



**STATUESQUE**  
Philadelphia is home to more sculptures and murals than any other U.S. city, including the Love Statue shown here.

ble 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 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 local cheesesteak shop, the Liberty Bell, or Fairmont Park.—EMILY BONES

# 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. Shakhshiri 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.

**MEETING INFO ON THE WEB**  
[www.acs.org/philly2012](http://www.acs.org/philly2012)

In addition to supporting the meeting theme, Shakhshiri will continue to endorse his presidential agenda, “Advancing Chemistry & Communicating Chemistry.” 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 “Dou-

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# TECHNICAL PROGRAM SUMMARY

## Presidential Event

PRES

*Bassam Z. Shakhshiri, Program Chair*

Philadelphia Marriott Downtown/Loews Philadelphia Hotel	S	M	Tu	W	Th
Presidential Plenary Keynote: Chemistry & Climate Change		A			
Communicating Chemistry & Public Engagement: Celebrating the 25th Anniversary of National Chemistry Week**		D			
150 Years of Chemistry at Land Grant Institutions: The Past as Prelude to the Future			A		
Communicating Controversial Science: Honoring Rudy Baum**			D		
Materials for Health & Medicine Plenary* (MAHM)	P				
Symposium in Honor of 2009 & 2010 ACS Fellows in the Industrial & Engineering Chemistry Division* (I&EC)		D			
50 Years of NIGMS-Supported Chemistry Enabling Biomedical Research* (BIOL)		D			
Forensic Chemistry, Science & the Law Presents: Innocence! The Work of the Innocence Project* (CHAL)			D		
Celebrating the Sesquicentennial of the Land Grant College Act* (HIST)		D			
Ensuring the Sustainability of Critical Materials & Alternatives: Addressing the Fundamental Challenges in Separation Science & Engineering* (ANYL)			D		
The Power of Chemistry in Public Health: Drug Development from the Lab Bench to the Consumer* (CHED)			D		
Innovative Chemistry Research for Health & Medicine: East Meets West* (IAC)			D		

\*Cosponsored symposium with primary organizer shown in parentheses; located with primary organizer.

\*\*Primary organizer of a cosponsored symposium.

MAHM: Materials for Health & Medicine

A = AM AE = AM/EVE P = PM D = AM/PM  
E = EVE DE = AM/PM/EVE PE = PM/EVE

## Materials for Health & Medicine

MAHM

*X. Jia, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
Materials for Health & Medicine Plenary**	P				
Nanoscience & Nanotechnology for Health & Medicine**		P			
The Kavli Foundation Innovations in Chemistry Lecture		P			
50 Years of NIGMS-Supported Chemistry Enabling Biomedical Research* (BIOL)		D			

## Academic Employment Initiative

A E I

*C. Kuniyoshi, J. Sostaric, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Academic Employment Initiative		E			

## Division of Agricultural & Food Chemistry

AGFD

*L. Jackson, Program Chair*

Loews Philadelphia Hotel	S	M	Tu	W	Th
Young Scientist Award Symposium	A				
Food Safety: New Technologies for the Protection of the Food Supply**	D	A			
Neuroactive Compounds from Natural Products** MAHM	D				
General Papers	P	P	P		A
Discovering Bioactive Compounds** MAHM		D	D		
Fruit & Vegetable Aroma Precursors		D			
Sci-Mix		E			
AGFD Award Symposium			A		
Sterling Hendricks Memorial Lectureship**			A		
2011 Kenneth A. Spencer Award: Honoring Michael W. Pariza**			P		
General Posters			P		
Essential Oils: Natural Materials for Flavor, Fragrance & Bioactives MAHM					D
Physical Methods in Food Analysis**					D
Natural Products for Pest Management* (AGRO)	A				

## Division of Agricultural & Food Chemistry (Continued)

AGFD

*L. Jackson, Program Chair*

Loews Philadelphia Hotel	S	M	Tu	W	Th
Science & the Law: Analytical Data in Support of Regulation in Health, Food & the Environment* (CINF)	A				
Addressing the Complex Site: Chemistry, Toxicology & Fate of Mixed Pollutants Across Environmental Media* (ENVR)	D			E	
Interactions of Nanomaterials with Emerging Environmental Contaminants* (ENVR)	D	A		E	
Materials for Water Sustainability* (ENVR)	D	D		E	
2012 Kenneth A. Spencer Award: Honoring James N. Seiber* (AGRO)	P				
Innovative Materials & Technologies for Detection & Inactivation of Environmental Pathogens* (ENVR)		A			
International Sustainable Development: Institutional Frameworks* (IAC)		A			
Green Chemistry & the Environment* (ENVR)		D	A	E	
MRLs & Ag Chemicals* (AGRO)		D	A		
Undergraduate Research Posters* (CHED)		P			
Environmental Biotechnology & Sustainability: Applications to Drinking Water, Industrial Waste Treatment & Site Remediation* (ENVR)			D	E	
Is Your Analytical Method Good Enough?* (AGRO)			D	A	
Nanomaterials in Medicine, Food & the Environment* (ENVR)				DE	A
Perfecting Communication of Chemical Risk* (AGRO)				P	
Fate & Exposure of Urban Applied Pesticides in the Context of Human & Ecological Risk Assessments* (AGRO)					A
Human Health & Transgenic Crops* (AGRO)					A

