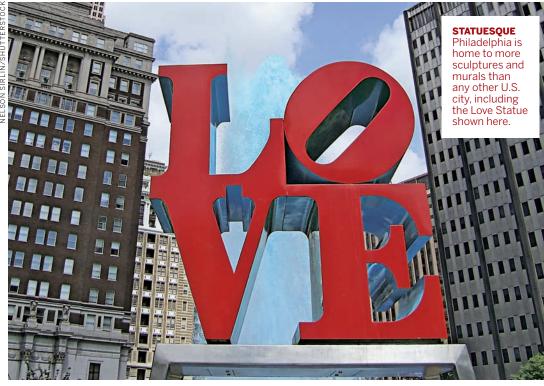
PRELIMINARY PROGRAM



employers, the ACS Career Fair once again will provide opportunities for actual interviews (both on-site and online), one-on-one career assistance, and professional development workshops. The workshops require a separate registration and fee.

The exposition will feature more than 230 companies showcasing services, instruments, books, lab equipment, and much more in booths that number more than 350.

And if the expo and various symposia aren't enough to fill your time, be sure to check out the many landmarks Philadelphia is known for—a

244TH ACS NATIONAL MEETING

PHILADELPHIA, Aug. 19-23

THE CITY OF Brotherly Love will host the 244th American Chemical Society National Meeting at the Pennsylvania Convention Center. Symposia supporting the meeting's multidisciplinary theme, "Materials for Health & Medicine," are organized by thematic program chair Xinqiao Jia, an associate professor of materials science and engineering at the University of Delaware.

ACS President Bassam Z. Shakhashiri will host 30 technical divisions and seven committees in original programming over 790 half-day oral sessions and 118 poster sessions that include Sci-Mix. More than 8,500 papers will be presented at the meeting.

In addition to supporting the meeting theme, Shakhashiri will continue to endorse his presidential agenda, "Advancing Chemistry & Communicating Chemistry."

MEETING INFO ON THE WEB www.acs.org/philly2012 On Monday, "The Work of the Innocence Project" will address how forensic science plays a tragic role in innocent people's convictions and in some cases death, and on Tuesday, "Communicating Controversial Science" will honor Rudy M. Baum, who is retiring from C&EN as editor-in-chief.

The International Lounge is a new feature that will serve to host international guests. When you're in the convention center, drop by and meet ACS members from outside the U.S.

As usual, many education-focused programs for high school teachers, undergraduate and graduate students, postdocs, and chemical professionals who want to expand options and manage their careers are being offered. On Sunday night, a "Double Feature Feature" will take place as part of the education program, featuring two science-themed films.

Throughout the meeting, a range of professional development courses are available; ACS Short Courses have a separate registration and fee. And for job seekers and local cheesesteak shop, the Liberty Bell, or Fairmont Park.—EMILY BONES

REGISTRATION CATEGORY	FEE STANDARD AFTER JULY 24
MEMBERS	
ACS member or society affiliate	\$435
Postdoctoral member	435
Emeritus or retired member	220
50-year member	No Fee
Unemployed member (Dues waiver required)	No Fee
Precollege teacher	90
Graduate, less than postdoctoral	180
Undergraduate	90
One-day registrant	220
NONMEMBERS	
Chemical scientist	\$770
Postdoctoral scientist	770
Visitor: Nonchemical scientist or chemical technician	435
Precollege teacher	90
Graduate, less than postdoctoral	360
Undergraduate	180
One-day registrant	435
Guest of registrant ^a	40
EXPOSITION-ONLY VISITORS	
Adult, exposition only	\$50
Student, exposition only	25

a Registration is restricted to a spouse or family member of registered attendee having no affiliation with the field of chemical science and who is not eligible to become an ACS member. Only one guest registration is allowed per registering attendee, and the guest registration must be completed and paid by the registering attendee at time of original registration.

REGISTRATION

Early Registration. Early registration for the national meeting closed on July 24; registrations or payments received after July 24 will be processed at standard registration rates. Attendees who registered by July 24 should receive their badge credentials in the mail before the meeting. International registrants and early registrants who do not receive their badge credentials before the meeting must pick them up at ACS Attendee Registration (Pennsylvania Convention Center, Grand Hall).

