Scientific Instruments

166-Emission

HORIBA Jobin Yvon, Inc.

169-IR

Shimadzu Scientific Instruments

171-IR & UV cells

AABSPEC Instrumentation Corp
BrandTech Scientific Inc.

172-Mass

International Equip Trading
Shimadzu Scientific Instrument
Shimadzu Scientific Instruments

174-Raman

Headwall Photonics Inc.
JASCO

177A-X-ray Crystallography

Shimadzu Scientific Instruments

178-X-ray fluorescence

Shimadzu Scientific Instruments

EDUCATION & PUBLICATIONS

179-Books, journals, monographs

CryoGas International
Photonics Spectra/Laurin Publ.

179B-Training & education

American Inst. of Chemists Inc
Chromatography Forum Del Val
Northeastern University
The Chem Show
University of Wisconsin Press

SUPPLIES

181-Solvents & thinners

Cambridge Isotope Laboratories

To be in next year's Guide, contact Vince Gale at:

phone: 781-837-0424,

e-mail:

cust-svc@mboseervices.net

Community College

Continued from page 13

Vice-President Joe Biden's wife, Jill Biden, taught for several years at a community college. Mrs. Biden has said about teaching at a community college, "I feel like I can make a greater difference in their lives...I love the women who are coming back to school and getting their degrees, because they're so focused."

In conclusion, the faculty members continued to praise the high quality of their students. "If you have the opportunity to work with a student from here you see that they are obviously getting something worthwhile," said Professor Atkinson. "They are fantastic and well-prepared."

"I think the people who work in community colleges really believe in open access for all," Dean Young said. "We should continue to highlight the things we are really good at," like open access education and helping students recognize their potential. In conclusion, Dean Young added, "I think we have a lot to be proud of." ◇

Historical Events

Continued from page 14

of carbon, the structure of liquids, and interatomic forces.

October 31, 1835

One hundred and seventy-five years ago, Adolf von Baeyer (Johann Friedrich Wilhelm Adolf Von Baeyer) was born. He was a researcher on indigo, evolved the strain theory of carbon rings, prepared acetylene, and in 1863 discovered barbituric acid. In 1905 he was awarded the Nobel Prize in Chemistry in recognition of his services in the advancement of organic chemistry and the chemical industry, through his work on organic dyes and hydroaromatic compounds,

For more historical facts on chemistry, visit Dr. May's website at <http://faculty.cua.edu/may/ChemistryCalendar.html> ◇

CCAS Feedback

Continued from page 9

raise. Each query will be addressed. CAS operates for the benefit of the scientific community and CCAS can be your first point of contact if there is an issue that concerns you." ◇

What's Yours?

DMPK Scientist,
LC/MS Product Specialist,
Mass Spec Operator,
Staff Investigator,
Process Chemist,
QA Manager,
Synthetic Chemist,
Lab Instructor

Many local employers post positions on the NESACS job board.

Find yours at
www.nesacs.org/jobs

BUSINESS DIRECTORY

SERVICES



PCI Synthesis Inc. is a custom chemical manufacturer of new chemical entities (NCE's), and other specialty chemical products.

- Process Research
- Process Development
- Analytical Development
- Process Validation
- Regulatory Support
- FDA filing



PCI Synthesis

9 Opportunity Way, Newburyport, MA 01950

978.462.5555

www.pcisynthesis.com

SERVICES

Elemental Analysis

CHNOS ash
ICP • AA • ICP/MS
TOC • TOX • BTU
Problem Solving

HUFFMAN

LABORATORIES, INC.
Quality Analytical Services Since 1935
Phone: (303) 278-4455
FAX: (303) 278-7012
chemistry@huffmanlabs.com
www.huffmanlabs.com



NMR Service 500MHz

*Mass

*Elemental Analysis

NuMega Resonance Labs

numegalabs.com P- 858-793-6057

MASS] SPEC] SERVICES

Accurate Masses
High Sensitivity
Method Development
MALDI-TOF-MS and GC-TOF-MS
www.neu.edu/msanalysis

SERVICES

Front Run OrganX, inc.

Custom Synthesis & Process Chemistry

WHEN QUALITY MATTERS

High Purity, Scalable Solutions
to Challenging Organic Synthesis

Starting Materials to Pre-clinical
Single to Multi-Step mg to Kgm

98% min. purity

Phone 978-356-7133 Fax 978-356-7449

Email FrontRun@Sprynet.com

www.FrontRunOrg.com

NMR - IR/FTIR - UV/VIS/FL Sampling supplies & accessories

See our full catalogs / current pricing at

www.newera-spectro.com

CAGE Code: 44ME9

DUNS 556785857

NEW ERA
New Era Enterprises, Inc.
1-800-821-4867
cs@newera-spectro.com

ORGANIX INC.

Your Partner in
Organic & Medicinal Chemistry
Providing Services Since 1986

Services:

- Custom Synthesis
- Hit-to-Lead Programs
- Structure Activity Programs
- 1H NMR and 13C NMR
- LC/MS Services

Strengths:

- Outstanding Communications
- Reliable Time Management
- Experienced Ph.D. Scientists



On Target - On Time - On Budget.

