GENERAL MEETING INFORMATION

YOUR MEETING REGISTRATION entitles you to a wide range of programming, including 908 scientific sessions, invited symposia, poster sessions, special lectures and events, award presentations, workshops, and the exposition. Interact with chemical scientists from around the world by participating in social events, networking opportunities, exhibitor sessions, and educational activities, with many events offered at no additional charge. Certain workshops, short courses, and ticketed events require a separate entry fee, as indicated in this program.

EARLY REGISTRATION: UP TO JULY 24
STANDARD REGISTRATION: JULY 24–AUG. 23
ON-SITE ATTENDEE REGISTRATION: Pennsylvania Convention Center Grand Hall

REGISTRATION

ALL ATTENDEES, including speakers and poster presenters, must register for the meeting in order to participate in the technical sessions. Sponsored speakers should contact their symposium organizer or division program chair to clarify the terms of their invitation and to determine who will complete the speaker’s registration. Attendees must display their badge at all times for admission to all official ACS sessions and events.

Early Registration. Attendees with U.S. and Canadian addresses who register prior to July 24 will receive their badge credentials by mail before the meeting. International registrants must pick up their badge credentials at ACS Attendee Registration.

Standard & On-Site Registration. Attendees who register after July 24 must pick up their badge credentials on-site.

Registration Changes. Attendees can modify their existing registration or generate a receipt from the registration website by following the instructions in their confirmation message. Attendees can also contact the ACS National Meeting Registration Center before Aug. 17 or update their registration on-site at ACS Attendee Registration. Bring your confirmation and/or badge credentials with you to the meeting for faster processing.

REGISTRATION METHODS. All registrants will receive a confirmation via the original method of registration.

Internet. Register online at www.acs.org/philly2012 before Aug. 23. A valid credit card is required to register online, and online registrations are real-time transactions.

Telephone. Call the ACS National Meeting Registration Center by Aug. 23 at (800) 251-8629 (U.S./Canada only) or (508) 743-0192 (international), Monday to Friday, 9 AM to 5 PM EDT.

Fax/ Mail. Submit a registration form (available online) by fax: (508) 743-9604 or mail: ACS Registration, c/o CDS, 107 Waterhouse Rd., Bourne, MA 02532. Mailed registrations will be accepted until Aug. 17.

On-site. Register during the meeting at ACS Attendee Registration at standard registration rates. ACS Attendee Registration will be open at the Pennsylvania Convention Center, in the Grand Hall, on Saturday, 7 to 7 PM; Sunday, 7:30 AM to 7:30 PM; Monday, 7:30 AM to 9:30 PM; Tuesday and Wednesday, 7:30 AM to 5:30 PM; and Thursday, 7:30 AM to 1 PM.

REGISTRATION PAYMENTS. Registration fees can be paid by check, money order, credit card (American Express, MasterCard, or VISA), or bank wire transfer. Make checks payable in U.S. dollars to the American Chemical Society, and include a completed registration form with each payment. Registration fees should not be combined with any other payment (such as membership dues). Purchase orders or training requests are not accepted. For wire transfer payments, contact the ACS Finance Department at (202) 872-6106 or e-mail bankwires@acs.org. Registration forms received without payment will not be processed.

REGISTRATION ASSISTANCE. The ACS National Meeting Registration Center will be available from 9 AM to 5 PM EDT by telephone, fax, mail, or e-mail. Service representatives can be reached at (800) 251-8629 (U.S./Canada only) or (508) 743-0192 (international); fax: (508) 743-9604; e-mail: acs@xpressreg.net; or mail: ACS registration, c/o CDS, 107 Waterhouse Rd., Bourne, MA 02532.

REGISTRATION CANCELLATIONS/REFUNDS. All cancellations and refund requests must be submitted in writing by Aug. 7 to guarantee a full refund less a $50 administrative fee. Refund requests made after Aug. 7 will not be honored. Your registration badge credentials and a copy of your registration confirmation must be attached to your request. All refunds will be issued via the original payment method, and refunds will be processed within 30 days after the meeting. Send your request to ACS Registration Cancellation, c/o CDS, 107 Waterhouse Rd., Bourne, MA 02532 or fax (508) 743-9604 (save your fax confirmation sheet).

SPECIAL EVENT TICKET CANCELLATIONS/REFUNDS. Social event cancellations received by Aug. 7 entitle the registrant to a full refund. Refund requests made after Aug. 7 will not be honored. Event tickets and a copy of your registration confirmation must be attached to your request.

ABSTRACT CANCELLATIONS/REFUNDS. Abstract CD-ROMs and their shipping costs are nonrefundable.

<table>
<thead>
<tr>
<th>CATEGORIZATION</th>
<th>CATEGORY</th>
<th>REGISTRATION FEE EARLY BY JULY 24</th>
<th>REGISTRATION FEE STANDARD AFTER JULY 24</th>
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<tr>
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<tr>
<td>ACS member or society affiliate</td>
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<tr>
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<tr>
<td>Undergraduate</td>
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<tr>
<td>One-day registrant</td>
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<td>NONMEMBERS</td>
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<tr>
<td>Student, exposition only</td>
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</tbody>
</table>

* 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.
Book your hotel for the
American Chemical Society

244th National Meeting & Exposition
August 19-23, 2012 in Philadelphia, PA

Housing Opened May 8, 2012
www.acs.org/philly2012 or by calling (866) 847-8570
Monday–Friday, 7 am–6 pm MST.
Housing will close on July 24.
Rooms are limited, so make your reservation today.

1. All sleeping rooms booked through Orchid Event Solutions include complimentary internet access.
2. YOU WILL BE AUTOMATICALLY ENTERED INTO THE DRAWING when you stay at a hotel booked through Orchid Event Solutions.
3. DISCOUNTED RATES at the official hotels.
4. COMPLIMENTARY SHUTTLE SERVICE between Philadelphia Convention Center and the hotels on the ACS housing list.
5. MAKE YOUR RESERVATION ONLINE OR BY PHONE and receive instant acknowledgment of your reservation.
6. KEEP REGISTRATION FEES LOW by booking rooms through Orchid Event Solutions ultimately helping ACS meet its contractual obligations for the meeting.

Enter the ACS Philadelphia, PA Housing Drawing by staying at a hotel booked through Orchid Event Solutions!

1st Prize 2nd Prize 3rd Prize
A New iPad* Free Hotel Accommodations* A New iPod*

Top Reasons To Book Your Reservation Through Orchid Event Solutions:

DON'T DELAY, RESERVE YOUR ROOM TODAY!

The official ACS housing bureau is Orchid Event Solutions. ACS does not endorse any other housing company.

*Prize Drawing Rules: The 2nd prize winner will be reimbursed for their actual hotel room and tax expenses at the standard single or double room rate up to 5 nights. All winners will be determined on the basis of a random drawing conducted on or about August 27th, 2012.

Complete details at www.acs.org/philly2012

Reserve your Hotel Online at www.acs.org/philly2012
MEMBER REGISTRATION. You must enter a valid ACS membership number during registration in order to register as a member and receive your ACS member discount on registration fees. Your registration options will automatically appear in accordance with your current membership status in the ACS membership database. Your ACS membership number can be found on your ACS membership card or your Chemical & Engineering News address label. Address questions about your membership status to ACS Member Services at (800) 333-9511 (U.S./Canada); (614) 447-3776 (international); or e-mail service@acs.org.

NONMEMBER REGISTRATION. Save money on discounted registration fees by joining ACS. You can join ACS now through the online ACS membership application at www.acs.org/join or by contacting ACS Member Services and then registering for the meeting at your member rate. To receive your meeting discount, you must join the society before you register for the meeting. New memberships or questions about membership status should be handled through ACS Member Services at (800) 333-9511 (U.S./Canada); (614) 447-3776 (international); or e-mail service@acs.org.

PRESS/MEDIA REGISTRATION. Press registration is complimentary for credentialed members of the news media (restricted to reporters and editors working full-time for print or broadcast news) who are approved by the ACS Office of Communications. Press badges may be picked up with valid media credentials from the Press Room at the Pennsylvania Convention Center. For more information, visit www.acs.org/pressroom.

EXPO-ONLY ADMISSION. All meeting attendees with a valid badge receive complimentary admittance into the exposition as part of their registration. Individuals who want to visit the exposition without registering for the meeting’s technical sessions can register for an Expo-Only adult badge for $50 or $25 for students with school identification. Register online or in person at ACS Attendee Registration.

EXHIBITOR REGISTRATION. Exhibitor registration is handled exclusively through ACS National Expositions at www.acs.org/expositions.

CAREER FAIR EMPLOYER REGISTRATION. ACS Career Fair Employer registration is handled exclusively through ACS Careers at www.acs.org/careers.

A VARIETY of social and special events will be held by event organizers during the meeting. Event participation is open to all interested registrants. View an updated listing of social and special events at www.acs.org/philly2012. The following social events require purchase of a ticket (event number in red), which can be purchased through Attendee Registration. Tickets will remain on sale until the evening prior to the event, if available. All tickets are sold on a first-come, first-served basis. Cancellations or refund requests must be made by Aug. 7. No tickets will be refunded after that date.

SATURDAY, AUG. 18

TOXI Workshop—NMR Spectroscopy Applications in Toxicology & Metabolism/SE-01/$45
1 to 5 PM, Pennsylvania Convention Center
See description in “Workshops” (page 84)

TOXI Workshop—Writing Fellowships & Other Grants at the Pre- & Postdoctoral Level/SE-02/$15
1 to 5 PM, Pennsylvania Convention Center
See description in “Workshops” (page 84)

SUNDAY, AUG. 19

WCC Workshop—Lens of the Market/SE-03/$60
9 AM to 3 PM, Philadelphia Marriott Downtown
Targeted for teams of two to five people; each team member must register. Fee includes lunch. More information is online at womenchemists.sites.acs.org/WCC_workshop_Philadelphia.pdf.