Standard & On-Site Registration. Standard registration rates are in effect until Aug. 23. Register online at www.acs.org/ philly2012. A valid ACS membership number must be entered during registration to register as a member and receive your member discount on registration fees. Attendees who register after July 24 must pick up their badge credentials at ACS Attendee Registration in the Pennsylvania Convention Center, Grand Hall, during the meeting. Please bring your e-mail confirmation for faster processing.

In Philadelphia, attendees can pick up their badge credentials or complete a new registration using credit card, cash, check, or money order at ACS Attendee Registration in the Pennsylvania Convention Center, Grand Hall, on Saturday, 3 to 6 PM; Sunday, 7:30 AM to 7:30 PM; Monday, 7:30 AM to

ACS BADGE REPRINT POLICY

1st Badge Reprint: No charge, upon proper identification and confirmation of registration payment, a duplicate badge is issued.

2nd Badge Reprint: Attendee completes a duplicate badge request, shows identification, a charge of \$25 is paid (cash/credit card), a duplicate badge is issued.

3rd Badge Reprint: Attendee completes a duplicate badge request, shows identification, a charge of \$50 is paid (cash/credit card), a duplicate badge is issued.

Beyond 3rd Badge Reprint: Attendee completes a duplicate badge request, shows identification, a charge of \$100 is paid (cash/credit card), a duplicate badge is issued. 9:30 PM; Tuesday and Wednesday, 7:30 AM to 5:30 PM; and Thursday, 7:30 AM to 1 PM.

SOCIAL EVENTS

A VARIETY of organizers are hosting special events during the meeting. Event participation is open to all interested registrants. Some events require purchase of a ticket to participate. The following events are coded to indicate what is required to participate: **T**—ticket required; **NT**—sponsored, no ticket required; **COD**—payment due based on individual consumption at event; all nonticketed events require a visible registration badge for entry. View an updated listing of social and special events at www.acs.org/ philly2012.

Ticket sales for specific events will close at 6 PM the evening prior to the event. Some event organizers may offer a limited number of tickets for sale at the door of the events. All tickets are sold on a firstcome, first-served basis. Cancellations or refund requests must be made by Aug. 7. No refunds will be issued after that date.

SATURDAY, AUG. 18

Project SEED & Chemistry Olympiad Luncheon (NT)

Noon to 1 PM, Philadelphia Marriott Downtown, Conference Room 306

TOXI Workshop—Spectroscopy Applications in Toxicology & Metabolism/SE-01/\$45 (T)

1 to 5 PM, Pennsylvania Convention Center, 110A

TOXI Workshop—Writing Fellowships & Other Grants at the Pre- & Postdoctoral Level/SE-02/\$15 (T)

1 to 5 PM, Pennsylvania Convention Center, 110B

COACh Reception (NT) 5 to 7 PM, Sheraton Philadelphia City Center Hotel, Salons 5&6

SUNDAY, AUG. 19

Undergraduate Student Hospitality Center

8 AM to 5 PM, Sheraton Philadelphia City Center Hotel, Liberty Ballroom C&D

ACS Career Fair

8 AM to 6 PM, Pennsylvania Convention Center, Hall C

WCC Workshop—Lens of the Market/ SE-03/\$60 (T)

9 AM to 3 PM, Philadelphia Marriott Downtown, Independence Ballroom III

Board Executive/Open Meeting

Noon to 1 PM, Pennsylvania Convention Center, 108AB

CHED High School-College Interface Luncheon/SE-04/\$35 (T)

(Included at no charge with high school teacher registration.) Noon to 1 PM, Pennsylvania Convention Center, 111AB

Get To Know Sci-Mind Exclusive Event for Industry Scientists

4:30 to 5:30 PM, DoubleTree by Hilton Philadelphia Center City, Ormandy East

I&EC Reception Honoring 2009 & 2010 ACS Fellows in the I&EC Division & Honoring I&EC Graduate Award Symposia Participants (NT) 5 to 6:30 PM, Philadelphia Marriott Downtown, Franklin Hall 3

Undergraduate Programs Networking Social with Graduate School Recruiters (NT)

5 to 6:30 PM, Sheraton Philadelphia City Center Hotel, Liberty Ballroom C&D

University of Wisconsin, Madison, Alumni & Friends (NT)

