ACS Show Daily

PHILADELPHIA

244TH ACS NATIONAL MEETING AND EXPOSITION

SUNDAY AUGUST 19 2012

Pre-ACS National Meeting: Workshops Draw Industrious Participants

Academic and industry experts offered special sessions Saturday. Left, Michael D. Reily of Bristol-Myers Squibb lectured on NMR applications in toxicology and metabolism, while Mary Jo Ondrechen of Northeastern University in Boston discussed writing fellowships and other grants.

Hall of Fame: "Heroes" Developed Innovative Drugs, Technology

The scientists behind three inventions that touch the lives of millions of people around the world were inducted into a coveted scientific "Hall of Fame" today as the latest Heroes of Chemistry named by the American Chemical Society.

Among those recognized were teams that developed:

- The first oral drug for the most common and difficult-to-treat form of chronic hepatitis C, which infects more than 3 million people in the U.S and 130-170 million worldwide.
- A new medicine for one form of adult leukemia that provided patients with an alternative

Continued on page 18

Nobel Laureates, Their Research Teams Headline ACS Meeting

At least five Nobel laureates have research that will be presented here this week during the 244th National Meeting & Exposition of the American Chemical Society, and another will present the keynote address. Research from the laureates' teams will be among 8,600 presentations this week—expected to attract more than 14,000 scientists and others.

They are: Robert H. Grubbs, Richard R. Schrock, Stanley B. Prusiner, George A. Olah, Alan J. Heeger, and Mario J. Molina.

Grubbs, who is with the California Institute of

Continued on page 18

TCI AMERICA Booth #500
What's New at TCI

Academic Benefits

- Product Discounts
- New Lab Set-up Discount
- Shipping Discounts

Save money with TCI

Win an iPad

Like us on Facebook
or
Enter our Structure Contest

Visit booth for details

East Coast Warehouse

Philadelphia, PA

Faster Shipping – Lower Cost

Free Ground Shipping

for eShop orders $300 or more!

Order today from our new eShop

Visit us at **Booth #500** www.TCIchemicals.com

Email: sales@tciamerica.com Phone: 800-423-8616 Fax: 888-520-1075

Moving Your Chemistry Forward

ACS President: National Meeting Program Rich in Content

It is with great pleasure that I welcome you to the 244rd ACS National Meeting held in Philadelphia, the cradle of American Independence and the birthplace of liberty, and today continues to foster free and open dialogue among our nation's best, brightest, and most innovative scientific minds. Benjamin Franklin would for sure be fully at ease at our national meeting! The meeting theme is "Materials for Health and Medicine," and the program is rich in scientific, educational, and professional content. I am sure you will make wise choices to satisfy your needs and expectations.

There are several presidential symposia and events related directly to my ACS presidential theme, "Advancing Chemistry and Communicating Chemistry." I am delighted that Nobel Laureate Mario Molina will deliver the ACS Presidential Plenary Lecture on Monday at 11 am (Philadelphia Marriott Downtown, Liberty Ballroom C), where he will address one of today's grand challenges facing science and society: "Chemistry and Climate Change."

Bassam Z. Shakhashiri, Ph.D.

On Monday, a Presidential Symposium— "The 25th anniversary of National Chemistry Week" (Philadelphia Marriott Downtown, Liberty Ballroom C)—was initiated by my late mentor and friend, 1987 ACS president George C. Pimentel. There is also a fascinating symposium on forensic chemistry, science, and the law, "Innocence: The Work of the Innocence Project" (Convention Center, Terrace Ballroom IV). Later on Monday, MIT Professor Robert Langer will present the fourth "The Kavli Foundation Innovations in Chemistry Lecture" (5:30 pm, Convention Center).

On Tuesday, I am pleased to host an all-day Presidential Symposium on "Communicating Controversial Science" (Philadelphia Marriott Downtown, Liberty Ballroom C), honoring Rudy Baum on the occasion of his retirement as editor-in-chief of *C&EN*.

Tuesday morning features a Presidential Symposium on "150 Years of Chemistry at Land Grant Institutions: The Past as Prelude to the Future" (Philadelphia Marriott Downtown, Grand Ballroom C), honoring the sesquicentennial of the Morrill Land Grant Act, which gave federal lands to states to establish colleges that focus on teaching agriculture, science, and engineering in addition to liberal arts.

On Wednesday, the ACS Council will meet in the Philadelphia Marriott Downtown Hotel, to consider a full agenda, including a special discussion on what major efforts should ACS pursue to help alleviate water and other global challenges.

Visit the ACS Exposition in Halls A/B of the Pennsylvania Convention Center to learn about scientific and industrial trends, discover effective technologies and services, and network with more than 250 exhibitors that serve chemical professionals.

Bassam Z. Shakhashiri, Ph.D.
ACS President
Professor of Chemistry
University of Wisconsin-Madison

In One Vital Space: ACS Central Features World of Member Services, Opportunities

Stop by the ACS Booth at the American Chemical Society's National Meeting in Philadelphia and experience the best in chemistry all in one location. Chemical Abstracts Service (CAS), ACS Publications, *C&EN*, ACS Membership, and all of the American Chemical Society will be at the booth to answer questions and showcase member benefits and new ACS offerings. The ACS Store will be selling plush mole dolls, periodic table beach towels, beaker mugs, t-shirts and more. A variety of games, contests, giveaways and prizes are also on tap.

Learn about content and enhancements from CAS, the world's authority for chemical information. See how SciFinder's industry-leading coverage of chemistry now includes bioactivity and protein target information for medical researchers. Meet the CAS team and sign up for contests for chances to win great prizes.

Staying up-to-date tastes sweet. Sign up for any one of *C&EN*'s SCENES weekly newsletters and get a candy bar. Pick a field—materials, analytical, biological or environmental—*C&EN* will keep you up to date with a roundup of latest news delivered to your email inbox each week.

ACS Publications invites you to learn about new ACS Member Publications benefits and to fill a box of treats Monday at 1:30 pm. Benefits expand access to all ACS Publication content, including the newest journals via ACS Member Universal Access. Take the ACS Publications Challenge to receive a customizable ACS t-shirt.

ACS Membership kiosk is the

Continued on page 18

Published by **American Chemical Society** C&EN

Publisher Kenneth M. Carroll
Editor Sharon Donovan
Art Director Connie Hameedi
Photographer Peter Cutts
Advertising Sales USA
Dean Baldwin,
Robert LaPointe, Thomas Scanlan

Europe Uwe Riemeyer,
Paul Barrett, Nadia Liefsoens
Asia Minghua Lu, Angel Zhu,
Mai Hashikura, Shigamaro Yatsui,
Faredoon Kuka
Production Manager
Krystal King

ACS Publications
Advertising Sales Group
480 East Swedesford Road
Wayne, PA 19087
Phone 610.964.8061
Fax 610.964.8071
CEN-onsite.org

CAREER FAIR

CONSULTANT'S CORNER

Editor's Note: This week 30 volunteer career consultants will be pitching in to help members sharpen their job hunting skills as they review resumes and conduct mock interviews toward aligning experience with prospective employment.

NAME: MARY MOORE
TITLE: PRINCIPAL TECHNOLOGIST
COMPANY: EASTMAN CHEMICAL

Eastman Chemical is a global specialty chemicals company that produces a broad range of advanced materials, additives and functional products, specialty chemicals, and fibers that are found in products people use every day. The Kingsport, TN-based company employs approximately 13,500 people worldwide.

What do you do as an ACS Career Consultant? What are your favorite tasks and least favorite?

I really enjoy helping the future generation of professionals learn the tools to help them find their dream career path. The advancement of technology has drastically changed the way jobs are found these days, as they are no longer simply listed in the newspaper. Both new graduates and seasoned professionals have to learn how to find jobs that are available. I assist people with their résumés and give them the tools to prepare for their interviews.

I also conduct workshops concerning job search strategies, interviewing skills, and résumé writing—and help both at national and regional ACS meetings. I will be facilitating the new Career Pathway workshops.

In today's economy, it has been challenging for job seekers. However, when you get a note from someone that you have been helping and they get the job they have been looking for, this is what it is all about. I get so excited for them.

Do you do other volunteering work outside of ACS? If so, what?

I work with several colleges and talk with their students about chemistry and the possible career paths available to them. I also help with an education program at Eastman Chemical, "GEM4STEM" which stands for "Growing Educational Mentors 4 Science, Technology, Engineering and Mathematics." It is an educational mentoring program where Eastman employees visit local schools to engage students in the STEM-related areas of education.

What inspiring "Aha" moments have you had in conversations with job seekers?

I love it when young professionals understand the difference between a résumé and a CV. A résumé is not a complete listing of everything you have done in your life. When a job seeker starts looking at the résumé as a marketing tool to sell him/herself for a particular position, it makes it easier for them to get their résumé together. Remember, the purpose of a résumé is to get you an interview.

What key advice would you give to chemists looking for jobs?

Evaluate what type of position you may be looking for: Do you want to teach? Do you want to work for the government? Do you want to work in industry? Evaluate what you want out of a position; what is important to you, your strengths, etc. Once you know who you are, what is important to you, and what you have a passion to do, your job search will be much easier. Then, when you prepare for the interview, you will know exactly how to showcase yourself. Also, look outside the box. The knowledge and skills you have as a chemist can fit into a lot of different types of positions.