CHED High School-College Interface Luncheon/SE-04/$35
(Included at no charge with high school teacher registration.)
Noon to 1 PM, Pennsylvania Convention Center

MONDAY, AUG. 20

YCC Fun Run/SE-05/$30
5 to 10 AM, Pennsylvania Convention Center (starting point)
(Includes guided run, water, and souvenir bag. The first 20 undergraduates to register will receive a $10 rebate.)

WCC Women in the Chemical Enterprises Breakfast—LinkedIn Training with Deborah L. Smith/SE-06/$35 (regular)/SE-07/$18 (student)
7:30 to 9 AM, Philadelphia Marriott Downtown
(A limited number of student tickets are available. Students may purchase regular tickets if student tickets are sold out.)

CMA Reception & Luncheon/SE-08/$40
11:30 AM to 2 PM, Philadelphia Marriott Downtown

Undergraduate Program Eminent Scientist Lecture & Lunch/SE-09/$35
(Included at no charge with undergraduate registration.)
11:45 AM to 1:15 PM, Pennsylvania Convention Center

CHAL Luncheon with the Hon. Pauline Newman/SE-10/$20
Noon to 1:30 PM, Chemical Heritage Foundation, 315 Chestnut St.

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

TUESDAY, AUG. 21

Senior Chemists Breakfast/SE-12/$15
7:30 to 9:30 AM, Philadelphia Marriott Downtown

I&EC Graduate Award Symposia Luncheon/SE-13/$47
11:30 AM to 1 PM, Philadelphia Marriott Downtown

MEETING INFO ON THE WEB
Registration, housing, technical programming, special events, participating exhibitors, and other meeting details are available at www.acs.org/philly2012.
244th American Chemical Society National Meeting & Exposition

MATERIALS FOR HEALTH & MEDICINE
Philadelphia, PA • August 19-23, 2012

Materials for Health & Medicine (MAHM) theme organized by
Xinqiao Jia
Associate Professor, Materials Science and Engineering
Biomedical Engineering, University of Delaware

THEMATIC PROGRAM

BIOL
50 Years of NIGMS-Supported Chemistry Enabling Biomedical Research
MON AM/PM

ORGN
Materials for Health and Medicine
SUN AM/PM; TUE EVE (Posters)

COLL
Functional Nanoparticles for Biomedical Applications
SUN – WED AM/PM;
MON EVE (Posters)

MAHM
Nanoscience and Nanotechnology for Health and Medicine
MON PM

MEDI
Drug Delivery Technologies: Getting Your Compounds to the Clinic
WED AM

New Strategies for Targeting Parkinson’s Disease and Other Neurodegenerative Conditions
MON AM

PMSE
Polymeric Biomaterials
SUN – TUE AM/PM

Polymeric Materials and Surfaces for Cell Differentiation
WED AM/PM

POLY & PMSE
POLY/PMSE Plenary Lecture and Awards Reception
WED PM

TOXI & ANYL
Harnessing Nanotechnology for Human Health and Environment: Toxicology and Potential Health Implications of Engineered Nanomaterials
WED AM/PM

THE KAVLI FOUNDATION INNOVATIONS IN CHEMISTRY LECTURE

Monday, August 20, 5:30 – 6:30 PM
Pennsylvania Convention Center, Grand Ballroom B

Robert S. Langer  Massachusetts Institute of Technology

Chemistry in medicine: From the discovery of angiogenesis inhibitors to the development of controlled drug delivery systems and the foundation of tissue engineering

MATERIALS FOR HEALTH & MEDICINE PLENARY

Sunday, August 19, 3:00 – 6:00 PM
Pennsylvania Convention Center, Grand Ballroom B

Jacqueline K. Barton  California Institute of Technology

Signaling through DNA

Buddy D. Ratner  University of Washington

A 2012 perspective on biocompatibility: The contributions of the chemist

Chad A. Mirkin  Northwestern University

Spherical nucleic acid (SNA) nanostructures: A new platform for intracellular gene regulation

John T. Santini  On Demand Therapeutics, Inc., Tyngsboro, MA

Multireservoir drug therapies…from science to startups

Register at www.acs.org/philly2012
CINF Luncheon/SE-14/$15
Noon to 1:30 PM, Philadelphia Marriott Downtown

COLL Luncheon/SE-15/$40
Noon to 1:30 PM, Pennsylvania Convention Center

WCC Luncheon/SE-16/$45 (regular)/SE-17/$23 (student)
Noon to 1:30 PM, Philadelphia Marriott Downtown
(A limited number of student tickets are available. Students may purchase regular tickets if student tickets are sold out.)

ANYL Reception/SE-18/$10
6 to 8:30 PM, College of Physicians of Philadelphia, 19 South 22nd St.

ENFL Awards Dinner/SE-19/$45
6:30 to 9:30 PM, Maggiano’s Little Italy, 1201 Filbert St.

ENV R Dinner & Social/SE-20/$60
6:30 to 9:30 PM, Chemical Heritage Foundation, 315 Chestnut St.

ACCOMMODATIONS

TAKE ADVANTAGE of special ACS room rates for the national meeting in Philadelphia by reserving hotel rooms directly through Orchid Event Solutions (formerly the Housing Connection) by July 24. Orchid Event Solutions, a subsidiary of the Salt Lake Convention & Visitors Bureau, is the official housing bureau endorsed by ACS for the national meeting in Philadelphia. ACS does not endorse booking hotel reservations through any other sources. A listing of official hotel rates with their guaranteed ACS rates and amenities is on page 76. All attendees who make reservations through Orchid Event Solutions will receive complimentary Internet access in their sleeping rooms and are automatically entered in the ACS Housing Drawing (see ad on page 72 for details).

Late Housing. Some hotels may have rooms available after July 24. A listing of these hotels will be posted on the ACS meeting website at www.acs.org/philly2012. ACS rates and/or availability cannot be guaranteed during late housing.

On-Site Housing. During the meeting, an on-site housing desk will be available at the Pennsylvania Convention Center, in the Grand Hall, to assist with last-minute housing changes or needs.

RESERVATION METHODS. All registrants will receive confirmation for reservations made directly through Orchid Event Solutions. Review this document carefully for accuracy. Each confirmation contains a unique number that is proof of your reservation through Orchid Event Solutions. We strongly recommend that you bring your confirmation to the meeting. If you lose or do not receive your confirmation, you can obtain another copy online or by contacting Orchid Event Solutions. You will not receive a separate confirmation from the hotel.

Published ACS rates apply to hotel stays between Aug. 14 and 25. To extend your stay beyond these dates, you must reserve additional nights directly through the hotel.

Internet. Reserve online at www.acs.org/philly2012. Online reservations require a valid credit card, and you will receive a confirmation to your e-mail address within 24 hours.

Telephone. Call Orchid Event Solutions at (866) 847-8570 (U.S./Canada only) or (801) 505-4140 (international), Monday through Friday, 7 AM to 6 PM MST. Telephone reservations require a valid credit card, and you will receive an acknowledgment to your e-mail address within 24 hours.

Fax/Mail. Fax the ACS Housing Form (available online) with your valid credit card information to (801) 355-0250 or mail the form with your valid credit card information or a check made payable to Orchid Event Solutions for the amount of one night’s room and tax and send to ACS Housing, c/o Orchid Event Solutions, 175 South West Temple, Suite 140, Salt Lake City, UT 84101. Faxed and mailed reservations will be processed on a first-come, first-served basis and require 10 to 14 days to be confirmed. If your requested hotel is no longer available, we will attempt to honor your indicated preference according to cost and location.

RESERVATIONS, CHANGES & CANCELLATION POLICY. Hotel reservations can be guaranteed by credit card (American Express, MasterCard, or VISA), check, or money order. Make checks payable in U.S. dollars to Orchid Event Solutions and include a completed ACS Housing Form with each mailed payment. Housing fees should not be combined with any other payment (such as registration or membership dues). Reservations received without payment will not be processed.

Although a valid credit card or check deposit for one night’s room and tax is required to confirm a reservation, a payment will not be charged by Orchid Event Solutions. The credit card information or check deposit will be forwarded with your individual reservation to your hotel on July 24 after 5 PM MST. Hotels may elect to charge a deposit of one night’s room and tax to your credit card prior to your arrival. You will need to handle all payment arrangements directly with your assigned hotel. All hotel rooms are subject to 15.2% room and occupancy tax (subject to change).

Reservation changes and cancellations can be made without penalty until July 24. Hotels do not have individual reservations or credit card guarantees yet. After July 24, you may continue to make changes and cancellations through Orchid Event Solutions until Aug. 9; however, canceled reservations may incur a $25 fee that will be charged by Orchid Event Solutions. A one night’s room and tax charge will be charged by the hotel for reservations that are not canceled 72 hours prior to arrival. Penalties for early departures may be enforced and vary by hotel, so call your hotel for details.

ECONOMICAL ALTERNATIVE. The following hotels are not part of the official ACS housing block but may be of interest to attendees on a restricted budget. Make your reservations directly with the hotel.

SUITES. Send your suite requests by e-mail to help@orchideventsolutions.com (Attn.: Katie McLaughlin). They will attempt to find you a suite at an official ACS property that fits your needs.

Best Western Center City, 501 North 22nd St.; (215) 568-8500; ACS rate $99 single/double occupancy.
Holiday Inn Express—Midtown, 1305–11 Walnut St.; (215) 735-9300; ACS rate $177 single/double occupancy.

Inn at Union League, 1450 Sansom St. (between Broad & 15th Sts.); (215) 587-5570; ACS rate $189 single/double occupancy.

The Windsor Suites, 1700 Benjamin Franklin Pkwy.; (215) 981-5678; ACS rate $169 single/double occupancy.