5 to 7 PM, DoubleTree by Hilton Philadelphia City Center, Overture

CHED Social Reception (NT) 5:30 to 7 PM, Pennsylvania Convention Center, Terrace Ballroom I

ACS Diversity Reception (NT) 5:30 to 7:30 PM, Philadelphia Marriott Downtown, Franklin Hall 1

ACS Petroleum Research Fund/Research Corporation Joint Reception (NT) 5:30 to 7:30 PM, Philadelphia Marriott Downtown, Liberty Ballroom C

BIOL Poster Session

5:30 to 7:30 PM, Pennsylvania Convention Center, Hall C

FINAL PROGRAM

IAC International Welcoming Reception (NT)

5:30 to 7:30 PM, Loews Philadelphia Hotel, Millennium Hall

25 Years of NCW Reception (NT) 6 to 8 PM, Chemical Heritage Foundation, 315 Chestnut St.

INOR Poster Session 6 to 8 PM, Pennsylvania Convention Center, Hall D

Attendee Welcome Reception 6 to 8:30 PM, Pennsylvania Convention Center, Halls A&B

CELL Poster Session 6:30 to 8:30 PM, Pennsylvania Convention Center, Hall D

CINF Welcoming Reception & Poster Session

6:30 to 8:30 PM, Philadelphia Marriott Downtown, Liberty Ballroom A

CARB Poster Session 6:30 to 9:30 PM, Pennsylvania Convention Center, Hall D

CHED Poster Session 7 to 9 PM, Pennsylvania Convention Center, Terrace Ballroom I

MEDI General Poster Session 7 to 9 PM, Pennsylvania Convention Center, Hall D

ORGN Poster Session 8 to 10 PM, Pennsylvania Convention Center, Hall D

MONDAY, AUG. 20

YCC Fun Run/SE-05/\$30 (T) 5 to 10 AM, Pennsylvania Convention Center, 1101 Arch St.

Corporation Associates Breakfast 7 to 9 AM, Four Seasons Hotel Philadelphia, Jefferson Room

WCC Women in the Chemical Enterprise Breakfast—LinkedIn Training with Deborah L. Smith/SE-06/\$35 (regular)/SE-07/\$18 (student) (T)

(A limited number of student) (1) (A limited number of student tickets are available. Students may purchase regular tickets if student tickets are sold out.) 7:30 to 9:30 AM, Philadelphia Marriott Downtown, Liberty Ballroom A/B

Graduate School Recruiters' Breakfast 8 to 9:30 AM, Sheraton Philadelphia City Center Hotel, Liberty Ballroom C&D

ACS Career Fair 8 AM to 5 PM, Pennsylvania Convention Center, Hall C

ACS Exposition 9 AM to 5 PM, Pennsylvania Convention Center, Halls A&B

Women Chemists of Color Networking Social 10 AM to noon, Philadelphia Marriott Downtown, Franklin Hall 1

Committee on Minority Affairs Reception & Luncheon/SE-08/\$40 (T) 11:30 AM to 1:30 PM, Philadelphia Marriott Downtown, Liberty Ballroom A/B

Undergraduate Program Eminent Scientist Lecture & Lunch/SE-09/\$35 (T)

(Included at no charge with undergraduate registration.) 11:45 AM to 1:15 PM, Pennsylvania Convention Center, 108AB

CHAL Luncheon with the Hon. Pauline

Newman/SE-10/\$20 (T) Noon to 1:30 PM, Chemical Heritage Foundation, 315 Chestnut St.

PROF Networking Lunch Noon to 1:30 PM, Philadelphia Downtown Courtyard by Marriott, Juniper's Ballroom

Corporation Associates Luncheon Noon to 2 PM, Four Seasons Hotel Philadelphia, Jefferson Room

AGRO Poster Session 1 to 5 PM, Pennsylvania Convention Center, Hall D

ACS Fellows Ceremony 1:30 to 4 PM, Philadelphia Marriott Downtown, Grand Ballroom E/F

Undergraduate Research Poster Session 2 to 4 PM, Pennsylvania Convention Center, Hall D University of Pennsylvania Chemistry Alumni Reception 5 to 7 PM, Chemical Heritage Foundation,

COLL Social Hour/Poster Session 5:30 to 8 PM, Pennsylvania Convention Center, Hall G

315 Chestnut St.

Harry's Party 5:30 to 8:30 PM, Sheraton Philadelphia City Center Hotel, Governor's Suite