What do job seekers tend to overlook in their job search, but you consider to be very important?

Network. A lot of jobs are what we call "Hidden Jobs" and how you find those jobs is through who you know. Network with professionals within your career choice, network with friends and family. Because the people you know also know other people that may be aware of a job that is "Hidden."

When changing jobs, what transferable skills do chemists have that they often fail to consider?

People in the chemistry community have numerous skills. We have been taught the scientific way to figure out problems. Those in the chemistry community must be fluent in both oral and written communication. Who would be best to communicate with others that are not familiar with chemistry such as lawyers, judges, politicians, etc.?

What career path would you have followed if you weren't in your current position?

I would not wish to change anything about the career path I have chosen. The choices you make in life make you who you are today. I really enjoy where my career has taken me and I can't wait to see where my career will take me tomorrow. I have reached a point in my career that I would like to give back to my profession—(it's) very important to me and mentoring the next generation of professionals is exciting for me.

VIRTUAL STEPS...

NAME: CÉSAR VEGA
TITLE: RESEARCH MANAGER
COMPANY: MARS
PRESENTATION TODAY: NOON AT CONVENTION CENTER LOBBY A BRIDGE

What experiences shaped your decision to go into the field of science?

I was only six years old when I realized that I wanted to work with food for the rest of my life. Since I remember, I wanted to cook. When I grew older, I realized that going to culinary school was too expensive for me. I'm also a very curious person, I want to know how/why things happen and in the process, become not more knowledgeable, but more ignorant—in other words, the more you know, the less you know because new questions arise. I satiated some of that curiosity by getting some extra-curricular classes on chemistry when I was in high school. I was so into chemistry that I made it into the final pool of students from which the Mexican Chemistry Olympic team was selected and that was it! I soon

Career Fair

realized that food chemistry would be the perfect marriage between my love for cooking and science.

What is the nature of your job day-to-day?

I'm a research manager of a group of talented people that aims to improve human health by incorporating cocoa-derived (i.e. not chocolate) phytonutrients into a wide range of nutritionally balanced foods. In doing so, we try to understand the chemical and physical interactions of such compounds with other food constituents (e.g. proteins) as to design tasty, stable foods which ultimately deliver the intended benefit. So my team and I frequently design, execute, and interpret experiments. We also support the on-going business by qualifying suppliers and establishing raw material and finished product specifications. One thing to highlight, and that I value a lot, is that no day is the same; I'm not built for routine jobs.

How do you define success?

Success is personal and multi-dimensional. However, I would say that to be professionally successful you must first do what makes you happy—the rest will come by itself because a happy/engaged person delivers and those who deliver are rewarded. Quite simple, really. Success is also making a difference in your community. My choice was to make people more curious about the chemistry and physics of cooking, to contextualize how science can truly make us eat better both in nutritional and pleasurable ways. This, I think, will bring us back into the kitchen and provide us with more happy moments around the table.

If you were not now in this job, what career do you imagine you would be pursuing?

Most probably academia, doing research in the area of dairy science and/or the physical-chemistry of cooking. Another option would be to work as the research manager of some world-renowned restaurant—there is a lot going on in the world of food!

Editor's Note: ACS Live! events are being produced this week by ACS Webinars at the ACS National Meeting. Today, Cesar Vega headlines with a presentation on the chemistry of making buttery coffee ice cream. The webinars allow the virtual audience front row seats to live events from Philadelphia, as ACS Live! connects the global audience with subject matter experts. This week, ACS Live! speakers include such off-the-bench careers as a forensic scientist in Philadelphia Police Department and a practicing attorney. Live broadcast and recording is available on the ACS Webinars www.acswebinars.org.

Five Minutes With...

Editor's Note: Kara Allen is one of the 31 employers onsite this week recruiting candidates at the ACS Career Fair. The initiative is an important facet of ACS National Meetings as it taps into a wide range of potential jobs available in the field of chemistry. Visit Recruiters Row (Exposition Hall) to chat with recruiters and find out about possible opportunities at their companies. Check today at www.acs.org/careerfair to kick start your career advancement.

Photo by Cheryl Matthews

Name: Kara Allen
Title: College Recruiter
Company: Aegis Sciences

Aegis Sciences offers full service forensic sciences providing toxicology and consulting services to wide range of organizations.

What other careers have you been interested in pursuing?

I initially began my career as a microbiologist and analytical chemist. My main work was focused in quality control for healthcare products (soaps, OTC pharmaceuticals) where I spent time testing raw materials, in-process and finished products. Although I enjoyed the laboratory work, I found more personal satisfaction with outreach endeavors through my ACS volunteer work. I was very active in my local section, having served as Public Relations Chair, National Chemistry Week Coordinator, Section Chairman, and Career Services Chairman. I was also part of the National Chemistry Week Task Force and two National Committees, the Committee on Community Activities, and the Younger Chemists Committee. I stepped down from CCA after relocating to Nashville, TN and also "graduated" from the YCC since I was no longer considered a "younger" chemist at that time. My passion for networking and outreach led me to a career as a recruiter, which I love!

What advice would you give to chemists looking for jobs?

I think it is very important to find a career in an area that you are passionate about. Many times through my career I have interviewed candidates who tell me they are looking for "a lab job" or a way to get "their foot in the door." A career is so much more than that. I would suggest that they think about what they enjoyed the most about past positions (or lab experience from school). Aside from that, learn as much about the companies that you are targeting as you can. With so much information available online, you can learn a lot about each company—the culture, products/ services, and the people. Make sure the company is a fit for you as much as the position itself is.

What was your best interview with a candidate? Why?

The best interview I ever had was with a candidate that knew and believed in the mission of the company. It was obvious that she had "done her homework" with regards to learning about the company. She understood the mission, the culture, and even talked to some of her college professors and the company team members in her alumni network she knew to learn more about the position. She was not afraid to ask questions, was excited to share her skills and abilities, and openly shared where she felt she would need additional training to be successful.

What is your favorite thing about attending the ACS National Meetings?

Networking! From events at the Career Fair to Sci-Mix and numerous technical sessions, there are an amazing number of opportunities to meet others in the field of chemistry to network. With an attendance of 11,000 chemists, you never know who you may have the chance to meet and which of those people may have your "dream job" available!

Visit History: Chemical Heritage Foundation is Treasure Trove of All Things Chemistry

Opening day for *Alchemical Quest*, the latest exhibit in the Horiba Gallery in the Museum at CHF.

CHF hosted many demonstrations of chemistry during the Philadelphia Science Festival in 2012.

The Museum at CHF celebrates First Friday each month and attracts local gallery goers from 5–8 pm.

The Museum at CHF is open Monday–Wednesday 10 am–8 pm with hourly shuttle bus service. Also 4–8 pm Sunday, no shuttle.

The Othmer Library at CHF

Cupcake tasting at a First Friday public event at CHF

CHF boasts the largest collection of chemistry sets in the world. Of the many on display in the Museum at CHF, the most notable are the sets that claim to have "No Chemicals" and the sets that include salts of uranium.

The recent exhibit *Elemental Matters: Artists Imagine Chemistry* included a Periodic Table of Elements as an eye chart and in electric stove heating elements.

The two-story media column at the center of the Museum at CHF displays each element of the Periodic Table of Elements in videos and images.

Gigi Naglak, manager of museum programs, and Jennifer Dionisio, program associate, Roy Eddleman Institute, put on the "Jen and Gigi Show" for the Philadelphia Science Festival explaining the chemistry of Jello and a show about cupcakes for the 25th Anniversary of the Beckman Center for the History of Chemistry at CHF.

Less than a mile east of the Philadelphia Convention Center, Chemical Heritage Foundation is the leading museum, library and center for scholars in America. CHF tells the story of chemistry and preserves the art, artifacts, instruments, documents, images and books of more than 500 years of chemistry, alchemy, and early science.

CHF is open from 10 am–8 pm Monday through Wednesday with shuttle service on the hour. It is also open today from 4-8 pm, but no shuttle service. If you walk, head east on Market Street from the Convention Center, turn right at 6th Street and you will pass the Liberty Bell. In front of you will be historic Independence Hall. Turn left on Chestnut Street and CHF is two blocks ahead on the left.

CHF Facts and Figures

- 6,000 rare scientific volumes from 1478 onward
- Largest collection of alchemy art in the world. Comic and captivating depictions of alchemy and alchemists in 300 paintings and drawings from the 16th through 19th centuries
- Analytical tools and artifacts that shaped the 20th century, including test samples of nylon stockings from the 1930s, early batteries, instruments, and labware
- A collection of chemistry sets—the largest collection in the world and the subject of an episode of the show Wired Science.
- More than 20,000 photographs illustrating the lives and work of individuals and groups as well as chemical processes and products
- The personal papers of such innovators as Daniel Fox and Carl Marvel and of Nobel laureates Paul Flory, Paul Lauterbur, Alan MacDiarmid, and Richard Smalley
- Organizational records, including the Dow Historical Collection and the Rohm and Haas Archives

For those who can't visit, CHF has many was of connecting with connoisseurs of chemistry beginning with CHF's website, with links to all things CHF online, including Facebook and Flickr—each with hundreds of images. The Chemistry in History portion of CHF's website provides teachers and students with biographies of chemistry's leading lights, information on chemistry milestones arranged by theme, and classroom activities.