**KEEP YOUR MEETING COSTS AFFORDABLE.** Attendee support of the official hotels allows ACS to utilize meeting space at a discount and to keep registration fees to a minimum. Stay in an official hotel whenever possible, and reserve your hotel room through Orchid Event Solutions at www.acs.org/philly2012.

**SUSTAINABILITY PRACTICES**

**THE AMERICAN CHEMICAL SOCIETY** is committed to sustainable meetings and event practices that promote social responsibility, support economic development, and reduce the environmental impact locally, nationally, and globally. Since 2008, the ACS Committee on Meetings & Expositions has implemented a number of operational practices and partnered with service contractors that foster sustainability in each host city.

In spring 2011, ACS together with Legacy Sustainability Management implemented the Global Reporting Initiative (GRI) Event Organizer Sector Supplement—the most comprehensive sustainability framework in the meetings and events industry. During its national meeting and exposition in Philadelphia, ACS will conduct sustainability audits and event impact studies that include unique on-site data attributes and findings. The findings will enable ACS to leverage its global influence to shape...
## American Chemical Society · 244th National Meeting & Exposition · August 19-23, 2012

### Hotel Walking Time (in minutes) from PCC Distance (in miles) from PCC

<table>
<thead>
<tr>
<th>Hotel</th>
<th>Walking time (in minutes) from PCC</th>
<th>Distance (in miles) from PCC</th>
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<tbody>
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<td>1. Sonesta Hotel Philadelphia (formerly the Crowne Plaza)</td>
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<td>0.6</td>
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<td>2. DoubleTree by Hilton Philadelphia Center City</td>
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<td>0.82</td>
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<td>3. Embassy Suites Philadelphia Center City</td>
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<tr>
<td>4. Four Points by Sheraton Philadelphia City Center</td>
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<td>5. Four Seasons Hotel Philadelphia</td>
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<td>6. Hampton Inn City Center Philadelphia</td>
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<td>0.1</td>
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<td>14. Radisson Plaza-Warwick</td>
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<td>15. Sheraton Philadelphia City Center Hotel</td>
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<td>16. Sofitel Philadelphia</td>
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<tr>
<td>18. Westin Philadelphia</td>
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the future of corporate social responsibly standards; spearhead change within the meeting, event, and hospitality industry; and provide educational platforms that will enhance the sustainable legacy of ACS and its stakeholders for generations to come.

Existing sustainability practices from the city of Philadelphia, the Pennsylvania Convention Center, and ACS meeting hotels will be captured by GRI. Highlights of these practices and accomplishments, including our 2011 sustainability report, are available at www.acs.org/philly2012.

Help Us Lead the Charge. Meeting attendees are our most important partner when it comes to helping ACS exceed its sustainability performance benchmarks for 2012. While attending the meeting in Philadelphia, we invite you to participate in making the 244th ACS National Meeting & Exposition the most sustainable event yet! Please consider the following recommendations:

■ Opt in to daily linen and towel reuse programs.
■ Limit your water use and use in-room recycling containers.
■ Recycle admissible items in the proper bins and encourage your fellow colleagues to do so.
■ Take the ACS Shuttle Service to and from hotels that are not within walking distance to the Pennsylvania Convention Center.
■ Reuse materials as often as possible.

Suggestions? Send them to the ACS Committee on Environmental Improvement. Member contact information can be found at www.acs.org/committees.

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TRAVEL & TRANSPORTATION

DISCOUNTS. ACS has negotiated special airline, car rental, and ground transportation discounts with the following partners:

American Airlines (800) 433-1790; Discount Code: 6982AY

ACS has partnered with Clean the World to collect and donate gently used soaps to help eliminate diseases in developing countries. Visit the meeting website for details and a list of participating hotels.

Continental Airlines (800) 468-7022; Discount Code: 866539 ZKWJ

Delta (800) 328-111; Discount Code: NM9MB

United Airlines (800) 521-4041; Discount Code: 5850W (offer not available online)

Amtrak (800) 872-7245; Discount Code: X35K-948 (offer not available online or for Acela trains)

Avis (800) 331-1600; AWD Code: B923099

Dollar Rent A Car (800) 800-4000; Discount Code: CM2379

Hertz (800) 654-2240; Discount Code: CV#: 02UZ0011

SuperShuttle (800) 258-3826; Discount Code: ACSUS

AIRPORT. Philadelphia International Airport (PHL) is 7 miles from the center of downtown Philadelphia.

AMTRAK. Amtrak’s 30th Street Station is minutes from the Pennsylvania Convention Center and city center hotels. See Amtrak (above) for booking details.

AIRPORT GROUND TRANSPORTATION

Public Transportation (rail). Transportation between the airport and downtown is available from the Southeastern Pennsylvania Transportation Authority (SEPTA) via the Airport Line, which operates every 30 minutes between 4:25 AM and 11:25 PM. The Airport Line stops at Terminals A, B, C/D, and E/F and can be accessed from the pedestrian walkway between the main terminal and baggage claim. One-way fare is $7.00 and tickets are available for purchase aboard the train (cash only). Visit septa.org online or call (215) 580-7800 for trip planning and route information.

Rental Cars. Courteous phones for on-site car rental agencies are located in the baggage claim areas. All car rental agencies are accessible through Zone 2 outside the baggage claim area.

Taxi. Taxi service is available at Zone 5 on the Commercial Transportation Roadway. Taxis charge a flat rate of $25 for travel between the city center and the airport. For destinations outside of the city center, fares are based on meter. There is a minimum $10 fare from the airport to any destination. Call the Ground Transportation Hotline at (215) 937-6958 for more information.

Shared-Ride Shuttle Service. Various van services are available at Zone 7 on the Commercial Transportation Roadway. A ground transportation desk is located in each baggage claim area to assist travelers.

TRAVELING TO MEETING VENUES

The Pennsylvania Convention Center is located at 1101 Arch St., Philadelphia, PA 19107.

ACS Shuttle. Complimentary shuttle service will be provided between the Pennsylvania Convention Center and official ACS hotels, with the exception of hotels within walking distance. Buses will run from 7 AM to 11:30 PM from Sunday to Tuesday; 7 AM to 11 PM on Wednesday, and 7 AM to 6 PM on Thursday. Buses will run approximately every 15 to 30 minutes. Visit the meeting website for a route map and to download the shuttle schedule.

Parking. There are many garages and lots located within blocks of the Pennsylvania Convention Center. Garages and lots are individually owned and operated, prices vary by location. Visit paconvention.com for a list of lots and garages. Parking is also available at each ACS official hotel. View the Hotel Amenities & Pricing table for pricing on page 76.

GETTING AROUND THE CITY

Walking. The Pennsylvania Convention Center and ACS hotels are conveniently located in the heart of downtown Philadelphia. Do your part to reduce our environmental impact by walking to ACS properties.

Public Transportation. The Southeastern Pennsylvania Transportation Authority (SEPTA) offers travelers the option of commuting by bus, rail, and trolley. Visit septa.org online or call (215) 580-7800 for trip planning and route information.

ACS MEMBER SERVICES

ACS MEMBER SERVICES. ACS staff can assist you on-site with joining ACS, renewing memberships, completing adjustments to member records, and answering general membership questions. ACS members re-
ceive discounted rates when registering for the meeting.

ACS Member Services is located in Grand Hall near registration in the Pennsylvania Convention Center and is open Saturday, Aug. 18, 3 to 6 PM; Sunday, Aug. 19, 7:30 AM to 7:30 PM; Monday, Aug. 20, 7:30 AM to 9:30 PM; Tuesday, Aug. 21 and Wednesday, Aug. 22, 7:30 AM to 5:30 PM; and Thursday, Aug. 23, 7:30 AM to 1 PM.

MEMBER INSURANCE PROGRAM. Booth No. 827. The ACS Member Insurance Program is committed to offering quality comprehensive insurance plans and financial security programs to members and their families. Stop by the Member Insurance station to learn how you can sign up for Life & Health Insurance, Auto & Homeowners Plus, Disability Income, Long-Term Care, Medicare Supplement, Medical Discount Cards, Pet Insurance, and Professional Liability.

Also learn more about our new ACS Group Special Event Cancellation and Liability Insurance. With these two new policies you can rest easy knowing your private event and finances are covered if the unexpected happens.

We look forward to showing you how you can receive great value for your insurance dollars. For additional information, visit www.acs.org/insurance.

ON-SITE MEETING ARRANGEMENTS

“ASK ME” GREETERS. Look for ACS “Ask Me” greeters wearing bright yellow T-shirts, caps, or scarves; they can help you locate meeting rooms, navigate the on-site program, or assist with other attendee services.

ATTENDEE BADGES. Attendees and guests must be registered and display their badges at all times in order to be admitted to all official ACS sessions and events.

ATTENDEE MESSAGING/MEETING MAIL. After registering for the meeting, you will be assigned a temporary electronic mailbox to exchange personal messages with other registered attendees via Meeting Mail. Meeting Mail will be available before, during, and after the meeting at www.acs.org/philly2012. Use the Meeting Mail terminals located in the Pennsylvania Convention Center. Telephone messages left at the ACS Information Booth will be conveyed to attendees via the electronic message center, but the society cannot accept responsibility for the delivery of any messages. No one will be paged in meeting rooms.

AUDIOTAPING, PHOTOGRAPHY & VIDEOTAPING. Unauthorized taking of pictures of speakers or presentations will result in the confiscation of equipment by ACS staff or session moderator.

BARRIER-FREE MEETING/SPECIAL SERVICES. The society is dedicated to ensuring that no individual with a disability is excluded, denied services, segregated, or otherwise treated differently due to the absence of auxiliary aids and services identified in the Americans with Disabilities Act (ADA). If you require special accommodations to participate in the meeting, communicate your needs to ACS Meeting Services by e-mail: nationalmeetings@acs.org; fax: (202) 872-4410; or TDD: (202) 872-4557 by July 24 to allow us enough time to fulfill your request. Keep in mind that ACS may not be able to accommodate last-minute requests. If you have an emergency or need immediate assistance during the meeting, contact any ACS Operations Office.