INOR Poster Session 6 to 8 PM, Pennsylvania Convention Center, Hall D

Binghamton University (SUNY) Alumni & Friends Reception 6:30 to 8:30 PM, Philadelphia Marriott

6:30 to 8:30 PM, Philadelphia Marriott Downtown, Grand Ballroom Salon C

Emory University Chemistry Department Reception

6:30 to 9:30 PM, Sofitel Philadelphia, Chez Collette Room

Graduate & Postdoctoral Scholars Reception 7 to 8:30 PM, Pennsylvania Convention Center, 108AB

Larry Marnett Retirement Reception 7 to 9 PM, Philadelphia Marriott Downtown, Grand Ballroom A/B

Chinese-American Chemical Society Social Hour & Dinner/SE-11/\$30 (T) 7:30 to 9:30 PM, Joy Tsin Lau Chinese Restaurant, 1026 Race St.

Sci-Mix Interdivisional Poster Session & Mixer/Drink Ticket at Registration 8 to 10 PM, Pennsylvania Convention Center, Hall D

TUESDAY, AUG. 21

Senior Chemists Breakfast/SE-12/\$15 (T) 7:30 to 9:30 AM, Philadelphia Marriott Downtown, Liberty Ballroom A

University of Minnesota Alumni & Friends Breakfast/SE-21/\$5.00 (T) 7:30 to 9:30 AM, Pennsylvania Convention Center, 108B ACS Career Fair 8 AM to 6 PM, Pennsylvania Convention Center, Hall C

ACS Exposition 9 AM to 5 PM, Pennsylvania Convention Center, Halls A&B

WCC/Eli Lilly & Co. Poster Session & Reception

11 AM to noon, Philadelphia Marriott Downtown, Liberty Ballroom A/B

Alpha Chi Sigma Fraternity Luncheon/\$25 (COD)

11:30 AM to 1 PM, Philadelphia Marriott Downtown, 13 Restaurant Sign up by contacting Gary Anderson, Alpha Eta '62 at (304) 634-1921 or e-mail Anderson@marshall.edu

I&EC Graduate Award Symposia Luncheon/SE-13/\$47 (T)

11:30 AM to 1 PM, Philadelphia Marriott Downtown, Conference Room 405

CINF Luncheon/SE-14/\$15 (T)

Noon to 1:30 PM, Philadelphia Marriott Downtown, Franklin Hall 9&10

COLL Luncheon/SE-15/\$40 (T)

Noon to 1:30 PM, Pennsylvania Convention Center, 108B

WCC Luncheon/SE-16/\$45 (regular)/ SE-17/\$23 (student) (T)

(A limited number of student tickets are available. Students may purchase regular tickets if student tickets are sold out.) Noon to 1:30 PM, Philadelphia Marriott Downtown, Liberty Ballroom A/B

AGRO Poster Session 1 to 5 PM, Pennsylvania Convention Center, Hall D

AGFD & ENFL Poster Session 2 to 4 PM, Pennsylvania Convention Center, Hall D

Mid-Afternoon Reception Sponsored by Teva Pharmaceuticals

3:20 to 3:50 PM, Pennsylvania Convention Center, 203AB

University of Rochester Alumni Social Hour (NT)

5 to 6:30 PM, Philadelphia Marriott Downtown, Independence Ballroom I **College of Science & Technology at Temple University Alumni Reception (NT)** 5 to 7 PM, Loews Philadelphia Hotel, Howe

lota Sigma Pi—National Honor Society for Women in Chemistry (NT) 5 to 7 PM, Pennsylvania Convention Center, 111A

Journal of Physical Chemistry/PHYS Division Reception (NT) 5 to 7 PM, Philadelphia Marriott Downtown, Franklin Hall 9&10

UMass Amherst POLY Science & Engineering Reception (NT) 5 to 7 PM, Sheraton Philadelphia City Center Hotel, Horizon Rooftop Ballroom

Arthur C. Cope Award & Scholars Award Symposium Reception

5:15 to 6:45 PM, Loews Philadelphia Hotel, Washington A

BIOL Poster Session 5:30 to 7:30 PM, Pennsylvania Convention Center, Hall C

MEDI Hall of Fame Ceremony 5:30 to 7:30 PM, Pennsylvania Convention Center, Grand Ballroom B