## Division of Agrochemicals

AGRO

*J. Clark, Program Chair*

Loews Philadelphia Hotel	S	M	Tu	W	Th
Natural Products for Pest Management**	D	D			

## Division of Agrochemicals (Continued)

AGRO

*J. Clark, Program Chair*

Loews Philadelphia Hotel	S	M	Tu	W	Th
Pesticide Environmental Fate Properties: Measurement, Prediction, Limitations & Reliability**	D				
2012 Kenneth A. Spencer Award: Honoring James N. Seiber**	P				
Protection of Agricultural Productivity, Public Health & the Environment	P		P		
MRLs & Ag Chemicals**		D	A		
Pesticides & Fumigant Emissions from Agricultural Systems**		D			
AGRO International Research Award: Honoring Thomas C. Sparks for Contributions to the Discovery of New Agrochemicals		D			
AGRO Education Award Poster Session**		P			
Sci-Mix		E			
Integrated Vector & Resistance Management			D		
Is Your Analytical Method Good Enough?***			D	A	
Environmental Fate, Transport & Modeling/Monitoring of Agricultural Chemicals**			D	D	
Reactive Nitrogen (Nr) from Agriculture: Emission, Consequence & Management			P	D	
Mechanisms of Insecticidal Action & Resistance: New Compounds & Recent Advances					D
Synthesis & Chemistry of Agrochemicals				D	
Perfecting Communication of Chemical Risk**				P	
Worker Exposure: Are Your Senses a Proper Evaluation of Hazardous Exposure? <b>MAHM</b>					A
Fate & Exposure of Urban Applied Pesticides in the Context of Human & Ecological Risk Assessments**					D
Human Health & Transgenic Crops**					D
Next-Generation Biofuels & Bioproducts: Advances & Challenges**					D
Addressing the Complex Site: Chemistry, Toxicology & Fate of Mixed Pollutants Across Environmental Media* (ENVR)	D			E	

# PROGRAM SUMMARY

## Division of Agrochemicals (Continued)

**AGRO**

*J. Clark, Program Chair*

Loews Philadelphia Hotel	S	M	Tu	W	Th
Interactions of Nanomaterials with Emerging Environmental Contaminants* (ENVR)	D	A		E	
Materials for Water Sustainability* (ENVR)	D	D		E	
Neuroactive Compounds from Natural Products* (AGFD)	D				
Green Chemistry & the Environment* (ENVR)		D	A	E	
Discovering Bioactive Compounds* (AGFD)		D	D		
Innovative Technologies for Green, Grey, Brown & Black Water Reclamation & Reuse* (ENVR)		P		E	
Sterling Hendricks Memorial Lectureship* (AGFD)			A		
Environmental Biotechnology & Sustainability: Applications to Drinking Water, Industrial Waste Treatment & Site Remediation* (ENVR)			D	E	
2011 Kenneth A. Spencer Award: Honoring Michael W. Pariza* (AGFD)			P		
Nanomaterials in Medicine, Food & the Environment* (ENVR)				DE	A
Measurements & Methods in Environmental Nanotechnology* (ENVR)				E	A

## Division of Analytical Chemistry

**ANYL**

*C. Larive, Program Chair*

Sheraton Philadelphia City Center Hotel	S	M	Tu	W	Th
Analytical Chemistry & Quality Management: Two Sides of the Same Coin** <i>MAHM</i>	A				
ACS Award in Chromatography: Honoring Wolfgang Lindner	D				
Conventional & Differential Ion Mobility Spectrometry**	P	A			
General Posters	E				
Chirality: Analytical Chemistry Challenges & Innovations**		A			
ANYL Awards		P			

## Division of Analytical Chemistry (Continued)

**ANYL**

*C. Larive, Program Chair*

Sheraton Philadelphia City Center Hotel	S	M	Tu	W	Th
Emerging Quantitative Applications of Nonlinear Optical Measurements to Address Key Bottlenecks in Biological Sciences** <i>MAHM</i>		P	D	A	
Sci-Mix		E			
ACS Award in Analytical Chemistry: Honoring Nick Winograd** <i>MAHM</i>			D		
Ensuring the Sustainability of Critical Materials & Alternatives: Addressing the Fundamental Challenges in Separation Science & Engineering**			D		
Frank H. Field & Joe L. Franklin Award for Outstanding Achievement in Mass Spectrometry: Honoring Scott McLuckey				A	
Harnessing Nanotechnology for Human Health & Environment: How To Exploit Physicochemical Properties of Engineered Nanomaterials for Health & Societal Applications** <i>MAHM</i>				A	
New Directions in Bio & Pharmaceutical Analysis <i>MAHM</i>				P	D
New Directions in Spectroscopic Measurements				P	
New Directions in Mass Spectrometry				P	A
New Directions in Electrochemical Analysis & Sensors					D
New Directions in Analytical Separations					P
Science & the Law: Analytical Data in Support of Regulation in Health, Food & the Environment* (GINF)	A				
Solvent Dynamics at Biomolecular Interfaces: Experiment & Theory* (PHYS)	D	D	D	D	A
Computational Approaches to Spectroscopy Analysis* (COMP)	DE				
Recent Advances in Studies of Molecular Processes at Liquid Interfaces* (COMP)	P	D	D	D	A
Molecular & Supramolecular Chirality* (ORGN)		P			
Abiotic/Biotic Interfaces* (COLL)		P	A	D	D
Structure, Dynamics & Reactivity at Charged Interfaces* (COLL)		P	A	D	D
Undergraduate Research Posters* (CHED)		P			