ELECTRONIC DEVICES. As a courtesy to other meeting attendees, electronic devices must be operated in silent/vibrate mode within technical or educational sessions. Cell phone conversations are not permitted in meeting rooms.

CHILD CARE. Camp ACS (child care) will be available to all meeting attendees free of charge from 7 AM to 6 PM on Sunday, Aug. 19, through Thursday, Aug. 23. At Camp ACS, children two (and potty-trained) to 16 years of age can participate in age-appropriate activities including arts and crafts and active games while you enjoy the meeting. To ensure your child’s participation, register online by Aug. 10 at accentregister.com/register/americhemaug12. Please note that for your child’s safety, the location of Camp ACS will not be communicated until your registration is confirmed. On-site registration will be accepted on a space-available basis.

MOTHERS ROOM. For your convenience and privacy, ACS will provide a room for nursing mothers at the Pennsylvania Convention Center. Please see the Operations Office at the Pennsylvania Convention Center, Room 307AB, for access to the room.

EMERGENCIES DURING ACS MEETING EVENTS. ACS will place detailed instructions inside each meeting room to be used if an emergency occurs during an ACS meeting.

INTRODUCING THE INTERNATIONAL LOUNGE

Meet other international attendees while enjoying interactive activities in a lounge created especially for our international guests. Pennsylvania Convention Center, Lobby A Bridge Saturday, Aug. 18, 2–6 PM Sunday, Aug. 19—Wednesday, Aug. 22, 8 AM–6 PM
meeting event. These instructions will revolve around following the established emergency guidelines of the facility where the emergency occurs. Report emergencies to the nearest security guard or to any ACS Operations Office during the meeting. Should a catastrophic event occur, attendees should follow safety and security instructions issued by the facility where they are located at the time of the event.

HOST LOCAL SECTION. ACS gratefully acknowledges the cooperation and assistance of the ACS Philadelphia Local Section and its members in handling local arrangements. Its volunteers have planned many interesting activities; the Host Local Section booth will be located in the Pennsylvania Convention Center.

INTERNATIONAL REGISTRANTS. Many international visitors are required to hold a visa prior to being admitted to this country because of the security measures that the U.S. has in place at airports and other border crossings. All visa applicants are advised to apply for their visa in their home country as soon as possible. Detailed information for international attendees can be found at www.acs.org/philly2012.

INTERNET & COMPUTER SERVICES. Utilize our electronic communication services before, during, and after the meeting. Once you get to the meeting, you can access your e-mail and the Internet as well as your personal Meeting Mail mailbox from Meeting Mail terminals and Laptop Lane. These areas will be located throughout the Pennsylvania Convention Center.

LITERATURE & PRODUCT DISTRIBUTION. Promotions, posters, and literature distribution by attendees, exhibitors, or other groups during the meeting must be done within their own contracted meeting space or exhibit booth and not in public meeting space, with the exception of designated marketing opportunities. No one is authorized to place any promotional items in public meeting space except the ACS Operations Office at a given location. Items left in violation of this policy will be removed and discarded. Literature distribution at specific division tables is under the control of that division, and permission must be secured from the division before placing any items on their table.

LUGGAGE & COAT CHECK. A luggage and coat check station will be available during normal registration hours from Sunday through Thursday at the Pennsylvania Convention Center, in the Grand Hall. Items left beyond published hours of operation will be turned over to building security at the end of each day.

MEETING OFFICES. The following ACS offices will be located in the Pennsylvania Convention Center:
- Attendee Registration: Grand Hall
- Career Fair: Hall C
- Exhibitor Registration & Exposition: Halls A&B
- Finance Office: Room 300
- Host Local Section Booth: 12th Street Level near 107
- Information Center: 12th Street Level near 107
- Member Services: Grand Hall
- Press Center: Room 304
- Shuttle Desk: 12th Street Level near 107

The following offices are located at the identified properties:
- Governance & Executive Director’s Office: Philadelphia Marriott Downtown
- Society Programs: Philadelphia Marriott Downtown

SMOKING. ACS policy prohibits smoking in all rooms during ACS functions at the convention center and official hotels. Additionally, the convention center and many of the official hotels are designated as smoke-free environments at all times.

INFORMATION BOOTH. Attendants who have meeting questions should visit the ACS Information Booth located in the Pennsylvania Convention Center, 12th Street Level near 107. Our information clerks can help you navigate the on-site program, find a particular session or room, and answer basic meeting questions on Saturday from 3 to 6 PM; Sunday to Wednesday from 7:30 AM to 6 PM; and Thursday from 7:30 AM to 1 PM. Lost-and-found items at the convention center should be directed to the ACS Information Center. Telephone messages left there will be conveyed to attendees via the electronic message center, but the society cannot accept responsibility for the delivery of any messages, mail, and packages.

SPEAKER & AUTHOR INSTRUCTIONS

ALL SPEAKERS, authors, and poster presenters must register and pay the appropriate registration fee to attend the meeting. Invited speakers should contact their symposium organizer or division program chair to clarify terms of their invitation.

All presenters should prepare for their presentation by verifying the following details: the status of your abstract at abstracts.acs.org (using your ACS ID to log in to the system); mode of presentation (oral or poster); and the time, length, and location of your presentation. Speakers should arrive in their presentation rooms at least 30 minutes before their scheduled speaking time. Poster presenters should set up their poster at least 30 minutes before the start of their poster session. If you need to withdraw your presentation, please send a withdrawal notice to pacs@acs.org and contact your symposium organizer immediately.

TECHNICAL SESSION EQUIPMENT. Each technical session meeting room will be equipped with the following: LCD projector, screen, lighted podium, podium microphone or lapel microphone, and laser pointer. Speakers need to provide their own laptops or arrange for specialty equipment directly with their symposium organizer and/or division program chair. To request other specialty equipment (at the standard fee), contact an ACS Operations Office during the meeting.

SPEAKER READY ROOMS & AUDIO-VISUAL SERVICE CENTERS. Session pre-
senters may use the speaker ready rooms to preview their presentation, ensure compatibility with our LCD projectors, or fulfill last-minute audiovisual equipment orders. We strongly recommend that all authors come to the speaker ready room the day before their presentation to check for connectivity and resolution. The hours of operation will be from 3 to 5 PM Saturday and 7 AM to 6 PM Sunday through Thursday. Visit the ACS Operations Office at any ACS property for speaker ready room locations. Speaker ready rooms are not equipped with copy machines; any copies will need to be made in local business centers in or near the hotels and convention center.

**POSTER SESSIONS.** All materials must be confined to a 4-foot-high by 8-foot-wide display board in the convention center, and 4-foot-high by 6-foot-wide display board in hotels. Authors must mount their poster one hour before the scheduled session start. Poster numbers supplied by ACS will be in the upper corner of each poster board and this number corresponds with the number assigned to each poster in the technical program. Pushpins will be available at the poster session. Authors must remain with their posters for the duration of their scheduled session as indicated in the technical program. All posters must remain up until the session ends and then must be removed within one hour. ACS cannot assume responsibility for materials beyond these time limits.

**Abstracts & Preprints**

**Online Technical Program.** The technical program for the 244th national meeting is now available at www.acs.org/philly2012. You can search by divisions or committees, symposia, speakers, or keywords from abstracts as well as presidential events and the multidisciplinary theme of “Materials for Health & Medicine.”

**Abstracts (CD-ROM).** Abstracts of all scientific sessions at the meeting can be purchased in CD-ROM format through ACS Attendee Registration either online before July 24 or on-site in Philadelphia from Aug. 19 to 23. The ACS member fee is $65 each; the nonmember fee is $90 each. Attendees can pick up their abstracts on-site at ACS Attendee Registration at the Pennsylvania Convention Center. You can have a CD-ROM shipped to you if you place your order before July 24, pay an $8.00 postage fee per item, and provide a valid street address located within the U.S. or Canada. If you are not attending the meeting, you can purchase abstracts only from the ACS Office of Society Services, 1155—16th St., N.W., Washington, DC 20036; (800) 227-5558. Abstract CD-ROMs and their shipping costs are nonrefundable.

**Preprints.** Preprints from the following divisions may be ordered directly from each division. You can purchase preprints via the e-mail addresses below or inquire about these preprints at the hospitality table for each division near their meeting rooms.

**Energy & Fuels.** Jonathan Mathews  
e-mail: jmathews@psu.edu

**Polymer Chemistry.** Kathy Mitchem  
e-mail: kathy1@vt.edu

**Polymeric Materials: Science & Engineering Inc.**  
Visit the PMSE hospitality table at the meeting.

**Special & Educational Events**

**Presidential Events**

**DURING 2012,** ACS President Bassam Z. Shakhashiri has set a presidential agenda based on “Advancing Chemistry & Communicating Chemistry.”

He is also supporting “Materials for Health & Medicine” as the theme for the Philadelphia meeting, organized by thematic program chair Xinqiao Jia, an associate professor in the department of materials science and engineering at the University of Delaware. The plenary symposium will take place in the afternoon on Sunday, Aug. 19.

A special highlight will be a lecture by Robert S. Langer, the David H. Koch Institute Professor at Massachusetts Institute of Technology, for the Kavli Foundation Innovations in Chemistry Lecture on Monday, Aug. 20, at 5:30 PM.

Several presidential events will also take place during the meeting. On Monday, Aug. 20, the presidential symposium titled “Communicating Chemistry & Public Engagement: Celebrating the 25th Anniversary of National Chemistry Week” will take place; the presidential plenary keynote address, “Chemistry & Climate Change,” will be presented by Mario J. Molina, Distinguished Professor of Chemistry & Biochemistry at the University California, San Diego; and a presidential event sponsored by the Chemistry & the Law Division titled “The Work of the Innocence Project” will explore how forensic science can play a tragic role in convicting innocent people of crimes and sentencing them to prison and even death.