Presidential Gay, Lesbian & Transgender Chemists & Allies Reception (NT) 5:30 to 7:30 PM, Philadelphia Marriott Downtown, Conference Rooms 304/305

POLY/PMSE Poster Session & Reception (NT)

5:30 to 8:30 PM, Sheraton Philadelphia City Center Hotel, Liberty Ballroom C&D

I&EC Poster Session 6 to 7:30 PM, Pennsylvania Convention Center, Hall D

COMP Poster Session 6 to 8 PM, Pennsylvania Convention Center, Hall G

INOR & ENVR Poster Session 6 to 8 PM, Pennsylvania Convention Center, Hall D

AGRO Social (NT) 6 to 8:30 PM, Loews Philadelphia Hotel, Millennium Hall ANYL Reception/SE-18/\$10 (T) 6 to 8:30 PM, The College of Physicians of Philadelphia, 19 South 22nd St.

George Washington University Chemistry Alumni Reception (NT) 6 to 8:30 PM, Philadelphia Marriott Downtown, Conference Room 306

ENVR Dinner & Social/SE-20/\$60 (T) 6:30 to 9 PM, Chemical Heritage Foundation, 315 Chestnut St.

ENFL Awards Dinner/SE-19/\$45 (T) 6:30 to 9:30 PM, Maggiano's Little Italy, 1201 Filbert St.

TOXI General Posters 7:30 to 9:30 PM, Pennsylvania Convention Center, Terrace Ballroom IV

ChemLuminary Awards Reception (NT) 8 to 9 PM, Pennsylvania Convention Center, Terrace Ballroom Fover

ORGN Poster Session 8 to 10 PM, Pennsylvania Convention Center, Hall D

ChemLuminary Awards Banquet (NT) 9 PM to midnight, Pennsylvania Convention Center, Terrace Ballroom I

WEDNESDAY, AUG. 22

AGRO Blues & Brews 5 to 7 PM, Loews Philadelphia Hotel, Millennium Hall

POLY/PMSE Awards Reception (NT) 5:30 to 8 PM, Sheraton Philadelphia City Center Hotel, Horizon Rooftop Ballroom

ENVR & INOR Poster Session 6 to 8 PM, Pennsylvania Convention Center, Hall D

PHYS Poster Session 6 to 9 PM, Pennsylvania Convention Center, Hall D

MEDI & ORGN General Poster Session 7 to 10 PM, Pennsylvania Convention Center, Grand Ballroom

EXPOSITION

SEE WHAT'S NEW INSIDE THE EX-

POSITION. Take time to visit the ACS National Exposition at the Pennsylvania Convention Center, Halls A&B, from Sunday, Aug. 19, through Tuesday, Aug. 21. The show hours will be Sunday, 6 to 8:30 PM, and Monday and Tuesday, from 9 AM to 5 PM.

Companies will showcase services, instruments, books, computer hardware, scientific software, and a wide array of chromatographic, lab, and safety equipment. Technical personnel will also be available to give demonstrations, answer questions, and discuss your specific needs and interests. You can also visit the ACS Career Fair Recruiters Row inside the exposition, where employers will showcase their products and services. Also, join us at the ACS Booth in the middle of the exposition floor where ACS staff units will present the many benefits, services, products, and merchandise offered by ACS.

Online Exposition. The Online Exposition is a component within the Exhibitor Directory that enables attendees to view videos, press releases, brochures, and flyers of participating exhibitors. Access the Online Exposition at www.acs.

org/philly2012 to learn more about exhibiting companies and to download product information that meets your needs.

Virtual Exposition. Can't attend the exposition? Engage in live discussions with, watch videos of, and take advantage of special offers from participating virtual exhibitors. Register for the Virtual Exposition at www.acs.org/ve, which features the ACS Career Fair for free.

Free Exhibitor Workshops. Free workshops will be hosted by exhibitors on the exposition floor and in private rooms inside the Pennsylvania Convention Center. These workshops will introduce new products and services, build skills with specific tools and techniques, and highlight innovative applications that may improve your productivity. Preregister at www.acs.org/philly2012 to reserve your seat. Preregistered attendees will be entered into a prize drawing; winners will be announced during the session.