Chemical Heritage magazine features the chemists and chemical innovations that have shaped modern life. Features include the beginnings of anesthesia, one of the most important chemical innovations in history, and a profile of Felix Hoffmann who invented aspirin and heroin in the same month: August 1997.

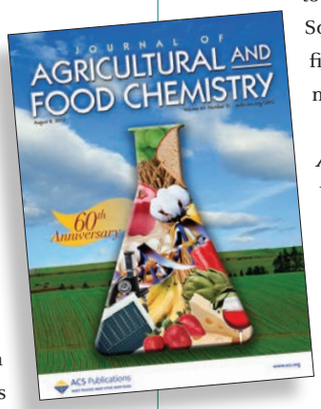
Distillations, CHF's award-winning science podcast, brings listeners extracts from the past, present, and future of chemistry. For five years in more than 140 biweekly episodes, the podcasts have entertained and informed audiences of more than 10,000 with green chemistry, explosive chemistry, the chemistry of love, and the chemistry of leeches. Episodes are available for download at chemheritage.org/distillations and through iTunes.

FIVE MINUTES WITH...

JAMES N.SEIBER
EDITOR-IN-CHIEF
JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY

Congratulations, Dr. Seiber, on your 60th anniversary of the Journal of Agricultural and Food Chemistry, as well as your recent nomination of the 2012 Kenneth A. Spencer Award. What does it mean to be recognized with the Spencer award?

The Kenneth A. Spencer Award is given for outstanding achievement in food and agricultural chemistry. It was established in memory of Kenneth A. Spencer who, among other things, operated an ammonium nitrate-based munitions plant during World War II, which after the war became a highly successful fertilizer plant. The Spencer family was quite active in giving back to communities in the Kansas City area near where I grew up. Kenneth Spencer was a co-founder of the Midwest Research Institute that has produced world class research, largely in the area of agricultural and environmental chemistry. It means a lot to me as a native of Missouri, and from my connections with MRI scientists on a personal level and through their contributions to many manuscripts published in JAFC, to have this recognition of my career's work in agricultural and environmental chemistry by the Kenneth A. Spencer award.



Over the past 60 years the journal has had significant growth, what has contributed to the journal's history of success?

JAFC has an excellent reputation and attracts manuscripts from leading research groups around the world. Agricultural and food chemistry has renewed interest because of its recent contributions to such areas as food safety and our knowledge of the health benefits of chemicals in foods—both hot areas with intense public interest. The growth of the science of agricultural and food chemistry in international circles, in Asia, Europe, and South America as well as the U.S. and North America, has contributed much to the success of JAFC, which is now the most cited journal in its field, far exceeding the citation rates of other journals.

What are the major challenges facing researchers in your field?

Lack of funding. Researchers in this field largely depend on public funds from USDA, which have lagged seriously behind NIH and NSF-funded national priorities. It's a dilemma—U.S. agriculture is so successful, in large part because of agricultural and food researchers efforts, but this success does not translate to support needed to meet the challenges of today—obesity in westernized nations to insufficient food and nutrition supplies in the poorest nations. So our agricultural and food chemists often move into other fields—biomedicine, drug development, etc—where funding is more readily available.

Any predictions for the future of your field? The journal?

We are celebrating our 60th year of publication this year. If anything, public interest in the quality and health of our food supply is increasing, which translates to more student interest at all levels, and more innovative research that effects people's lives. It is an attractive field that will continue to grow and produce good scientists and exciting science breakthroughs that more often than not will find their way to the pages of JAFC.

Are there any special issues planned this year for the journal?

We have a number of manuscript clusters under development around specific themes, ranging from polyphenols and health to foodborne allergens to pesticide residues to Italian food chemistry research that will be featured in JAFC over the coming months. One cluster, on ood bioactives, which appeared earlier this year has attracted significant reader interest. We will also be organizing virtual issues around hot topics, like nanoscience and nano materials. Biopesticides is a hot topic, and of course the 'omics' technologies continue to find major applications in understanding and facilitating improvements in our food supply and environmental quality. Sustainability of agriculture and food production is another hot topic. JAFC will publish in all of these areas.

ACS JOURNALS RANK NO. 1, LEAD COMPETITION

There is only one choice for staying current with the published research in your field and that is the publisher with more No. 1 rankings than any other publisher in the chemical and related sciences, including all seven chemistry categories as reported in the 2011 Journal Citation Reports from Thomson Reuters.

ACS Journals lead the competition with more than 2 million total citations, 16 categories with a No. 1 ranking in either Impact Factor and/or total citations, 16 journals with an Impact Factor of five or greater, and 27 journals ranking No. 1 for either Impact, citations, or articles published—a clear indication of the ACS commitment to quality.

ACS journals introduced since 1999 are serving the community well, as evidenced by a median 2011 Impact Factor of 5.164 and several journals that are already leaders in their respective fields. These journals include *Organic Letters*, introduced in 1999, which remains the highest impact communications journal in the field of Organic Chemistry; *ACS Chemical Biology*, introduced in 2006, posted its highest Impact Factor to date of 6.446; and *ACS Applied Materials & Interfaces*, introduced in 2009, increased to 4.525 from its prior year debut Impact Factor of 2.925. *The Journal of Physical Chemistry Letters*, introduced in 2010, reported its debut Impact Factor of 6.213, placing it No. 1 in Impact in the category of Physics, Atomic, Molecular, & Chemical.

These successes are a product of the ACS's high standards in peer-review, the leadership of ACS editors—all of whom are practicing researchers—and the contributions of ACS authors and reviewers. Stop by the ACS Booth in Philadelphia to learn more about the latest journal: *ACS Sustainable Chemistry & Engineering*, which begins publication in 2013.

VISIT YOUR HISTORY.

Titrating Aluminum 1944.
Dow Historical Collection,
CHF Collections.

Chemical Heritage Foundation

LIBRARY • MUSEUM • CENTER FOR SCHOLARS

Tour the Museum at CHF during special extended hours

August 19
4 p.m. to 8 p.m.

August 20 through 22
10 a.m. to 8 p.m.

The Liberty Bell
600 Chestnut Street

Independence Hall
520 Chestnut Street

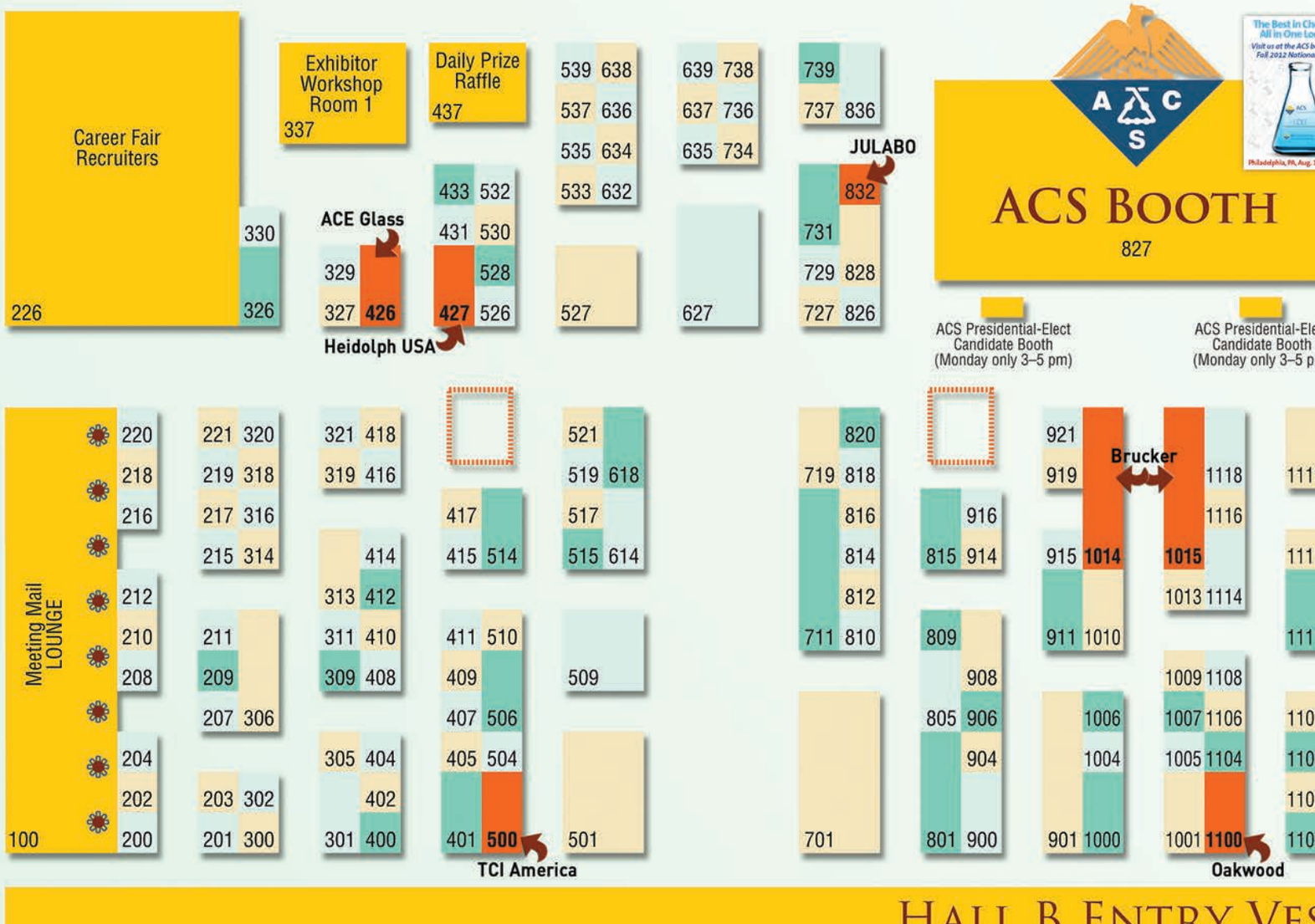
Chemical Heritage Foundation
315 Chestnut Street