On Tuesday, Aug. 21, two more presidential symposia will take place: “Communicating Controversial Science,” honoring Rudy M. Baum’s retirement as editor-in-chief of C&EN, and “150 Years of Chemistry at Land Grant Institutions: The Past as Prelude to the Future.”

Details of presidential events and other recommended symposia can be found at www.acs.org/philly2012 and in the on-site program.

**Student & Teacher Activities**

**Education-Focused** programs and specialty activities are being held for undergraduate students, graduate students, high school teachers, and chemical professionals. Explore these opportunities in depth at www.acs.org/philly2012.

**Sunday, Aug. 19**

**Double Feature Feature: Chemistry & the Environment Film Series, “Carbon for Water” and “The PHD Movie,” 6:30–9:30 PM. Pennsylvania Convention Center.**

**Undergraduate Program.** A dynamic program designed especially for undergraduate students has been planned by the Society Committee on Education’s Task Force on Undergraduate Programming. This educational and career-oriented program includes a technical symposium on the detection of counterfeit drugs, workshops on careers in government, and success in graduate school. M. Katharine Holloway, eminent scientist and senior investigator at Merck & Co., will discuss her career path and novel research, “Arresting AIDS & Halting Hepatitis C: Structure-Based Design of Protease Inhibi-
tors.” Events will take place at the Sheraton Philadelphia City Center Hotel and the Pennsylvania Convention Center.

**SUNDAY, AUG. 19**

Undergraduate Hospitality Center, 8 AM–5 PM
Graduate School Reality Check, Step I: Getting In, 8:45–9:45 AM
Graduate School Reality Check, Step II: You’re In—Now What? 9:45–10:30 AM
Technical Symposium: Detection of Counterfeit Drugs, 10:45 AM–noon
Workshop: Careers in Government, 1–3 PM
Workshop: Career Skills Training, 3–5 PM
Networking Social with Graduate School Recruiters, 5–6:30 PM

**MONDAY, AUG. 20**

Graduate School Recruiting Breakfast, 8–9:30 AM
Undergraduate Hospitality Center, 8 AM–5 PM
Undergraduate Speed Networking with Chemistry Professionals, 9:45–11:15 AM
Eminent Scientist Lecture & Luncheon, 11:45 AM–1:15 PM
Undergraduate Research Poster Session (sponsored by CHED), 2–4 PM
Sci-Mix/Successful Student Chapter Posters, 8–10 PM

All events are sponsored or cosponsored by the Society Committee on Education Task Force on Undergraduate Programming. Chair: Matthew Mio, University of Detroit, Mercy. Program Chair: Elizabeth Jensen, Aquinas College, Grand Rapids, Mich. For more information, contact the ACS Undergraduate Programs Office at (800) 227-5558 ext. 4480 or go to www.acs.org/undergrad.

**GRADUATE & POSTDOCTORAL PROGRAM.** The Graduate & Postdoctoral Scholars Office with support from the Graduate Education Advisory Board provides and promotes programs and events for graduate students and postdoctoral scholars. All events will take place at the Pennsylvania Convention Center.

**SUNDAY, AUG. 19**

High School Teachers Program, 8:30 AM–4:30 PM
For more information, contact the Office of High School Chemistry at education@acs.org; (800) 227-5558 ext. 2105.

**WORKSHOPS**

**THE FOLLOWING** workshops require a separate registration process and/or entry fee in order to participate in the event, as indicated in this listing. Participation is open to all interested registrants.

Division of Chemical Health & Safety (CHAS)-sponsored workshop fees (unless otherwise indicated). Member: Early registration (before July 23) $250, full registration $325; non-CHAS member: early registration $300, full registration $375. Registration is required for all CHAS workshops. Register online at dchas.org.

**Chemical Reactivity Hazards: Laboratory-Scale Recognition & Control.** Saturday, Aug. 18, 8:30 AM to 4:30 PM. Pennsylvania Convention Center. **Sponsored by CHAS.** The Process Safety Alliance, in cooperation with the Occupational Safety & Health Administration, is presenting this workshop with the objective of providing participants with the knowledge and skill to screen processes for potential hazards, to recognize when reactive hazards are present, and to implement appropriate controls to reduce the risk of an incident associated with the hazards. Workshop attendees will review case studies of actual incidents and do screening examples to understand the screening and recognition process. Group discussions of control methods will allow participants to share their experiences and to evaluate methods for controlling reactivity risks.

**How To Be a More Effective Chemical Hygiene Officer.** Saturday, Aug. 18, 8:30 AM to 4:30 PM. Pennsylvania Convention Center. **Sponsored by CHAS.** Presenters: James Kaufman, Russell Phifer, and George Wahl. Take a close look at the Chemical Hygiene Officer (CHO) position, and prepare at the same time for the CHO Certification exam to be presented on Sunday, Aug. 19, through the National Registry of Certified Chemists. The instructors provide a different slant to safety issues in the laboratory, focusing on what you do and how you can do it better. The course covers all of the content areas of the certification exam, including a sample test in the same format as the real one. Request an application packet for the Chemical Hygiene Officer Certification examination online at dchas.org.

**Laboratory Safety Workshop.** Friday, Aug. 17, 8:30 AM to 4:30 PM. Pennsylvania Convention Center. **Sponsored by CHAS.** Presenters: James Kaufman and W. H. (Jack) Breazeale. This classic presentation on laboratory safety by the Laboratory Safety Institute (LSI) has been attended by thousands of safety professionals. With experience in both industrial and academic laboratories, the presenters take a real-world approach to safety issues in the laboratory. Their stories are both interesting and pertinent. Interactive demonstrations help you deal with everything from creative wiring in the lab to administrators without...
a vision of what it means to have safe workplace. This workshop presents an excellent forum to speak openly about safety problems in your workplace.

**Laboratory Waste Management.** Friday, Aug. 17, 8:30 AM to 4:30 PM. Pennsylvania Convention Center. Sponsored by CHAS. Presenter: Russell Phifer. This comprehensive one-day course will identify the various regulatory requirements that apply to laboratories that generate hazardous waste, as well as provide insight into the options for on-site management and off-site disposal. The focus will include discussion of recycling/reclamation techniques, economical handling of wastes, and liability issues. Phifer has more than 25 years’ experience in managing laboratory wastes for academic and industrial laboratories and is a member and former chair of the ACS Task Force on Environmental Health & Safety. Preregistration for this event is required.

**Safety for K–12 Science.** Saturday, Aug. 18, 8:30 AM to 4:30 PM. Pennsylvania Convention Center. Sponsored by CHAS. Science laboratories and classroom demonstrations present serious hazards that teachers can control using known hazard information and control methods. This workshop will help teachers recognize and manage chemical hazards and associated risks in the classroom through the development of a comprehensive chemical management system. Hazards associated with common classroom demonstrations and labs will be discussed and used to illustrate how to control these hazards and reduce the possibility of an unexpected outcome. Preregistration for this event is required. Fee: $100 CHAS members and nonmembers.

**ENVR NRCC Certification Exams.** Sunday, Aug. 19, 8 AM to noon. Pennsylvania Convention Center. The certification exams of the National Registry of Certified Chemists (NRCC) will be administered. Advance registration and completion (with approval) of application must be done prior to Aug. 1. Requests for applications and registration should be made by e-mail to: rphifer@nrcc6.org or by mail to NRCC, 125 Rose Ann La., West Grove, PA 19390; (610) 322-0657; nrcc6.org.

**GREEN CHEMISTRY WORKSHOPS.** Registration is required online through proed. acs.org, click on “Philadelphia, PA Short Courses” and select the workshop title.

**Introduction to Green Chemistry (101).** Monday, Aug. 20, 9 AM to 12:30 PM. DoubleTree by Hilton Philadelphia Center City. Sponsored by ACS Green Chemistry Institute (ACS GCI). This half-day workshop will introduce the concepts of green chemistry, show real-world examples, and make the business case for green chemistry. Learn about greener, safer alternatives; metrics for comparing the greenness of chemicals and processes; and resources available from ACS GCI and others. The course will be led by green chemistry experts from and working with ACS GCI. Fee: $450. For ad-

### 2012 Leadership Development System Course Offerings

The following four-hour facilitated courses, sponsored by the ACS Leadership Development System, require a fee of $150 each for ACS members and $300 each for nonmembers. Scholarships are available. For course descriptions, scholarship information, or to register, go to www.acs.org/leaderdevelopment. For more information, contact Kareem Redmond, (202) 872-6015, e-mail leaders@acs.org.

**Participation is open to all interested registrants.**

**Developing Communication Strategies.** Sunday, Aug. 19, 8 AM–noon. Sonesta Hotel Philadelphia. When you’re rushing to get things done, it seems easy to send a quick text or e-mail and check it off the list. But how important is it to make sure your message is understood? And how valuable are the relationships that set the context for the short message? Too often we focus on what we want to say but very little on how we say it. Communicating effectively with others is still one of the most critical skills you can develop. If we don’t listen well and the messages we send are unclear, the result is projects getting derailed, inefficiencies, and missed deadlines. Learn how to improve your one-on-one communication skills for more effective results.

**Engaging & Motivating Volunteers.** Monday, Aug. 20, 8 AM–noon. Sonesta Hotel Philadelphia. One of the greatest challenges facing a volunteer leader is recruiting and engaging volunteers to help accomplish goals. It requires leaders to understand what help is needed, what skills are required, and what form of motivation will truly excite the volunteer to commit to the project. Learn practical tools to engage a volunteer and make the assignment successful and professionally rewarding so the volunteer will participate in future assignments.