Massachusetts, USA

Phone: (781) 932-4142

Fax: (781) 933-6695

Email: organix@organixinc.com

www.organixinc.com



Micron Analytical Services

COMPLETE MATERIALS CHARACTERIZATION
MORPHOLOGY CHEMISTRY STRUCTURE

SEM/EDXA • EPA/WDXA • XRD XRF • ESCA • AUGER • FTIR • DSC/TGA

Registered with FDA • DEA GMP/GLP Compliant

3815 Lancaster Pike Wilmington DE. 19805

Voice 302-998-1184, Fax 302-998-1836

E-Mail micronanalytical@compuserve.com

Web Page: www.micronanalytical.com



Robertson Microlit Laboratories

Where speed and accuracy are elemental

Elemental CHN, S, X, Analysis (same day service)

Metals by ICP-OES, ICP-MS, A/A

FTIR, UV/VIS Spectroscopy

Ion Chromatography

Bioavailability

Polarimetry

DSC, melting point

KF Aquametry, Titrimetry

P.O. Box 927 - 29 Samson Ave. - Madison, NJ 07940 - 973.966.6668 - F 973.966.0136

www.robertson-microlit.com - email: results@robertson-microlit.com

Rapid Results • Quality • Accuracy • Competitive Pricing

BUSINESS DIRECTORY

SERVICES



PolyOrg, Inc.
Chemical Solutions for
the Life Science Industry

- Custom Organic Synthesis
- Process Development
- Contract R & D
- Pharmaceutical Intermediates
- Medicinal Chemistry Support
- Biotechnology Specialty Reagents
- Solid Support Reactions
- Process Validation
- Gram to Multi-Kilogram Synthesis



PolyOrg Inc.

10 Powers Street, Leominster, MA 01453
Phone: 978-466-7978 1-866-Poly-002
Fax: 978-466-8084 info@polyorginc.com
www.polyorginc.com

SERVICES

COST-EFFECTIVE ANALYTICAL SERVICES

Our analytical laboratories offer same day or next day turn-around service. Our analytical department features a Waters Micromass Quattro Ultima Mass Spectrometer coupled with a Shimadzu LC-10AD VP liquid chromatography instrument for performing LC/MS analyses, and a Varian Inova 300 MHz NMR instrument.



YOUR FIRST SAMPLE IS FREE

Call 781-938-1122 or email majur@creagenbio.com to explore CreaGen's capabilities and expertise.



CAREER SERVICES

SEARCHING FOR THAT SPECIAL JOB?

There are many companies and organizations searching for chemical and biochemical personnel to fill important jobs in their organizations.

- Companies for laboratory and management positions
- Universities & Colleges for teaching positions and laboratory personnel
- Hospitals for technical and research personnel

There are several web sites that may help you search for these open positions.

- www.mboservices.net
- www.nesacs.org

THE FUTURE OF LIQUID
CHROMATOGRAPHY
IS ACQUITY UPLC



Waters ACQUITY UltraPerformance LC® (UPLC®) provides more information, increases laboratory throughput, and can enhance your lab's existing MS technologies.

Learn more about the UPLC advantage at:
www.waters.com/uplc

Waters

THE SCIENCE OF WHAT'S POSSIBLE™

WOULD YOU BELIEVE?

- Our Section (NESACS) is the largest in the ACS.
- We have more volunteers than any other Section.
- We have more activities than any other Section.
- The Nucleus has been voted at several ACS National meetings to be the best Section newsletter.
- We are expanding Nucleus and NESACS web site coverage of activities.

The Following positions are open

1. Photo Journalists
2. Book Reviewers
3. Corporate and Local news reporters
4. Copy Editors
5. Volunteer Coordinator

If you would like to be active in this vibrant organization, please contact Board of Publications member Vivian Walworth vwalworth@comcast.net

**No experience needed
Just a willingness to participate
and a sense of humor**

Index of Advertisers

CreaGen Biosciences	23
Eastern Analytical Symposium...	2
Eastern Scientific Co.	12
EMD Chemicals, Inc.....	6
Front Run OrganX, Inc.	22
Huffman Laboratories, Inc.....	22
Mass Spec Services.....	22
Mass-Vac, Inc.	4
Micron Inc.....	22
Nacalai USA, Inc.	14
New Era Enterprises, Inc.	22
NuMega Resonance Labs	22
Organix, Inc.	22
PCI Synthesis	22
PolyOrg, Inc.....	23
Rilas Technologies, Inc.....	13
Robertson Microlit Labs.....	22
University of Wisconsin	24
Vacuubrand, Inc.	8
Waters Corporation	23

19 Mill Road
Harvard, MA 01451

THE
NUCLEUS

NONPROFIT ORG.
U.S. POSTAGE PAID
NORTHEASTERN
SECTION
AMERICAN CHEMICAL
SOCIETY

Bassam Z. Shakhshiri's
Chemical Demonstrations, Volume 5
A Handbook for Teachers of Chemistry



**"The most comprehensive set of
chemical demonstrations
handbooks ever created."**

Roald Hoffmann, Nobel Laureate
in Chemistry

Color and light are the focus of this long-awaited fifth volume in the *Chemical Demonstrations* series, which describes demonstrations that effectively communicate science to both students and general audiences.