• FREE admission • FREE shuttle bus service to and from CHF •

More information at **chemheritage.org/ACS2012**

ACS National Meeting and E

PHILADELPHIA

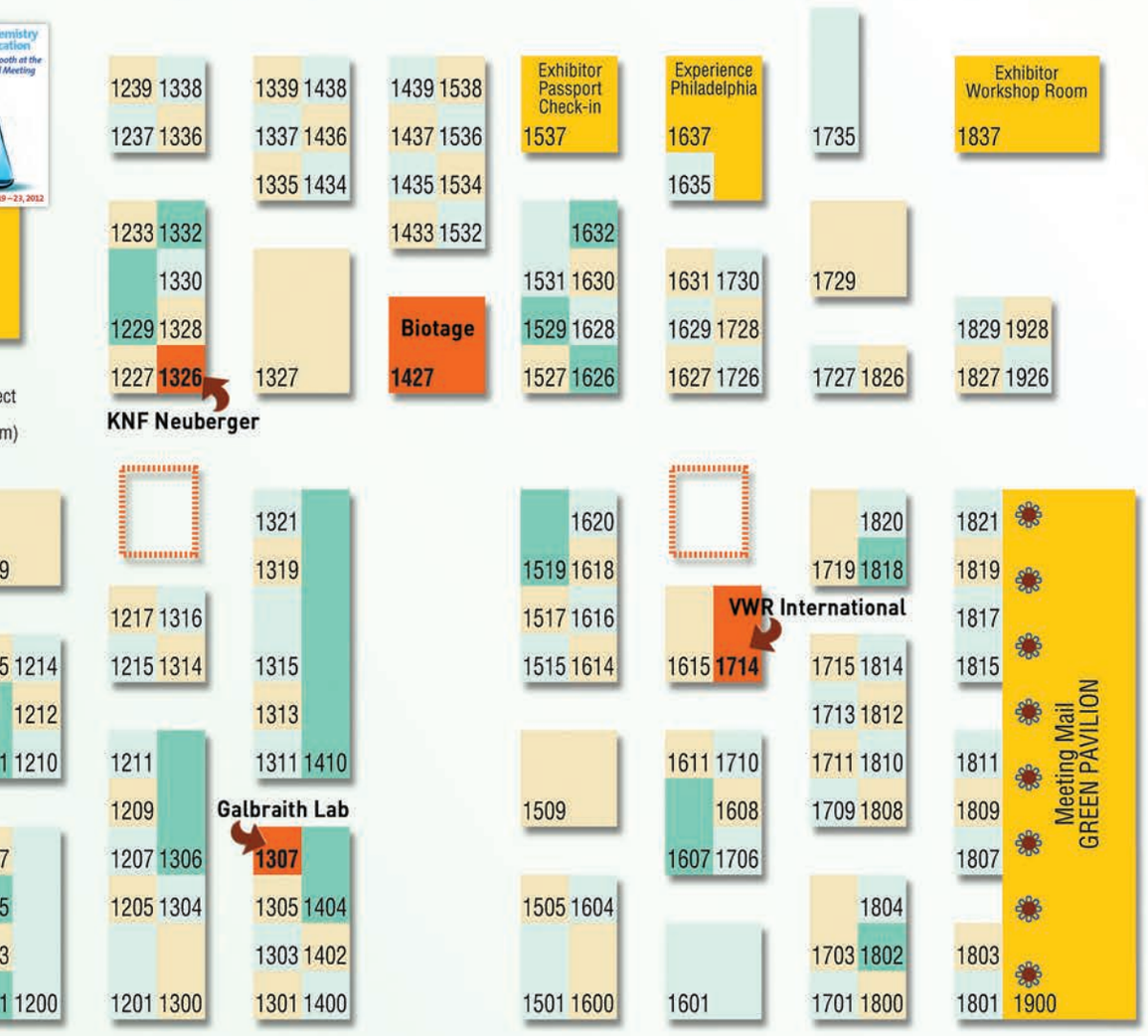


Hall B Entry Ves

2mag-USA, Booth 1706
AAAS/Science & Technology Policy Fellowship, Booth 1802
AAPPTec, Booth 916
Ace Glass, Inc., Booth 426
Across International, Booth 1800
ACS Committee on Health Safety/Div. of Chemical Health & Safety, Booth 1713
ACS Division of Small Chemical Businesses (SCHB), Booth 1433
ACS Education, Booth 827
ACS Green Chemistry Institute, Booth 826
ACS Indiana Local Section, Booth 1632
ACS Meetings & Expositions, Booth 827
ACS Member Insurance Program, Booth 827
ACS Membership Division, Booth 827
ACS Office of Public Affairs, Booth 836
ACS Office of Public Affairs, Booth 827
ACS Publications, Booth 827
ACS Store, Booth 827
ACS Web Strategy & Operations, Booth 827
Adam Equipment, Inc., Booth 517
AdValue Technology, Booth 1727
Advanced Chemistry Development Inc., Booth 1009
Advanced Polymer Materials Inc., Booth 1335
Advion, Booth 1601
Agilent Technologies, Booth 501
AIP Publishing—Journal of Chemical Physics, Booth 535
AirClean Systems, Booth 731
Aist-nt Inc., Booth 1827
AK Scientific, Inc., Booth 1336
AkzoNobel/Kromasil, Booth 1013
Aldrich/Sigma-Aldrich, Booth 815
Alfa Aesar-A Johnson Matthey Co., Booth 719
AnalytiCon Discovery LLC, Booth 1829
Anasazi Instruments Inc., Booth 402
Anton Paar USA, Booth 805
APAC Pharmaceutical LLC, Booth 1435
Applied Research & Photonics, Inc., Booth 1339
Arizona Instrument LLC, Booth 1313
Arjae Spectral, Booth 319
Ark Pharm, Inc., Booth 734
Astatech, Inc., Booth 200
Asylum Research, Booth 809
Avantes, Inc., Booth 528
B&W Tek, Inc., Booth 1604
Baden-Wurttemberg International, Booth 537
Baseline Service LLC, Booth 202
BASF—The Chemical Company, Booth 1306
BASi, Booth 1620
Beijing Laviana Pharmatech Co., Ltd., Booth 532
Beijing Mikrouna Mech. Tech. Co., Ltd., Booth 614
Beijing Synthware Glass Inc., Booth 1517
Bentham Sciences Publishers Ltd., Booth 1812
Berghof/America, Booth 1629
Biolin Scientific, Booth 1112
BioLogic USA, Booth 1239
Biotage, Booth 1427
BrandTech Scientific, Booth 411
Brookhaven Instruments Corp., Booth 737
Brooks/Cole Cengage Learning, Booth 1400
Bruker, Booth 1014
Bruker, Booth 1015
Buchi AG, Booth 326
Buchi Corp., Booth 1010
Buck Scientific, Booth 1710
C/D/N Isotopes, Booth 904
CAChe Research LLC, Booth 1534
CAS, Booth 827B
CEM Corp., Booth 509
ChemAxon Ltd., Booth 1305
ChemBridge Corp., Booth 416
Chemglass Life Sciences, Booth 1200
Chemistry Central, Booth 412
Chemistry Related Societies in Japan, Booth 1212
ChemPacific Corporation, Booth 1618
Chemrus Inc., Booth 1532
CombiPhos Catalysts, Inc., Booth 914
CONFLEX Corp., Booth 1711
Continuum Inc., Booth 204
Corning Inc., Booth 327
CP Lab Safety, Booth 1304
Cresset BioMolecular Discovery Ltd., Booth 409
Crystallographic Resources Inc., Booth 634
CSCS Inc., Booth 1536
D-Poly USA, Inc., Booth 218
Defiant Technologies Inc., Booth 217
Delong America, Booth 1807
DeltaNu, Intevac Photonics, Booth 309
Dotmatics Limited, Booth 1708
Eastern Analytical Symposium, Booth 207
eDAQ, Inc., Booth 906
Editage/Cactus Communications, Inc., Booth 1330
ELGA LabWater, Booth 1818
Elsevier Inc., Booth 618
EMD Millipore, Booth 1531
Emeryville Pharmaceutical Services, Booth 1004
Erlab, Inc., Booth 408
Excellims Corp., Booth 414
Experience Philadelphia, Booth 1637
Extrel CMS, Booth 627
Federal Bureau of Investigation, Booth 1328
Fit to a Tee, Booth 1338
FIZ Chemie Berlin, Booth 329
Fox Chase Chemical Diversity Center, Inc., Booth 1437
Frontier Scientific, Inc., Booth 521
Galbraith Laboratories Inc., Booth 1307
Gamry Instruments, Booth 506
Garland Science, Booth 1237
Gaussian, Booth 1229
Gelest, Inc., Booth 415
GenTech Scientific, Inc., Booth 320
GHS Safety, Booth 1628
Gilson Company, Inc., Booth 1438
Grace Davison Discovery Sciences, Booth 908
Harrick Scientific, Booth 1205
Heidolph USA, Booth 427
HEL, Inc., Booth 431
Hellma USA, Inc., Booth 1527
Hiden Analytical Inc., Booth 1007
Hielscher USA, Inc., Booth 314
Hirschmann, Inc., Booth 211
Hitachi High Technologies, Booth 216
HORIBA Scientific, Booth 1210
IKA Works, Inc., Booth 1315
IKA Works, Inc., Booth 1735
IKA Works, Inc., Booth 1729
IMA Life, Booth 1701
Indofine Chemical Co., Booth 1321
InfoChem GmbH, Booth 1311
Int'l Centre for Diffraction Data, Booth 635
Integrated Chemistry Design, Inc., Booth 1538
Interchim Inc., Booth 1614
International Atomic Energy Booth 221
Ivium Technologies, Booth 1
J-KEM Scientific, Booth 130
JASCO, Booth 1314
JEOL USA, Inc., Booth 1519
John Wiley & Sons, Inc., Boo
JULABO, Booth 832
Kalexsyn, Inc., Booth 1215
Kimble Chase LLC, Booth 17
KNF Neuberger, Booth 132
Krüss America, LLC, Booth
LABCONCO, Corp., Booth 91
Laboratory Equipment, Boo
LabX Media Group, Booth 13
LAUDA-Brinkmann, LP, Boo
LCGC, Booth 1005
LECO Corporation, Booth 11
M. Braun Inc., Booth 801
Maruzen Co., Ltd., Booth 12
Massaging Insoles, Booth 1
Materia, Inc., Booth 1719
Matrix Scientific, Booth 900
MeasureNet Technology, Bo
Med Chem 101, LLC, Booth
Mestrelab Research SL, Boo
Metrohm USA, Inc., Booth 9
Mettler-Toledo North Amer
Microfluidics Corp., Booth 1
MicroLAB, Inc., Booth 1505
Micromeritics Instrument C
Microtrac Inc., Booth 1709
Nagase & Co., Booth 919
Nanalysis Corp., Booth 637
Nanonics Imaging Ltd., Boo