**Coaching & Feedback.** Monday, Aug. 20, 1–5 PM. Sonesta Hotel Philadelphia. Most managers will tell you that coaching is important and yet they avoid actually coaching anyone. Some try, but find it harder than expected. The reason? Most managers lack the skills and confidence to be effective in the coaching role. Yet good coaching is central to your success as a leader and the success of your team members, employees, and volunteers. Coaching will help you increase performance, expand your team’s capabilities, and improve relationships and morale. This course provides leaders with a proven process, practical tools, and a hands-on opportunity to coach volunteers and employees more effectively.

**Collaborating across Boundaries.** Tuesday, Aug. 21, 8 AM–noon. Sonesta Hotel Philadelphia. Do you work with people from other units or departments or maybe even from other countries? As the world becomes more complex, the ability to reach across boundaries to work on projects and share information is critical to organizational success. It’s not just a matter of communication but of genuine collaboration—working in partnership to achieve common goals, create innovative solutions, and share expertise. Learn strategies and tools to be more effective in leading collaborative efforts and gain practical skills that you can apply immediately in the lab, at school, in the office, or at ACS.
ditional information, contact gci@acs.org or (202) 872-6173.

Intermediate-Level Green Chemistry (201). Monday, Aug. 20, 1 to 4 PM. Double-Tree by Hilton Philadelphia Center City. Sponsored by ACS GCI. This half-day advanced workshop will delve more deeply into case studies and tools of green chemistry. Participants will take a closer look at industrially implemented examples of green chemistry as well as have hands-on practice with several decision-making metrics and tools for assessing greenness. This course will be interactive and steered by dialogue among the participants. Attendees must have a basic understanding of the principles of green chemistry, industrial applications, and metrics for determining greenness or attendance at Green Chemistry 101 or other comparable training. The course will be led by green chemistry experts from and working with ACS GCI. Fee: $450. For additional information, contact gci@acs.org or (202) 872-6173.

Advanced Green Chemistry. Tuesday, Aug. 21, 8 AM to 5 PM. DoubleTree by Hilton Philadelphia Center City. Sponsored by ACS GCI. This full-day advanced workshop will provide participants with in-depth case studies on the application of green chemistry across a variety of areas including energy, water, and pharmaceuticals. Participants will examine industrially implemented real-world green chemistry and engineering as well as gain hands-on practice with several decision-making metrics and tools for assessing impact of their decisions. This course will be highly interactive. Attendees must have a command of the basic principles of green chemistry. Prior experience or attendance at Green Chemistry 101 and 201 are recommended prerequisites. The course will be led by green chemistry experts working with ACS GCI. Fee: $1,400. For additional information, contact gci@acs.org or (202) 872-6173.

COACching Strong Women in the Art of Strategic Persuasion. Saturday, Aug. 18, 8:30 AM to 5 PM. Sheraton Philadelphia City Center Hotel. Sponsored by COAC. This workshop will help professional women be more effective when leading or participating in discussions, meetings, or group negotiations. Learn about strategic rather than reactive behaviors and effective speaking voices while tuning out stress and tension, which will allow you to be heard. The workshop combines presentation, leadership training, and faculty development in an interactive format that encourages highly personal learning. Topics include communication styles effective for women; projecting confidence and credibility through voice, image, and body language; dealing with difficult conversations; and using powerful rather than weak words. Fee; preregistration is required at coach.uoregon.edu. Travel assistance is available. For more information, contact Priscilla Lewis at coach@uoregon.edu or (541) 346-0116.

Powerful Postdocs: Maximizing Your Opportunities in that First Academic Job. Saturday, Aug. 18, 8:30 AM to 5 PM. Sheraton Philadelphia City Center Hotel. Sponsored by COAC. This workshop for women postdoctoral associates teaches skills in assimilating the fundamentals of responsible negotiations and communication. Attendees will examine the importance of developing alternative to reaching agreement that build self-confidence and will use self-examination to discover personal negotiating skills for highly successful outcomes. Discussions will focus on issues relevant to securing an academic position. The workshop will also cover learning effective communication techniques for the workplace, the classroom, and scientific research presentations. Topics include communication styles effective for women; projecting confidence and credibility through voice, image, and body language; dealing with difficult conversations; and using powerful rather than weak words. Fee; preregistration is required at coach.uoregon.edu. Travel assistance is available. For more information, contact Priscilla Lewis at coach@uoregon.edu or (541) 346-0116.

Lens of the Market. Sunday, Aug. 19, 9 AM to 3 PM. Philadelphia Marriott Downtown. Sponsored by WCC in conjunction with the Chemical Entrepreneurship Council (CEC). Presenters: Judith C. Giordan and Joseph Steig. If you’re a researcher in materials for health, medicine, or other markets and you want to translate your research into a commercial innovation, this workshop will help you define which markets to target and what you need to do to reach them. The workshop will cover market definition, technical solutions, market segmentation, and market research. Lens of the Market is a program of the Research to Innovation Education Series of the National Collegiate Inventors & Innovators Alliance (NCIIA). The workshop is targeted to existing teams of two to five researchers/innovators with research to translate into innovation. Each team member must register. Fee: $60 and includes lunch. Space is limited to five teams. For additional information, contact Katherine Hoffman at k_hoffman@acs.org or (202) 872-6163.

NMR Spectroscopy Applications in Toxicology & Metabolism. Saturday, Aug. 18, 1 to 5 PM. Pennsylvania Convention Center. Sponsored by TOXI. Presenters: Mike Reily, Bristol-Myers Squibb; Nelly Arbore, BMS; and Greg Walker, Pfizer. This workshop will present the basic elements of nuclear magnetic resonance spectroscopy and major approaches to application that young investigators should know about in application to their research. The emphasis will be on major types of application in studying the metabolism of small molecules and issues relevant to toxicology and safety assessment. For questions, contact Fred Guengerich at f.guengerich@vanderbilt.edu, or Daniel Liebler at Daniel.liebler@vanderbilt.edu. Fee: $45 per registrant.

Writing Fellowships & Other Grants at the Pre- & Postdoctoral Level. Saturday, Aug. 18, 1 to 5 PM. Pennsylvania Convention Center. Sponsored by TOXI. This workshop is designed to make trainees (and their mentors) aware of fellowships and grants available to graduate students and postdoctoral fellows. Topics to be covered include fellowships for graduate students, National Science Foundation predoctoral fellowships, National Institutes of Health F32 applications, and NIH K99 awards. The presenters have experience both in reviewing fellowships and as successful award winners. For questions, contact Fred Guengerich at f.guengerich@vanderbilt.edu, or Daniel Liebler at Daniel.liebler@vanderbilt.edu. Fee: $45 per registrant.

User & Collaborative Research with the Ultrafast Laser Resource at Penn. Tuesday, Aug. 21, 2 to 5 PM. Philadelphia Marriott Downtown. This half-day workshop provides an opportunity to find out about use and collaborative research approaches available at the Regional Laser & Biotechnology Laboratories and the NIH Altoona Business Research & Training Center ultrafast laser resource at the University of Pennsylvania.
Pennsylvania. Drop by and learn about the resource, talk to staff members, and have your questions answered about research topics ranging from linear to nonlinear optical and infrared laser methods including 2-D IR spectroscopy and experimental protein-folding approaches. Free; no preregistration is required. Contact: Tom Troxler at ttroxler@sas.upenn.edu for questions or visit the website at rlbl.chem.upenn.edu.

ACS SHORT COURSES

THE FOLLOWING short courses from the ACS Department of Professional Education, specifically designed to improve the skills and marketability of chemical scientists and technicians, are offered in conjunction with the national meeting in Philadelphia. Early registration and group discounts are available. A course fee and registration separate from the national meeting are required. Register for a short course in Philadelphia, obtain course and pricing details, or view a full course catalog online at proed.acs.org; phone: (202) 872-4508; fax: (202) 872-6356; e-mail: shortcourses@acs.org.

ANALYTICAL

1-D & 2-D NMR Spectroscopy: Structure Determination of Small-Molecule Organic Compounds, Aug. 18–19
Capillary Electrophoresis of Biomolecules, Aug. 21–22
Conducting Successful OOS/OOT Investigations for Analytical Testing, Aug. 22
Fundamentals of High-Performance Liquid Chromatography, Aug. 18–19
Generation & Interpretation of Tandem Mass Spectra, Aug. 21–22
Groundwater Geochemistry for Chemists, Aug. 21–22
Infrared Spectral Interpretation: A Systematic Approach, Aug. 20–21
Introduction to Modern Mass Spectrometry, Aug. 18–19
Practical Applications of Mass Spectrometry for Small Molecules, Aug. 21–22
Spectroscopic Method Development: Qualitative & Quantitative Techniques, Aug. 18–19

BIOLOGICAL/PHARMACEUTICAL/ MEDICINAL CHEMISTRY

Capillary Electrophoresis of Biomolecules, Aug. 21–22
Chemical Toxicology: A Chemist’s Roadmap To Reduce Bioactivation

Liabilities in Drug Candidates, Aug. 18
Druglike Properties: Optimizing Pharmacokinetics & Safety in Drug Discovery, Aug. 18–19
Essentials of Medicinal Chemistry & Pharmacology, Aug. 18–19
Introduction to Drug Metabolism: Role & Practice in Drug Discovery & Development, Aug. 19
Pharmacokinetics & Pharmacodynamics in Drug Discovery for Chemists, Aug. 21–22
Process Research in the Pharmaceutical Industry: The Design & Development of Practical Syntheses, Aug. 18–19
Stability Testing in Pharmaceutical Development: Regulations, Methodologies & Best Practices, Aug. 21

COMPUTERS/STATISTICS/ ENGINEERING

Applied Computational Modeling, Aug. 21–22
Chemical Engineering & Process Fundamentals for Chemists, Aug. 18–19
Experimental Design for Productivity & Quality in Research & Development, Aug. 18–20
Statistical Analysis of Laboratory Data, Aug. 18–20

GENERAL

Effective Supervision of Scientists & the Technical Staff, Aug. 18–19
Effective Technical Writing, Aug. 21–22