Presentations, Prizes & Special Events. Visit the Daily Prize Raffle area from Sunday through Tuesday for a chance to win a prize and to pick up your meeting souvenir T-shirt (while supplies last). Also, don't forget to join us on Sunday from 6 to 8:30 PM for the Attendee Welcome Reception and visit the exposition on Monday and Tuesday for up \$2.00 off your concession order. Meet the ACS president-elect candidates on Monday from 3 to 5 PM in front of the ACS Booth. Look inside your meeting registration credentials for further information.

Exhibitor Passport Check-in. You will find the flyer that lists the exhibitors participating in the Exhibitor Passport inside your registration credentials. Or you can pick up your copy at Exhibitor Registration located in Lobby A. Have each participating exhibitor stamp their block, then bring your completed card to the Exhibitor Passport Check-in area to be entered for a chance to win an amazing prize.

Internet & Technology. Utilize free Internet access and leave messages for one another at the Meeting Mail terminals located throughout the meeting. Also, enjoy free Wi-Fi service in the Pennsylvania Convention Center lobby.

Admission Requirements & Expo-Only Registration. Exposition admission is complimentary for all national meeting registrants; however, you are required to wear your badge. Individuals who want to visit the exhibits without registering for the technical component of the national meeting can obtain an expo-only badge for \$50. Students with school identification can obtain an expo-only badge for \$25. Registration can be handled online, by mail, or in person at ACS Attendee Registration.

EXHIBITOR WORKSHOPS

EXHIBITING COMPANIES will host 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 two-and-a-half-hour sessions held at the Pennsylvania Convention Center in Halls A&B and in private rooms. Please register by Aug. 10 for exhibitor workshops at www.acs.org/philly2012. If you miss the registration deadline, visit the exhibitor at their booth inside the ACS National Exposition, Pennsylvania Convention Center, Halls A&B.

MONDAY, AUG. 20

Reaxys from Elsevier—Integrating Reaxys into Your Chemistry Research Workflow. Sponsor: Elsevier, Booth 618, Room 202A, 8:30 to 11 AM. Learn how Reaxys enhances the chemistry research workflow and explore in-depth the latest developments in Reaxys. Learn more about Reaxys and electronic laboratory notebook (ELN) integration and how researchers can effectively access the relevant results and 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. Learn how to make the most of the data analysis tools and be more effective in your search strategies.

Advanced Polymer Characterization

Workshop. *Sponsor:* Tosoh Bioscience, Booth 519, Halls A&B, Workshop Room 1, 9:30 AM to noon. Gel permeation chromatography (GPC), light scattering, viscometry, GPC/mass spectrometry, and beyond. Don't miss your chance to explore state-of-the-art solutions to the challenges of characterizing today's sophisticated polymer formulations. Let the experts show you how to obtain the data needed to control and understand polymeric properties such as elongation, tensile strength, adhesion, and compositional drift.

Smarter FTIR. Definitive Answers. Introducing the Thermo Scientific Nicolet iS50 FTIR Spectrometer. Sponsor: Thermo Scientific, Booth 1327, Room 202A, noon to 2:30 PM. The Thermo Scientific Nicolet iS50 FT-IR spectrometer gives definitive answers in your analytical laboratory where fast, easy workflows are essential. No other FTIR goes beyond your expectations to offer one-touch simplicity, flexibility, and integration in such a small, cost-effective workstation. The Nicolet iS50 is so advanced you won't think of it as simply an FTIR.

TUESDAY, AUG. 21

Author Workshop—How To Successfully Publish Scientific Articles.

Sponsor: Elsevier, Booth 618, Room 202A, 8:30 to 11 AM. This workshop is for earlycareer scientists looking for assistance in identifying, preparing, and submitting research articles to an academic journal. It will provide advice on best practices, top tips, ethics, the review process, and other important considerations. Are you a Ph.D. student interested in publishing your first scientific article, a young postdoc who wants to understand why articles are rejected, or a researcher who wishes to know what goes on behind the scenes in scientific publishing? Then this workshop is for you! We will address questions such as: What do I need to consider when preparing my article? How do I write an article for a specific journal? What happens after I submit my article to a scientific journal? Which tools are available during the writing process? Visit elsevier. com/authors for information about the publishing process.