XPOSTION FLOOR PLAN

AUGUST 19 – 21 2012



STIBULE

NanoSight, Booth 729
NASA, Booth 527
Nat'l Res. Council/Nat'l Academies, Booth 1402
National Library of Medicine, Booth 417
Nature Publishing Group, Booth 1600
NaugaNeedles, Booth 1217
Netzsch Instruments North America, LLC, Booth 433
New Era Enterprises, Booth 305
New Scientist, Booth 533
NIST, Booth 301
Norton, Booth 510
Oakwood Products Inc., Booth 1100
Ocean Optics, Inc., Booth 1227
OLIS, Inc., Booth 515
Opotek, Inc., Booth 727
Optibrium Ltd., Booth 404
Optofluidics, Inc., Booth 1820
OriginLab Corp., Booth 632
Oxford Instruments, Inc., Booth
Oxford University Press, Booth 1118
Park Systems, Inc., Booth 504
Parr Instrument Co., Booth 306
Particle Sizing Systems, Booth 1209
Peak Scientific Instruments, Ltd., Booth 1611
Pearson, Booth 401
PerkinElmer, Booth 313
Pharmabridge, Inc., Booth 636
picoSpin, LLC, Booth 405
PIKE Technologies, Booth 1101
Pine Research Instrumentation, Booth 302
Pittcon 2013, Booth 410
PNAS (Proceedings-Nat'l. Academy of Sciences), Booth 814
Polysciences, Inc., Booth 316
Practichem, Booth 1821
PSS USA Inc., Booth 1439
PSS-USA Polymer Standard Service, Booth 1439
Qorpak, Booth 407
Quark Glass, Booth 1301
Reaction Analytics Inc., Booth 1436
Research In Germany, Booth 539
Richman Chemical Inc., Booth 810
Rieke Metals, Inc., Booth 1434
Rigaku Americas Corp., Booth 820
Rothman and Company, P.A., Booth 1728
Royal Society of Chemistry, Booth 701
Royal Society Publishing, Booth 1116
Sapling Learning, Booth 1804
Schrodinger, Inc., Booth 1501
Scientific Instrument Services, Booth 1105
Scientific Systems, Inc., Booth 1616
Scilligence Corporation, Booth 1303
Semichem, Booth 1233
Shimadzu Scientific Instruments Inc., Booth 901
Sinova Inc., Booth 209
Sorbent Technologies, Booth 1627
Specac, Ltd., Booth 212
Springer, Booth 711
StellarNet Inc., Booth 400
Strem Chemicals, Booth 514
Supercritical Fluid Technologies, Booth 816
SURECHEM, Booth 1703
Sympatec, Inc., Booth 1801
Synquest Laboratories, Inc., Booth 1726
Synthonix, Booth 1000
Syrris Ltd., Booth 215
TA Instruments, Booth 1115
Taylor & Francis Group LLC/CRC Press, Booth 1119
TCI America, Booth 500
Tecan, Booth 201
Technical Sales Consultants, LLC, Booth 1337
Teledyne Isco - Chromatography, Booth 1509
ThalesNano Nanotechnology Inc., Booth 418
The Chemistry Research Solution LLC, Booth 1207
The New York Times, Booth 1319
Thermo Scientific, Booth 1327
Tosoh Bioscience LLC, Booth 519
TSI, Inc, Booth 220
UBE America Inc., Booth 318
University of New Hampshire, Booth 739
US EPA Green Chemistry Program, Booth 828
Vacuubrand, Inc., Booth 1211
Vacuum Atmospheres Co., Booth 1201
Valens Pharma Services, Booth 736
Vernier Software & Technology, Booth 1001
Vici Valco Instruments Co Inc., Booth 208
Vigor Gas Purification Technologies, Booth 321
VWR International LLC, Booth 1714
Wale Apparatus Co., Booth 1104
Wasatch Molecular, Booth 203
Waters Corp., Booth 1111
Wavefunction, Inc., Booth 1332
Wavefunction, Inc., Booth 1404
WebAssign, Booth 812
Welch-Ilmvac, Booth 530
Wilmad-LabGlass, Booth 1607
Wilmington PharmaTech, Booth 1106
Wyatt Technology Corp., Booth 911
Xigo Nanotools, Booth 1826
Yamazen Science, Inc., Booth 300

SPECIAL THANKS TO OUR ADVERTISERS:

TCI AMERICA
KNF LAB
BRUKER
Chemical Heritage Foundation
CAS | SciFinder
VWR
Heidolph North America
GALBRAITH LABORATORIES, INC.
ACE GLASS INCORPORATED
Biotage
Oakwood Chemical
Julabo

EXHIBITOR WORKSHOPS

Exhibiting companies are hosting free education sessions for attendees that will introduce new products and services, build skills with specific tools and techniques, and highlight innovative applications for existing instrumentation. Exhibitor workshops are intensive, up to 2.5 hour sessions held in the Exposition Halls, A thru B and in private rooms at the Philadelphia Convention Center. Register for workshops at the respective exhibitor's booth inside the ACS National Exposition, Philadelphia Convention Center, Halls A thru B.

MONDAY

How ChemSpider Can Help You Find Chemical Information
Sponsor: Royal Society of Chemistry, **Booth 701**

Workshop Room 2, 9:30 am–Noon
This two-hour interactive session will comprise a brief overview of the key features of the ChemSpider website and an open floor discussion for participants to ask both general questions and also explore how they can use ChemSpider as part of their own chemical information searching practices. The workshop is suitable for participants with no experience of ChemSpider through to regular users who want to get more out of their searches.

Integrating Reaxys Into Your Chemistry Research Workflow
Sponsor: Elsevier, **Booth 618**
Room 202A, 8:30–11 am

Learn how Reaxys enhances the chemistry research workflow and explore in-depth the latest developments in Reaxys. Learn more about Reaxys and ELN integration and how researchers can effectively access the relevant results, store, and share them as appropriate. Discover how to easily prepare reports, prepare effective synthesis plans, and reduce the time spent locating reliable chemical reaction and substance data; and how to make the most of the data analysis tools and be more effective in search strategies.