ORGANIC/PHYSICAL CHEMISTRY

1-D & 2-D NMR Spectroscopy: Structure Determination of Small-Molecule Organic Compounds, Aug. 18–19
Dispersions in Liquids: Suspensions, Emulsions & Foams, Aug. 18–19
Essentials of Organic Chemistry, Aug. 20
Mastering the Art of Writing Reasonable Organic Reaction Mechanisms, Aug. 18–19
NMR Spectral Interpretation & Organic Spectroscopy: A Problem-Based Learning Approach, Aug. 21–22
Organic Synthesis: Methods & Strategies for the 21st Century Chemist, Aug. 18–19

POLYMER CHEMISTRY

Polymer Science & Technology, Aug. 18–19
Polymeric Coatings, Aug. 21–22

PROFESSIONAL DEVELOPMENT

Effective Supervision of Scientists & the Technical Staff, Aug. 18–19
Effective Technical Writing, Aug. 21–22
Fundamentals of Lab Management for New Managers, Aug. 18–19
Mastering the Art of Writing Reasonable Organic Research Mechanisms, Aug. 18–19
Practical Approaches to Patents & Other Forms of Intellectual Property, Aug. 20
Project Management for Technical Professionals, Aug. 21–22

REGULATORY/ENVIRONMENTAL

Fundamentals of Lab Management for New Managers, Aug. 18–19
Groundwater Geochemistry for Chemists, Aug. 21–22
Methods Development, Validation Procedures & Regulatory Compliance Issues, Aug. 18–19
Practical Approaches to Patents & Other Forms of Intellectual Property, Aug. 20
Qualification & Validation of Laboratory Instruments & Equipment for Regulatory & QS Compliance (IQ, OQ, PQ), Aug. 20

ACS CAREER FAIR ON-SITE AND ONLINE

JOB SEEKERS, are you looking to jump-start your job search or enhance your professional development? Employers, are you looking to hire scientists and engineers? Then you need to attend the ACS Career Fair open Sunday, Aug. 19, 8 AM to 6 PM; Monday, Aug. 20, 8 AM to 5 PM; and Tuesday, Aug. 21, 8 AM to 5 PM, in Hall C of the Pennsylvania Convention Center. The Virtual Career Fair will be held Aug. 20 and 21. Whether on-site or online, the career fair is the place where the best talent and the best employers in chemistry meet.

During the career fair in Philadelphia, participants can take full advantage of the following:

- Networking opportunities
- Résumé reviews
- One-on-one career consulting
- Interview practice and skills building
- More than 50 career-related workshops
- Keynote speakers presented live and via webcast
- Request interviews

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LET ACS HELP YOU REACH YOUR CAREER GOALS. ACS will help you prepare for your next career move by providing resources that make it possible to map out your personal job search strategy, strengthen your résumé, and build your interview skills, all with the support of career consultants.

On-site job seekers must be ACS members, be registered for the national meeting, and complete career fair registration at www.acs.org/careers (pick up a career fair registration badge in Hall C of the convention center beginning Sunday, Aug. 19).

Please note: We cannot guarantee that you will secure interviews at the ACS Career Fair. Interviewing is strictly contingent on the availability of positions and the credentials and qualifications that employers are seeking.

GET ONLINE AND OPTIMIZE YOUR JOB SEARCH! The virtual portion of the ACS Career Fair eliminates geographical barriers, enabling job seekers and employers to connect with each other from their home, office, or from the dedicated computer stations on hand at the meeting. Interviews and informal discussions will take place in virtual booths via text or video chat. Additionally, job seekers can schedule time with ACS career consultants for one-on-one consultations and attend live events via webcast. In today’s tough economy, it makes good sense to enhance your job search by participating fully in both the on-site and online sections of the ACS Career Fair. Register at www.acs.org/vcf.

IDEAL FOR EMPLOYERS. Leading employers around the world trust and depend on ACS to provide them with the talent they need to innovate and excel. At our last Virtual Career Fair, nearly 2,700 global job seekers—from recent grads to seasoned professionals—met with on-site recruiters seeking to fill positions in all facets of chemistry, pharmaceuticals, and biotechnology. This career fair continues the innovation, with both on-site and online interviewing opportunities.

The ACS Careers Jobs Database can help manage your employer account, post jobs, search for qualified candidates, and schedule career fair interviews. Moreover, participating in the ACS Career Fair enables you to accomplish the following:

- Find the personnel your company needs to thrive, from entry- to executive-level positions.
- Meet qualified candidates informally via on-site and online networking forums.
- Extend your presence for 90 days after the career fair via the ACS jobs database and your virtual booth.

ACS CAREER FAIR AND THE ACS EXPOSITION TEAM HAVE JOINED FORCES. Employers can purchase booth space inside the exposition hall, enabling your company to maximize its ability to showcase products and services and connect with job seekers. Employers can sign up for the ACS Career Fair Recruiters Row package online at www.acs.org/careers.

Employers will receive an e-mail confirmation and must visit the ACS Career Fair Information Booth in Hall C of the Pennsylvania Convention Center to pick up their blue badge. For more information, please visit www.acs.org/careerfair. You can also contact Garretta Rollins at (800) 227-5558 ext. 6209 (U.S./Canada only), (202) 872-6209 (international), or e-mail g_rollins@acs.org.

ONE-ON-ONE CAREER CONSULTING. Individual half-hour appointments with expert career consultants are available both on-site and online. These consults can help you strengthen your résumé, improve your interviewing skills, and design a job search or comprehensive professional growth strategy. Please bring a copy of your résumé or CV to all appointments. All one-on-one on-site career consulting sessions will take place in the Résumé Review/Mock Interview area in Hall C. Sign-up begins at 8 AM on Sunday, Aug. 19, on a first-come, first-served basis.

CAREER AND PROFESSIONAL DEVELOPMENT WORKSHOPS. More than 30 career-related workshops will help you with everything from building your résumé to optimizing your job search to learning the ins and outs of academia, industry, and government employment. Workshop times are subject to change. Please consult the Web version of the workshop schedule at www.acs.org/careerfair or the “Guide to the ACS Career Fair” on-site brochure for final workshop program and times.

All workshops will be held in the convention center. Following is the preliminary schedule.

**SUNDAY, AUG. 19**

- Careers in Industry—Part I, 8:30–10:30 AM
- Finding Your Path, 8:30 AM–12:30 PM
- Working for Yourself, 8:30 AM–12:30 PM
- Foreign-National Scientist: Obtaining a Job in the U.S., 9:30–11 AM
- Careers in Industry—Part II, 10:45 AM–12:45 PM
- Writing Excellent Proposals, 11:15 AM–12:30 PM
- Careers in Higher Education—Part I, 1:15–3:15 PM
- Electronic Tools To Enhance Your Job Hunt, 1:30–3 PM
- Acing the Interview, 1:30–5:30 PM
- Careers in Government, 1:30–5:30 PM
- Patents & Intellectual Property, 3:30–5 PM
- Careers in Higher Education—Part II, 3:30–5:30 PM

**MONDAY, AUG. 20**

- Careers in Higher Education—Part I, 8:30–10:30 AM
- Acing the Interview, 8:30 AM–12:30 PM
- Careers in Government, 8:30 AM–12:30 PM
- Careers in Higher Education—Part II, 10:45 AM–12:45 PM
- Careers in Industry—Part I, 1:15–3:15 PM
- Finding Your Path, 1:30–5:30 PM
- Working for Yourself, 1:30–5:30 PM
- Careers in Industry—Part II, 3:30–5:30 PM

**TUESDAY, AUG. 21**

- Careers in Industry—Part I, 8:30–10:30 AM
- Finding Your Path, 8:30 AM–12:30 PM
- Working for Yourself, 8:30 AM–12:30 PM
- Careers in Industry—Part II, 10:45 AM–12:45 PM
- Careers in Higher Education—Part I, 1:15–3:15 PM
- Acing the Interview, 1:30–5:30 PM
- Careers in Government, 1:30–5:30 PM
- Careers in Higher Education—Part II, 3:30–5:30 PM

**WEDNESDAY, AUG. 22**

- Careers in Industry—Part I, 8:30–10:30 AM
- Acing the Interview, 8:30 AM–12:30 PM
- Finding Your Path, 8:30 AM–12:30 PM
- Careers in Industry—Part II, 10:45 AM–12:45 PM
EXPOSITION

SEE WHAT’S NEW INSIDE THE EXPOSITION. Take time to visit the ACS National Exposition at the Pennsylvania Convention Center, Halls A and 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. Stay tuned for additional information on the Virtual Career Fair & Exposition where you can schedule real-time discussions and review in-depth company information.

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 to $2.00 off your concession order. Also, 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. Find the flyer inside your registration credentials that list the exhibitors participating in the Exhibitor Passport or 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 a 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’s 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.

GOVERNANCE MEETINGS

For the complete list of committee meetings and agendas, please consult www.acs.org/philly2012 or the on-site program distributed during the meeting.

BOARD & COUNCIL MEETINGS

ACS BOARD OF DIRECTORS. The ACS Board of Directors will hold its Open Session on Sunday, Aug. 19, from noon to 1 PM in the Pennsylvania Convention Center, Room 108AB. All members are invited to participate in a luncheon discussion with the board as they consider the question, “What are the ‘Real World’ ethics issues faced by students and practitioners of chemistry?” The board welcomes your observations and suggestions. Sandwiches and soft drinks will be available.

ACS COUNCIL. The ACS Council meeting will begin at 8 AM, Wednesday, Aug. 22, in the Philadelphia Marriott Downtown hotel. The meeting will be preceded by a continental breakfast for councilors beginning at 7 AM. Councilors are asked to check in beginning at 7 AM and proceed to the breakfast area, keeping in mind that the meeting starts promptly at 8 AM. Space will be available for ACS members and non-members to observe the council in action. We hope that many will take advantage of this opportunity to learn firsthand of the society’s operation. Alternate councilors and division and local section officers are particularly urged to attend.