ChemSpider & You: A Workshop Exploring How ChemSpider Can Help You Find Chemical Information. *Sponsor*:

Royal Society of Chemistry, Booth 701, Halls A&B, Workshop Room 2, 9:30 AM to noon. This two-hour interactive session will comprise a brief overview of the key features of the ChemSpider website followed by an open floor discussion where participants can ask both general questions and explore how they can use ChemSpider as part of their own chemical information searching practices. The workshop is suitable for participants with no ChemSpider experience or for regular users who want to get more out of their searches.

Electrochemical Measurements &

Simulation. Sponsor: Gamry Instruments, Booth 506, Halls A&B, Workshop Room 1, 9:30 AM to noon. Learn about principles of electrochemical measurements through methods including cyclic voltammetry, electrochemical impedance spectroscopy, Fourier transform voltammetry, and quartz crystal microbalance.

Introducing the Latest Thermo Scientific Advances in IC-ICP/MS, HPIC, GC, & GC/MS To Help Increase Your Lab Productivity & Results. *Sponsor*: Thermo Scientific, Booth 1327, Room 202A, noon to 2:30 PM.

Charge Detection & IC-ICP/MS: The Latest in Ion Chromatography Detection. Come and learn about the latest advances in ion chromatography (IC) detection systems. The all-new charge detector (QD) responds to ionic species in solution by measuring the current flow between two electrodes at a fixed potential. With 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. QD complements the more traditional conductivity detector. Also, see how combining IC with inductively coupled plasma mass spectrometry (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 & Speed. With the advent of capillary ion chromatography systems that can operate up to 5,000 psi, combined with smaller particle size ion-exchange packing materials (4μ m), the realm of highpressure IC now affords increased separation efficiencies, increased resolution, and faster separations. Come 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 a higher level of instrument usability with the next-generation gas chromatographer. It has engineered miniaturized plug-in injectors and detectors, and it will redefine 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 & Flexibility. Learn how you can tackle today's challenges with the advanced features of the ISQ single-quadrupole GC/MS. Discover how the innovative ExtractaBrite ion source assembly can be removed and replaced in less than three minutes without venting the MS. Also learn about the advanced capabilities of the ITQ series ion trap.

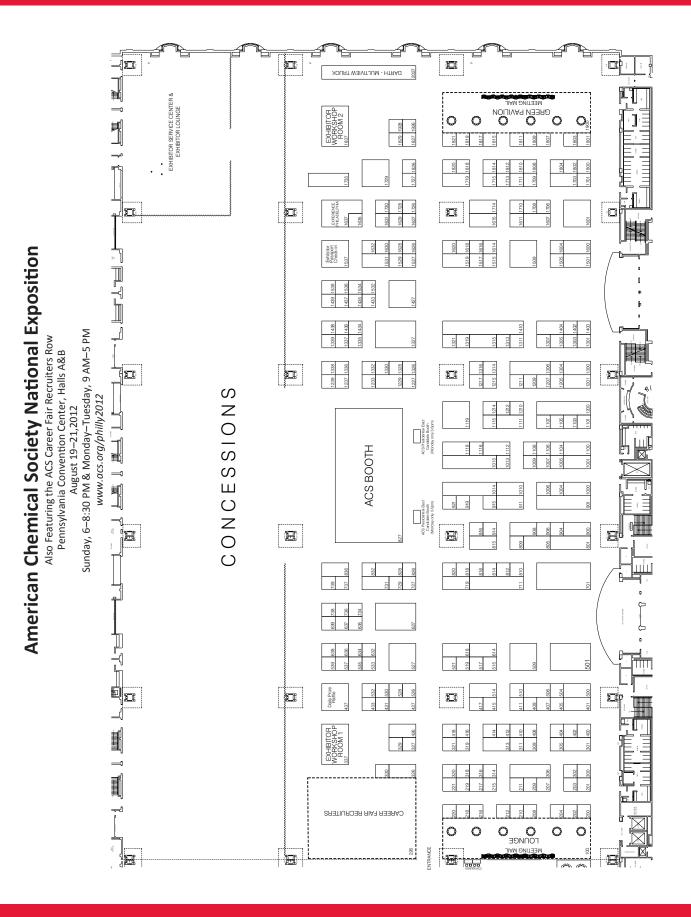
Making NMR Accessible: picoSpin-45 NMR Spectroscopy in the Classroom.