Advanced Polymer Characterization
Sponsor: Tosoh Bioscience, **Booth 519**, Exhibit Halls A-B
Workshop Room 1, 9:30 am–Noon

GPC, light scattering, viscometry, GPC-mass spectrometry, and beyond. Explore state-of-the-art solutions to the challenges of characterizing today's sophisticated polymer formulations. Experts show how to obtain the data needed to control and understand polymeric properties such as elongation, tensile strength, adhesion, and compositional drift.

Introducing Thermo Scientific's Nicolet iS50 FT-IR Spectrometer
Sponsor: Thermo Scientific, **Booth 1327**
Room 202A, Noon–2:30 pm

The Thermo Scientific Nicolet iS50 FT-IR spectrometer gives definitive answers in the analytical laboratory where fast, easy workflows are essential. Offers one-touch simplicity, flexibility, and integration in a small, cost-effective workstation.

TUESDAY

How to Successfully Publish Scientific Articles
Sponsor: Elsevier, Booth 618
Room 202A, 8:30–11 am

For early career scientists looking for assistance in identifying, preparing, and submitting research articles to an academic journal, this workshop provides advice on best practices, top tips, ethics, the review process, and other important considerations. For example, a PhD student interested in publishing a first scientific article, a PostDoc wanting to understand why articles are rejected, or a researcher wanting to know what goes on behind the scenes in scientific publishing? The workshop will address: What to consider when preparing my article; how to write an article for a specific journal; what happens after submission of an article to a scientific journal; and which tools are available during the writing process.

Electrochemical Measurements and Simulation
Sponsor: Gamry Instruments, **Booth 506**, Exhibit Halls A-B
Workshop Room 1, 9:30 am–Noon

Electrochemical simulation including CV, EIS and Fourier Transform Voltammetry. Quartz Crystal Microbalance studies. Principles of electrochemical measurements.

Introducing the Latest Thermo Scientific Advances in IC-ICP/MS, HPIC, GC, And GC/MS to Help Increase Lab Productivity and Results
Sponsor: Thermo Scientific, **Booth 1327**
Room 202A, Noon–2:30 pm

Charge Detection and IC-ICP/MS: The Latest in Ion Chromatography Detection. The new Charge Detector (QD) responds to ionic species in solution by measuring the current flow between two electrodes at a fixed potential. With the QD, response is proportional to charge which can lead to universal calibration while weakly dissociated species (organic acids, amines, borate, and silicate) give a more linear response. The QD compliments the more traditional conductivity detector. Also see how combining IC with ICP/MS allows speciation of multivalent elements such as arsenic, chromium, selenium, iodine and others. Highlights will include the determination of arsenic speciation in apple juice and hexavalent chromium in drinking water.

High Pressure Ion Chromatography (HPIC) for Increased Resolution and Speed. With the advent of capillary ion chromatography systems that can operate up to 5000 psi, combined with smaller particle size ion exchange packing materials (4µm) the realm of high pressure IC now affords increased separation efficiencies, increased resolution and faster separations. See how this technology can be applied to a variety of sample types ranging from environmental, food and beverage and industrial applications.

Going Modular: Introducing the Newest Innovations in GC. Discover the next level of instrument usability with the next generation GC with engineered miniaturized, plug-in injectors and detectors, redefining usability in routine and high throughput laboratories. See why the Trace 1300 GC may be the best fit for your laboratory.

Maximize GC-MS Productivity and Flexibility. Learn how you can tackle today's challenges with the advanced features of the single quadrupole ISQ MS. Discover how the innovative ISQ ExtractaBrite source assembly can be removed and replaced in less than three minutes without venting the mass spectrometer, also learn about the advanced capabilities of the ITQ ion trap GC-MS systems.

Continued on page 14

Continued from page 13

Making NMR Accessible: picoSpin-45 NMR Spectroscopy in the Classroom

Sponsor: picoSpin,
Room 202A, 3:30–6 pm

The picoSpin-45 NMR spectrometer is a 45 MHz permanent magnet spectrometer providing high-resolution spectra in a portable, compact design. Measuring a 1H NMR spectrum to determine product purity, monitor the course of a chemical reaction, or elucidating molecular structure is a valuable skill best acquired through hands-on experience as it personalizes the process for students, making it a much more meaningful learning experience, and remains a powerful teaching method for instructors. The low cost and small footprint of miniature and bench-top instrumentation brings NMR to the student, in the classroom or lab, providing increased accessibility to a broader group of students. The picoSpin-45 spectrometer has applications in organic, physical and analytical chemistry teaching labs and classrooms, from basic spectroscopic concepts such as multiplet patterns and spin-spin coupling, to more advanced applications of chemical reaction dynamics and measuring spin-lattice relaxation (T1) delays.

WEDNESDAY

Optibrium's StarDrop: User Group and Workshop

Sponsor: Optibrium, **Booth 404**
Room 202A, Noon–2:30 pm

Learn more about Optibrium's StarDrop software and how it intuitively guides decisions on the design and selection of high quality compounds in drug discovery. Hear about practical applications of StarDrop from current users, find out about the latest new features, and try a hands-on example yourself.

Bruker's PeakForce KPFM Mode Determines Work Functions

Kelvin Probe Force Microscopy (KPFM) can provide information in applications ranging from organic photovoltaics research to silicon and wide bandgap semiconductor characterization to general materials science. By mapping the electrostatic potential at the sample surface, it determines work functions and their variations, thus providing information about electronic structure, doping level variations, trapped charges, and chemical identity. KPFM is among the most used nanoelectrical AFM modes in peer reviewed publications.

In principle, KPFM can ►

Protein Homology Modeling, Loop Grafting & Sampling

Sponsor: Chemical Computing Group
Room 113A, 3:30-6 pm

With focus on protein homology modeling, loop grafting, and sampling, the session will include practical examples of creating and refining protein homology models. Topics will include preparing protein structures, sequence & structural protein alignments and the basics of homology modeling. Advanced homology modeling topics such as interactive loop grafting, conformational searching of loops with LowModeMD and using atom environments during model refinement will also be covered.

Note: Computers will be provided for the hands-on exercises (seats are limited). The molecular modeling software package MOE will be used during the workshop. More information about MOE can be found at www.chemcomp.com/software.htm. To reserve a seat, email: ralvarez@chemcomp.com ◆

provide a quantitative measure of work function tip-sample differences. In practice, when interrogating relevant samples (i.e., nanoscale structures with variations in modulus or adhesion), conventional ambient, TappingMode-based KPFM approaches face severe limitations. This is true for both commonly used detection mechanisms: amplitude modulation (AM) and frequency modulation (FM).

Where AM detection suffers from a lack of spatial resolution due to the cantilever's contribution to the error signal, FM is subject to mechanical cross-talk and lack of sensitivity. This mechanical cross-talk originates from the fact that nanomechanical tip-sample interactions shift the cantilever resonance behavior. Sensitivity limitations stem from the need for high-k (for stable oscillation), low-Q (for tapping response bandwidth) cantilevers for TappingMode, the exact opposite of what maximizes KPFM sensitivity. Furthermore, parameter setup complexity in conventional KPFM can limit user-to-user consistency.

PeakForce KPFM takes full advantage of the high spatial resolution afforded by FM KPFM while avoiding its pitfalls. By employing **Bruker**'s patented LiftMode, it avoids mechanical crosstalk. By building on the suite of PeakForce Tapping technology, it aligns cantilever needs, providing highest resolution topography with the same low-k, high-Q cantilevers, maximizing potential sensitivity. In addition, PeakForce QNM provides directly correlated quantitative nanomechanical information.

With the new PeakForce KPFM mode, Bruker offers consistent and quantitative work function measurements at the highest spatial resolution. Aside from its signature mode, the PeakForce KPFM package includes all industry standard KPFM implementations and an additional high-voltage mode. Across the board, automatic setup with ScanAsyst guarantees optimized results.

Visit Bruker at Booth 1014.

TCI's New Distribution Center Reduces Delivery Costs

TCI America has opened a new warehouse and distribution center in the greater Philadelphia area. Opened in April, this facility has the ability to deliver TCI's products within one to two business days via ground service to the majority of its customers in the northeast region of the U.S.

With this addition combined with its existing warehouse and distribution center located on the west coast, TCI is now able to accommodate delivery to all of its U.S. customers in an expedited fashion. With its growing product line, the new warehouse will enable the company to increase inventory levels in both catalog pre-pack and bulk sizes and deliver products to customers more efficiently, faster, and at a lower cost.

TCI America launched a new website in May—TCIchemicals.com. The website is customer friendly, easy to use, and features: quick and easy product searching; detailed stock information; the ability to compare multiple items side by side; and "MyTCI" customer portal and other user friendly options.

TCI America also released a new eShop online ordering system offering: 22,000 high quality fine chemicals available online; free shipping on orders more than $300; inventory availability from all distribution centers; order history and tracking; and available campaigns or coupons. **Visit TCI America at Booth 500.**

KNF's Corrosion-resistant Vacuum Pumps Specially Engineered

KNF Labport corrosion-resistant vacuum pumps are the solution for a variety of laboratory applications involving rotary evaporation, vacuum ovens, and gel drying, among others. These compact diaphragm pumps integrate corrosion-resistant PTFE wetted parts for added protection and longer service life; tough, condensate-resistant multi-port FFPM valves; and durable PTFE-bonded diaphragms.