Featuring a rich introductory section and full-color illustrations, this book provides meticulous instructions for safely demonstrating colorful phenomena and illustrating scientific principals.

408 pages, 8.5 x 11, 75 color illustrations. *Forthcoming February 2011*

UNIVERSITY OF
WISCONSIN
PRESS

Order from science suppliers or uwpress.wisc.edu

Calendar

Check the **NESACS** home page
for late **Calendar** 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/>
<http://web.mit.edu/chemistry/>
www.chem.neu.edu/web/calendar/index.html
<http://chem.tufts.edu/seminars.html> [CHEM.]
<http://ase.tufts.edu/chemical/seminar.htm>
[CHEM. ENGG.]
<http://www.chem.umb.edu/>
www.umassd.edu/cas/chemistry/seminars.cfm
www.uml.edu/Dept/Chemistry/speakers.html
<http://www.unh.edu/chemistry/seminars.html>

Oct 04

Stuart Schreiber (Harvard)
TBA
Harvard, Pfizer Lecture Hall
4:00 pm

Prof. Theodore Betley (Harvard)
New design strategies for small molecule
activation
Brandeis, Gerstenzang 122
3:45 pm

Oct 05

Theodore S. Dibble (SUNY - Syracuse
Environmental Science and Forestry)
Organic Radical Chemistry in the Atmosphere
Univ. New Hampshire, Iddles, L103
11:10 am

Oct 07

Thomas Kodacek (The Scripps Research
Institute)
Broad Institute, Kendall Square 4:00 pm

Paul Hergenrother (Univ. Illinois, Urbana-
Champaign)
MIT, 6-120 4:15 pm

Prof. Vicki H. Grassian (The University of Iowa)
Chemistry for a Sustainable Future
Univ. New Hampshire, Iddles, L103 11:10 am

Oct 11

Professor J.P. Hart, University of Texas
Brandeis, Gerstenzang 122 3:45 pm

Oct 12

Max Tishler Award Lecture
Prof. Ronald Breslow (Columbia)
Tufts Univ. Pearson Chemistry Bldg, P-106
4:30 pm

Alison Frontier (Univ. Rochester)
Univ. New Hampshire, Iddles, L103 11:10 am

Oct 14

Jean Frechet (U. C., Berkeley)
MIT, 6-120 4:15 pm

W. E. Moerner (Stanford University)
MIT, 6-120 5:00pm

Oct 18

Tom Muir (The Rockefeller University)
Ubiquitin Acts as a 'Steric Wedge' to Impede
Chromatin Compaction
MIT, 56-114 4:00 pm

Prof. James Prestegard (Univ. Georgia)
Brandeis, Gerstenzang 122 3:45 pm

Suzanne Walker (Harvard Medical School)
Harvard, Pfizer Lecture Hall 4:00 pm

Oct. 19

Prof. Scott Schaus (Boston University)
Boston College, Merkert 130 4-5 pm

Prof. Sergey Kozmin (Univ. Chicago)
Tufts Univ. Pearson Chemistry Bldg, P-106
4:30 pm

Prof. Tom Muir (MIT)
Ubiquitin acts as a 'Steric Wedge' to impede
chromatin compaction
Brandeis, Gerstenzang 122 3:00 pm

Oct 21

Dave Mason (Henckel)
Univ. New Hampshire, Iddles, L103 11:10 am

Oct 25

Phil Baran (The Scripps Research Institute)
Harvard, Pfizer Lecture Hall 4:00 pm

Prof. Dan Nocera (MIT)
Personalized energy for the non-legacy world
Brandeis, Gerstenzang 122 3:45 p.m.

Oct 26

Prof. Peter Caravan (Harvard)
Tufts Univ. Pearson Chemistry Bldg, P-106
4:30 pm

MIT-Pfizer Seminar in Organic Chemistry:
David MacMillan (Princeton University)
MIT, 54-100 4:00pm

Caryn Prudenté (Univ. Southern Maine)
Synthesis and Characterization of Group 14
Metalloles
Univ. New Hampshire, Iddles, L103 11:10 am

Oct 28

Bret Jackson (University of Mass.)
Univ. New Hampshire, Iddles, L103 11:10 am

Oct 29

Yoshiaki Nakao (Kyoto University)
C-C Bond Forming Addition Reactions by
Cooperative Metal Catalysis
Harvard, Pfizer Lecture Hall 4:00 pm

**Notices for The Nucleus
Calendar of Seminars should
be sent to:**

Sheila E Rodman
Konarka Technologies, Inc.
116 John St. Suite 12, Lowell, MA 01852
email: [srodman\(at\)konarka.com](mailto:srodman(at)konarka.com) ◇