Sponsor: picoSpin, Booth 405, Room 202A, 3:30 to 6 PM. The picoSpin-45 Miniature NMR spectrometer is a 45-MHz permanent magnet spectrometer providing high-resolution spectra in a portable, compact design. Measuring an ¹H NMR spectrum to determine product purity, monitoring the course of a chemical reaction, or elucidating molecular structure is a valuable skill best acquired through hands-on experience. 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 benchtop 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 spectrometric 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, AUG. 22

Optibrium's StarDrop: User Group & Workshop. *Sponsor*: Optibrium, Booth 404, Room 202A, noon to 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 features, and try a hands-on example. Everyone is welcome, whether you are a current user or just want to find out about StarDrop and how it can help your projects.

Protein Homology Modeling, Loop Grafting & Sampling. Sponsor: Chemical Computing Group, Room 113A, 3:30 to 6 PM. This is a hands-on workshop that will include practical examples of creating and refining protein homology models. Topics will include preparing protein structures, sequence and 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 chemcomp.com/ software.htm. To reserve a seat, please e-mail ralvarez@chemcomp.com.



EXHIBITORS

The following list of exhibitors is the property of the American Chemical Society. Any unauthorized use of this list, or any part thereof, either directly or indirectly, is strictly prohibited.

Visit the Online ACS National Exposition at www.acs.org/philly2012 to download the updated exhibitor list and access product information.

2mag-USA, P.O. Box 214769, Daytona Beach, FL, United States 32121-4769, Internet: www. 2magUSA.com Inductive Single- and Multi-Position Magnetic Stirring Systems without Motors. Submersible Stirring Systems for volumes from 1 ml up to 10 liter models with up to 96 stirring positions, without any moving parts. 100% maintenance- and wear-free; temperature resistant up -10 to +200 deg.C submersed or in ovens with stirring speeds from 100 to 2,000 rpm. Large Industrial Stirring Systems. Multiple Stirring Hotplates and Multiple Stirring Heating Blocks (Stirring Drybaths). Customized Stirring Systems. **1706**

AAPPTec, 6309 Shepherdsville Road, Louisville, KY 40228, 502-968-2223, fax: 502-968-3338, email:info@aapptec.com, Internet: www.aaptec. com AAPPTec is the one source for quality peptide products and innovative products for solid phase peptide synthesis. We utilize the latest methodologies to produce high purity peptides rapidly, efficiently and affordably. AAPPTec provides automated and semi-automated synthesizers worldwide for research and industrial scale production. We provide top quality resins, reagents and amino acid derivatives for peptide synthesis; including pseudoproline dipeptides, soacyl dipeptides, PEGylation reagents, glyco-amino acids, and building blocks for stapled peptides and click chemistry. Other products include HPLC systems, columns, and lyophilization equipment for preparing high quality peptides. AAPPTec products increase chemists' productivity and increase the chaeses of success. **916**

Ace Glass, Inc., 1430 N. West Blvd., POBox 688, Vineland, NJ 08360, 800-223-4524, fax: 800-543-6752, e-mail:sales@aceglass.com, Internet: www.aceglass.com Ace Glass manufactures lab glassware & equipment. ACE also manufactures Process and Pilot Plant scale glass reactors. ACE will feature our new NO-AIR product line for air sensitive chemistry and both bench scale and process scale glass reactors. ACE introduces our new process scale vacuum & liquid handling pump lines. Ace also manufactures both bench and large scale rotary evaporator glassware. **426**

Across International, 200 Connell Drive, Suite 1900, Berkeley Heights, NJ, United States 07922, 888-988-0899, fax: 888-988-1899, Internet: www.acrossinternational.com Founded in New Jersey, United States, Across International supplies laboratory equipment in the areas of heat treatment and material processing for universities, research facilities and labs. We have more than 15 years of industry manufacturing experience in induction heaters, drying ovens, ball mills, lab furnaces, pellet presses and pressing dies. **1800**

ACS Committee on Health Safety/Div. of Chemical Health & Safety, P.O. Box 152329, CA, United States 92195, 619-990-4908, CCS and CHAS provide information, ACS policy and technical guidance related to chemical safety at all levels of use including K-12, college and university, industrial and consumer handling of chemicals. Booth personnel are present and prepared to answer your chemical safety questions. **1713**

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