All pumps benefit from using no pump oil, operate without maintenance or water requirements, and perform quietly and reliably, even when continuously running corrosive solvent vapors. Their compatibility with all brands of rotary evaporators, concentrators, and vacuum ovens expands application potential.

This series of Labport pumps offers alternatives to oil-lubricated pumps, water aspirators, piston pumps, and house vacuum. They are lightweight and portable to allow users to move the pump wherever a vacuum is required. They can handle most aggressive vapors and can tolerate occasional condensate and other abuse typically encountered in busy labs without damage, especially those found in academic environments. Pumps quickly connect to systems using a vacuum hose without using tools.

Depending on model, these pumps can achieve flow rates to 60 L/min and generate vacuum to 1.5 Torr (29.9 in.Hg).

Visit KNF Labport at Booth 1326.

Ace Glass Features New Design for Filtration Apparatus

Ace Glass has introduced a new design in glass filtration apparatus. The borosilicate flask (or bottle) attaches to the center PTFE filter adapter and upper borosilicate glass funnel by threading together rather than via the use of cumbersome clamps. The entire system comes apart easily for cleaning, and the glass-fritted disc can be removed. Because of its design, the system utilizes 99 percent of the 75mm filter disc area.

The new 75mm size is available with either a two-liter Erlenmeyer flask bottom, or with a five-liter Duran laboratory bottle bottom. Both utilize the famous Ace-Safe design side port for safe and easy vacuum tubing attachment.

Ace's new color brochure details the new apparatus and its full ACE filtration apparatus product line. **Visit Ace Glass at Booth 426.**

Julabo Features Precision, Speed

The new PRESTO from **JULABO** provides liquid temperature control for modern laboratories. Models in this redesigned line of temperature-control instruments are the air-cooled A30, A40 and the water-cooled W40.

These instruments cover a working temperature range of -40 to +250°C with 1.2 kW of cooling capacity and 2.3 kW of heating capacity. The A80 and W80 have an operating range of -80 to +250°C with 1.2 kW of cooling capacity and 1.5 kW of heating capacity. Related A80t and W80t models provide additional heating power: 2.8 kW. The newest models, W91 and W92, supply 11 or 31 kW of cooling with options for heating (12, 24 or 36 kW) and pump capacity over a temperature range of -92 to +250°C.

Visit Julabo at Booth 832.

Heidolph Stands Out In Crowd

With so many hotplates in the market **Heidolph**'s products still manage to stand out and be different. Starting with the unique Kera Disk heating plate itself, it's made of aluminum, providing faster than usual heat up times but also features a thin layer of ceramic coating, making this plate both chemical and scratch resistant. Hotplates typically have one or the other of these benefits, but not both. With the fire resistant die cast housing these units categorically rule out unforeseen damage. Labs across the country are making Heidolph the preferred supplier of hotplates because they trust the German made quality and longevity of the products.

Visit Heidolph North America at Booth 427.

Hall of Fame from page 1

treatment when the disease became drug-resistant.

- The process, used around the world, for making "low-e window glass" and other glass coatings that saves millions of dollars each year in heating and cooling costs and significantly lowers energy consumption.

Established in 1996, the ACS Heroes of Chemistry program recognizes scientists whose work in various fields of chemistry and chemical engineering has led to the successful innovation and development of commercial products that benefit humankind.

Scientists from Merck, the global pharmaceutical firm known as MSD outside the U.S. and Canada, won the honor for developing the chronic hepatitis C drug Victrelis (boceprevir). They are Ashok Arasappan; Frank Bennett, Stéphane Bogen, F. George Njoroge, and Srikanth Venkatraman.

Victrelis was the first oral hepatitis C virus protease inhibitor approved by the U.S. Food and Drug Administration for use in combination with pegylated interferon alfa and ribavirin, to treat the most common type of chronic hepatitis C. Chronic hepatitis C is a viral infection that affects more than 130-170 million people worldwide and can cause serious liver damage.

Scientists from Novartis, the global pharmaceutical company, won the honor for developing the leukemia drug Tasigna (nilotinib): Paul Manley, Gabriele Fendrich, Werner Breitenstein, and Sandra Jacob. Tasigna is a prescription medication for adults with newly diagnosed form of Philadelphia chromosome-positive chronic myeloid leukemia and for patients who are resistant or intolerant to previous treatment.

Scientists from Arkema, a global producer of industrial chemicals, won the honor for developing atmospheric pressure chemical vapor deposition technology. They are Dave Russo, Jeff Stricker, Georg Lindner, Jeremy Nihart, Ryan Smith, Connie Lo, Jing Ming Mai, and Clem McKown. The technology deposits coatings of various chemicals onto the surface of glass, providing significantly increased solar heat gain control.

"Heroes of Chemistry are a visible reminder of the innovation, vitality, and talent that our profession offers to society," said Bassam Z. Shakhashiri, ACS president. "Chemistry serves as the foundation for so many aspects of our lives. Chemistry is new products, new materials and a new hope for the future.

"We are honoring innovations that result from the support and vision of corporate management who invest in science, understand its application, and advocate for it within their organizations. The corporate leaders at Arkema, Merck and Novartis have demonstrated the commitment that leads to breakthrough products and groundbreaking technologies. I salute each of these companies for creating the internal environment—the culture that leads to scientific discovery and commercialization."

Nobel Laureates from page 1

Technology, and Schrock, who is with the Massachusetts Institute of Technology, shared the 2005 Nobel Prize in Chemistry with Yves Chauvin for the development of the "metathesis method." That new way to make plastics, medicines and other products was an advance in "green chemistry," because it reduces the production of potentially hazardous waste compared with other approaches.

Prusiner, who is with the University of California, San Francisco, won the 1997 Nobel Prize in Physiology or Medicine for the discovery of prions. Those infectious proteins cause a degenerative brain disorder in humans called Creutzfeldt-Jakob disease, "mad cow" disease in cattle, and related diseases in sheep and deer.

Olah, who is with the University of Southern California, won the 1994 Nobel Prize in Chemistry for work on "carbocations," charged molecules that were considered too unstable to study. Olah developed a way to isolate these molecules, which was useful in the oil and coal industries.

Heeger, who is with the University of California, Santa Barbara, shared the 2000 Nobel Prize in Chemistry with Alan G. MacDiarmid, and Hideki Shirakawa, for the revolutionary discovery that plastics, after certain modifications, can conduct electricity. The discovery opened the way for plastic batteries, roll-up solar cells and other potential products.

Molina, who is with the University of California, San Diego, shared the 1995 Nobel Prize in Chemistry with F. Sherwood Rowland, and Paul J. Crutzen, for discovering that substances called CFCs in aerosol spray cans and other products were destroying the ozone layer. The ozone layer is crucial to life on Earth, forming a protective shield high in the atmosphere that blocks potentially harmful ultraviolet rays in sunlight.

CHECK THE PROGRAM FOR DATES AND LOCATIONS OF THE PRESENTATIONS.

In his Presidential Plenary Keynote, "Chemistry and Climate Change," Molina will speak about new scientific analysis that strengthens the view that record-breaking summer heat, crop-withering drought, and other extreme weather events in recent years do, indeed, result from human activity and global warming. Molina's presentation will be Monday at the Philadelphia Marriott Downtown, Liberty Ballroom C at level 3 at 11 am.

One Vital Space from page 3

place to learn and ask questions about the many personal and professional benefits ACS offers its members. While there, take the membership survey for a chance to win an iPad.

Personalize your meeting experience with three new ACS Network features: First, let people find and follow you in Philadelphia; second, share meeting photos in an ACS Network photo album; and third, schedule and promote your event in the ACS Network. Visit the ACS Network kiosk to learn more.

ACS Meetings and Expositions will display information on current and future national and regional meetings. The programming is diverse and exciting! Meet the volunteers who are planning these meetings and get a tour of this year's conferences at the ACS booth.

Visit ACS Education to discover new editions of ACS textbooks, Chemistry in Context and Chemistry in the Community. Explore the Use of the ACS Guidelines for Chemistry in Two-Year College Programs; a 2012 case study collection in which chemistry faculty share successes in using ACS guidelines to strengthen chemistry education.

ACS Booth staff will explain how to participate in improving science education, advocacy for federal research funding, and public outreach efforts like the Chemistry Ambassador Program. Learn to speak about your job in a way that a non-scientist can understand. Consider it your personal tag line, a 10-second job description.

Visit the ACS Member Insurance Program and explore the plans available exclusively to ACS members such as Life & Health Insurance, Auto & Homeowners, Pet Insurance and more. Learn about the new ACS Group Special Event Cancellation and Liability Insurance and enter to win a $300 hotel gift certificate.