COMMITTEE AGENDA

THE COMMITTEE ON COMMITTEES has clarified the three types of committee meetings:

OPEN. May be attended by any ACS member. At these sessions, members are encouraged to voice concerns, issue compliments, offer suggestions, express interest in, or raise questions about matters over which the committee has purview. The assumption is that participation is welcomed and will be orderly and courteous. Only committee members can vote.

EXECUTIVE. Attendance and participation are limited to officially appointed/elected committee members, associates, advisors, consultants, staff liaisons, and the appointed Committee on Committees liaison. Liaisons from other groups and ex officio and elected councilors may attend; participation by these groups would be at the invitation of the chair. Only committee members can vote.

CLOSED. The committee chair must declare any EXECUTIVE session CLOSED when confidential or sensitive personnel, financial, or legal matters of the society are discussed. At that point, only officially appointed/elected committee members, associates, consultants, staff liaisons, and the appointed Committee on Committees liaison shall remain in the session. Others
may stay in the session at the discretion of the chair. Once these discussions have been completed, the committee should return to EXECUTIVE mode.

During the open and executive committee meetings, ACS members are given a chance to express their views on issues under consideration before these issues are acted on by the board or the council, or to bring up other subjects that deserve attention. Members are urged to examine the agenda and make known any opinions or ideas they may have. If you cannot attend the particular sessions involved, write the officers listed or ask someone attending the session to speak on your behalf. For further information, contact the officers listed.

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**BUDGET & FINANCE**

Pat N. Confalone, chair; vice president, DuPont Global R&D, Stine-Haskell Research Center, 1090 Elkton Rd., S200, Newark, DE 19711-3510

Open Meeting
Saturday, Aug. 18, 8 AM–noon
Philadelphia Marriott Downtown

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**CHEMICAL ABSTRACTS SERVICE**

Spiro Alexandratos, chair; Department of Chemistry, Hunter College, City University of New York, 695 Park Ave., New York, NY 10021

Executive Session
Friday, Aug. 17, 6:30–8:30 PM
Philadelphia Marriott Downtown

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**CHEMICAL SAFETY**

Robert Hill, chair; 5795 Nash Commons Dr., Stone Mountain, GA 30087-2869

Combined Open Meeting and Executive Session
Monday, Aug. 20, 8:30–11:30 AM
Philadelphia Marriott Downtown

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**CHEMISTRY & PUBLIC AFFAIRS**

Connie Murphy, chair; 109 East Haley St., Midland, MI 48640-5907

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**COMMUNITY ACTIVITIES**

Lynn Hogue, chair; 9076 Arrowhead Ct., Cincinnati, OH 45231

CCA/LSAC Joint Open Meeting
Tuesday, Aug. 21, 2–3:30 PM
Philadelphia Marriott Downtown

Executive Session
Saturday, Aug. 18, 5–7 PM
Philadelphia Marriott Downtown

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**CONSTITUTION & BYLAWS**

Harmon B. Abrahamson, chair; University of North Dakota, 151 Cornell St., Stop 9024, Grand Forks, ND 58202-9024

Open Meetings
Sunday, Aug. 19, 1–1:30 PM
Philadelphia Marriott Downtown

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**COUNCIL POLICY COMMITTEE**

The Council Policy Committee will open the floor during its meeting at 11 AM on Tuesday, Aug. 21, to councilors who would like to raise issues of concern that affect them and/or their local sections or divisions. For further information contact Carolyn Ribes, vice chair of CPC, at cribes@dow.com. For more committee meeting details and agendas, please consult the meeting website at www.acs.org/philly2012 or the on-site program distributed during the meeting.
EDUCATION
Mary Carroll, chair; Department of Chemistry, Union College, Schenectady, NY 12308

Open Meeting
Monday, Aug. 20, 3–4 PM
Philadelphia Marriott Downtown

Executive Session
Friday, Aug. 17, 1–5:30 PM
Philadelphia Marriott Downtown

ENVIRONMENTAL IMPROVEMENT
Laura E. Pence, chair; University of Hartford, Department of Chemistry, 200 Bloomfield Ave., West Hartford, CT 06117

Open Executive Session
Saturday, Aug. 18, 4–6 PM
Philadelphia Marriott Downtown

ETHICS
Gregory M. Ferrence, chair; 4160 Department of Chemistry, Illinois State University, Normal, IL 61790-4160

Open Executive Session
Sunday, Aug. 19, 9 AM–4:30 PM
Philadelphia Marriott Downtown

INTERNATIONAL ACTIVITIES
Judith L. Benham, chair; c/o ACS Office of International Activities, 1155–16th St., N.W., Washington, DC 20036

Open Meeting
Saturday, Aug. 18, 1–5 PM
Philadelphia Marriott Downtown

Subcommittee Meetings
Saturday, Aug. 18, 9 AM–noon
Philadelphia Marriott Downtown

LOCAL SECTION ACTIVITIES
Lee Latimer, chair; 56 Sheridan Rd., Oakland, CA 94618

LSAC/CCA Joint Open Meeting
Tuesday, Aug. 21, 2–3:30 PM
Philadelphia Marriott Downtown

MEETINGS & EXPOSITIONS
Dee Ann Casteel, chair; Department of Chemistry, Bucknell University, Lewisburg, PA 17837

Combined Open Meeting and Executive Session
Sunday, Aug. 19, 7 AM–noon
Pennsylvania Convention Center

MEMBERSHIP AFFAIRS
Wayne Jones, chair; Binghamton University (SUNY), Vestal Pkwy. East, P.O. Box 6000, Binghamton, NY 13902

Executive Session
Sunday, Aug. 19, 8:30 AM–4 PM
Philadelphia Marriott Downtown

Open Meeting
Monday, Aug. 20, 1–2 PM
Philadelphia Marriott Downtown

MINORITY AFFAIRS
Al Ribes, chair; Dow Benelux BV, P.O. Box 48, Haven Nummer 446, Aa Terneuzen, Netherlands 4530

Closed Executive Session
Sunday, Aug. 19, 8:30 AM–noon
Philadelphia Marriott Downtown

Open Executive Session
Sunday, Aug. 19, 1–4 PM
Philadelphia Marriott Downtown

NOMENCLATURE, TERMINOLOGY & SYMBOLS
Peter Rusch, chair; 162 Holland Ct., Mountain View, CA 94040-3864

Open Meeting
Monday, Aug. 20, 2–5 PM
Philadelphia Marriott Downtown

NOMINATIONS & ELECTIONS
William H. (Jack) Breazeale Jr., chair; nomelect@acs.org

Open Meeting
Monday, Aug. 20, 11 AM–noon
Philadelphia Marriott Downtown

PATENTS & RELATED MATTERS
James L. Chao, chair; 7424 Ridgefield Dr., Cary, NC 27519-0503

Open Meeting
Saturday, Aug. 18, 9 AM–5 PM
Philadelphia Marriott Downtown

PROFESSIONAL TRAINING
Anne B. McCoy, chair; Department of Chemistry, Ohio State University, 2200 Bonftorte Blvd., Columbus, OH 43210

Open Meeting
Sunday, Aug. 19, 12:30–1:30 PM
Loews Philadelphia Hotel

PROJECT SEED
Sandra Bonetti, chair; Colorado State University, Pueblo, Department of Chemistry, Colorado State University, Pueblo, CO 81001-4901

Open Meeting
Sunday, Aug. 19, 9:30–10:30 AM
Philadelphia Marriott Downtown

PUBLIC RELATIONS & COMMUNICATIONS
Cheryl Frech, chair; University of Central Oklahoma, Department of Chemistry, 100 North University Dr., Edmond, OK 73034-5207

Open Meeting
Monday, Aug. 20, 9:30 AM–2 PM
Philadelphia Marriott Downtown

PUBLICATIONS
Ned D. Heindel, chair; Lehigh University, Department of Chemistry, 6 East Packer Ave., Bethlehem, PA 18015-3172
Open Meeting
Friday, Aug. 17, 4:30–5 PM
Philadelphia Marriott Downtown

Executive Session
Friday, Aug. 17, 1–5 PM
Philadelphia Marriott Downtown

SCIENCE
Sadiq Shah, chair; Office of Research & Economic Development, Western Kentucky University, 1906 College Height Blvd., Bowling Green, KY 42101

Open Meeting
Saturday, Aug. 18, 9 AM–5 PM
Philadelphia Marriott Downtown

TECHNICIAN AFFAIRS
Mary K. Moore, chair; 512 Locust St., Jonesborough, TN 37659-1020

Executive Session
Sunday, Aug. 19, 8:30 AM–2 PM
Philadelphia Marriott Downtown

Open Session
Sunday, Aug. 19, 2–2:30 PM
Philadelphia Marriott Downtown

WOMEN CHEMISTS
Judith H. Cohen, chair; Johnson & Johnson Pharmaceutical Research & Development, Spring House, PA 19477

Executive Session
Saturday, Aug. 18, 8 AM–5 PM
Philadelphia Marriott Downtown

WCC/AWIS Open Meeting & Just Cocktails Reception
Tuesday, Aug. 21, 4–5:30 PM
Philadelphia Marriott Downtown

YOUNGER CHEMISTS
Dorothy Miller, chair; Environmental Protection Agency, 1200 Pennsylvania Ave., N.W., MC 8102R, Washington, DC 20460

Executive Session
Sunday, Aug. 19, 8 AM–noon
Philadelphia Marriott Downtown

ACS Short Courses
Philadelphia, PA
August 18 – 22, 2012

Early Registration ends July 30, 2012!

American Chemical Society

www.ProEd.acs.org/Philadelphia

Department of Professional Education

The ACS Department of Professional Education is holding 40 one-, two- and three-day courses at the ACS Fall National Meeting! You don’t need to register for the National Meeting to attend a course but your registration does includes a free pass to the Expo! Early Registration and group discounts are available.