ACS
Chemistry for Life™

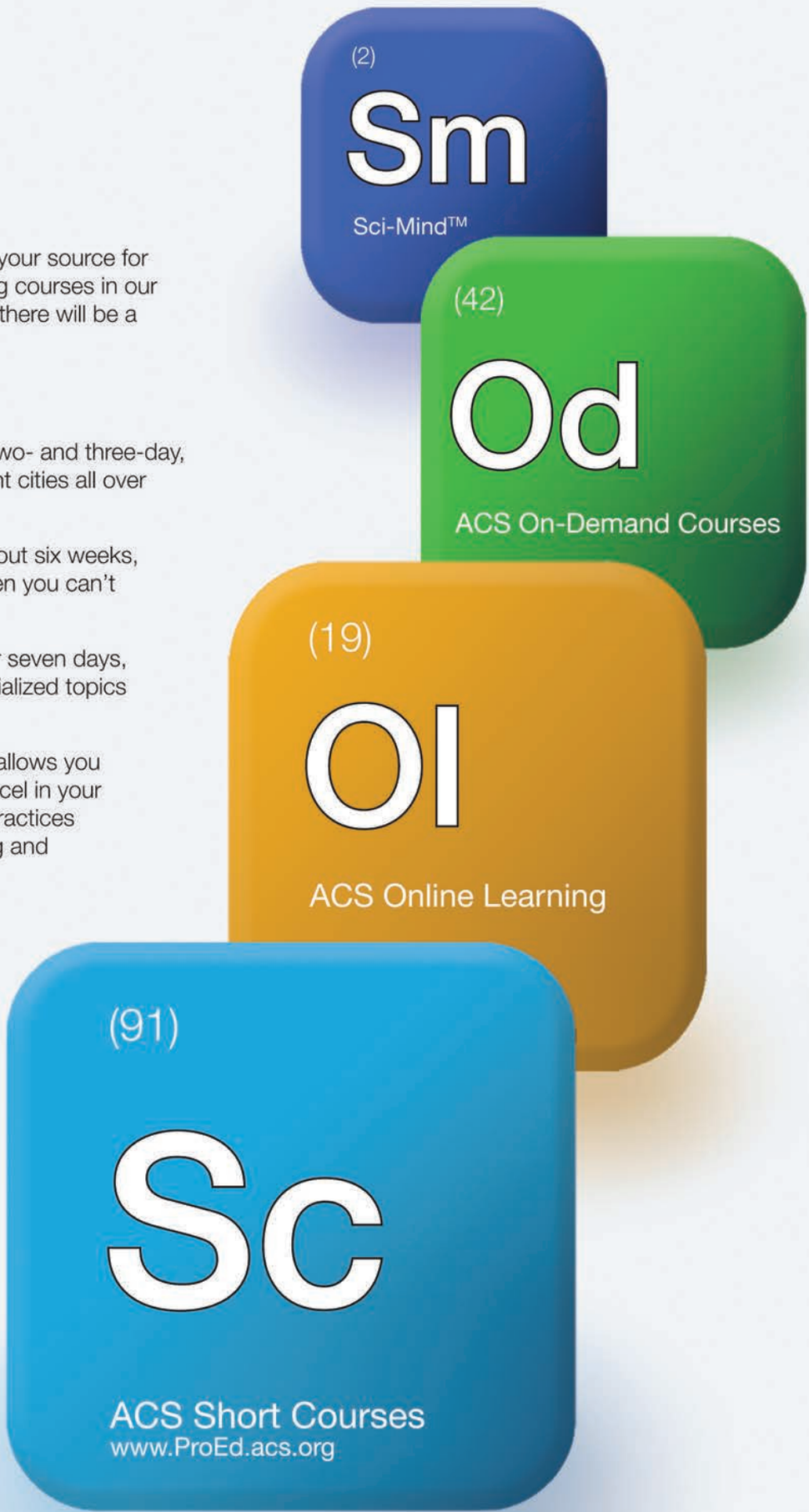
Vital Training from A Trusted Source

ACS Department of Professional Education is your source for high quality training. With more than 90 training courses in our catalog held in various formats, we guarantee there will be a course that suits your needs.

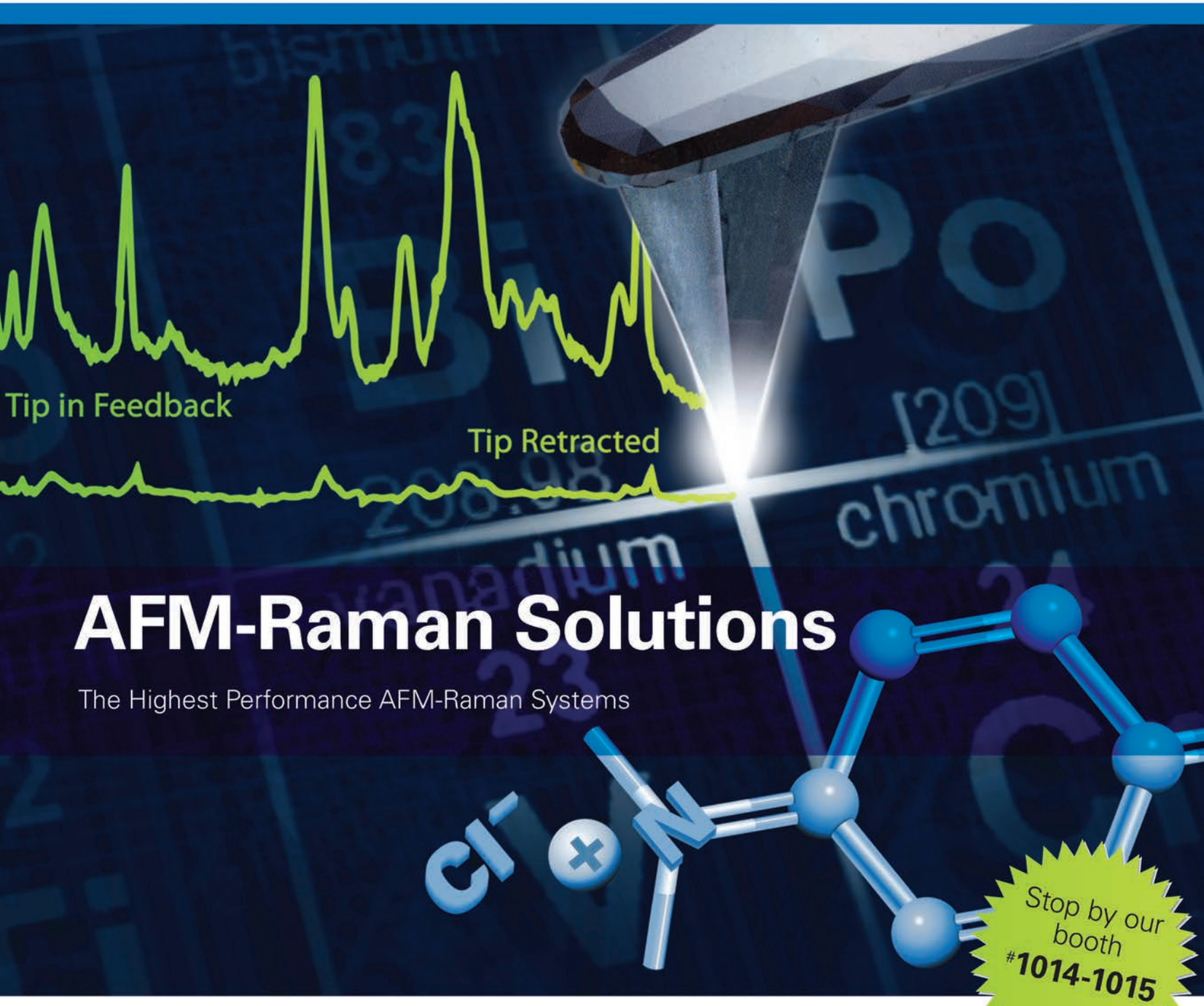
Our Products:

- ✓ Short Courses – Short Courses are one-, two- and three-day, in-person classes that are held in convenient cities all over the United States.
- ✓ Online Courses – Held once a week for about six weeks, Online Courses are a great way to train when you can't take time away from the office.
- ✓ On-Demand Courses – Available to you for seven days, On-Demand Modules allow training in specialized topics at your convenience.
- ✓ Sci-Mind™ – New innovative product that allows you to gain the scientific training you need to excel in your profession. Sci-Mind™ incorporates best practices from traditional instruction, blended learning and social media.

FIND OUT MORE at
www.ProEd.acs.org



BRUKER



AFM-Raman Solutions

The Highest Performance AFM-Raman Systems

Stop by our booth #1014-1015

Taking the quality of material characterization to a new level.

- IRIS models provide proven tip-enhanced Raman spectroscopy (TERS) integration
- Co-located models integrate highest performance, large-sample atomic force microscopy with uncompromised confocal micro-Raman spectroscopy
- Flexibility of analysis with every detail considered
- Easy-to-use AFMs for spectroscopy in materials research and life sciences
- Highest performance, most complete AFM capabilities
- True nanoscale spectroscopy targeted to your application

Visit **www.bruker.com/AFM-Raman** or contact us today at **+1.805.967.1400/800.873.9750** or **productinfo@bruker-nano.com** to learn more about Bruker's ideal AFM-Raman solutions.

Innovation with Integrity

Atomic Force Microscopy