## Division of Analytical Chemistry **ANYL** (Continued)

*C. Larive, Program Chair*

Sheraton Philadelphia City Center Hotel	S	M	Tu	W	Th
Terahertz Spectroscopy Moves from the Laboratory to the Commercial Sector* (SCHB)				D	
Harnessing Nanotechnology for Human Health & Environment: Toxicology & Potential Health Implications of Engineered Nanomaterials* (TOXI)				P	

## Division of Biological Chemistry **BIOL**

*T. Wandless, Program Chair*

DoubleTree by Hilton Philadelphia Center City	S	M	Tu	W	Th
Graduate Student & Postdoctoral Researcher Symposium	A				
Breakthroughs in Biological Chemistry	P				
Current Topics in Biological Chemistry	E		E		
50 Years of NIGMS-Supported Chemistry Enabling Biomedical Research** <sup>MAHM</sup>		D			
Sci-Mix		E			
Pfizer Award Symposium			A		
Repligen Award Symposium			P		
Lilly Award Symposium				A	
Goodman Award Symposium				P	
Membranes* (COMP)	A				
Drug Discovery* (COMP)	D	D	A	A	A
CSAR 2011-2012 Benchmark Exercise* (COMP)	D				
Molecular Mechanics* (COMP)	D	D	D	D	
Computational Approaches to Spectroscopy Analysis* (COMP)	DE				
Continuum Solvation Modeling in Biological Systems: Developments & Applications* (COMP)	P	D	D	D	D
Recent Advances in Studies of Molecular Processes at Liquid Interfaces* (COMP)	P	D	D	D	A
Cellular Targets & Chemical Biology* (MEDI)		A			

## Division of Biological Chemistry **BIOL** (Continued)

*T. Wandless, Program Chair*

DoubleTree by Hilton Philadelphia Center City	S	M	Tu	W	Th
Scripting & Programming: Drug Discovery & High-Performance Computing in the Cloud* (COMP)	A				
Computational Study of Water* (COMP)	D				
Drug Discovery in Tyrosine Kinase Inhibitors & Drug Resistance* (COMP)	P				
Simulations of Crowding, Confinement & Cellular Environments* (COMP)	P	P	P		
Undergraduate Research Posters* (CHED)	P				
Genome Instability* (TOXI)			D		
Glycoscience at the Crossroad of Health, Materials & Energy* (CARB)			D	D	
Modeling of Biomolecular Systems at Multiresolution* (COMP)			D	D	D
Perspectives in Applied Computational Methods* (COMP)			P	D	
Understanding & Predicting the Role of Water in Drug Design* (COMP)			P	P	A
Poster Session* (COMP)			E		

## Division of Business Development & Management **BMGT**

*D. Daly, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
Business Plan Competition for CEC**	A				
2012 Henry F. Whalen Jr. Award: Honoring Nance Dicciani			P		
Analytical Chemistry & Quality Management: Two Sides of the Same Coin* (ANYL)	A				
The Power of Chemistry in Public Health: Drug Development from the Lab Bench to the Consumer* (CHED)			D		

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# PROGRAM SUMMARY

## Division of Carbohydrate Chemistry

CARB

*X. Huang, Program Chair*

DoubleTree by Hilton Philadelphia Center City	S	M	Tu	W	Th
Current Topics in Glycoscience	P	D			
General Posters	E				
Sci-Mix		E			
Glycoscience at the Crossroad of Health, Materials & Energy**			D	D	
Renewable Biopolymers: Carbohydrates for Food, Nutrition, Health & Medicine* (CELL)		D	P	D	D
50 Years of NIGMS-Supported Chemistry Enabling Biomedical Research* (BIOL)		D			
Renewable Biopolymers: Developing Renewable Materials for Sustainable Healthy Living* (CELL)			A		

## Division of Catalysis Science & Technology

CATL

*C. Sievers, Program Chair*

DoubleTree by Hilton Philadelphia Center City	S	M	Tu	W	Th
Surface Science of Catalysis	D				
Computational Catalysis	P				
ACS Catalysis Lectureship for the Advancement of Catalytic Science Award Symposium**		D	A		
Progress in Electronic & Vibrational Spectroscopy of Catalytic Materials & Catalytic Reactions		D	D	D	A
Sci-Mix		E			
Catalysts for Biomass Conversion			P		
Synthesis of Catalysts				D	
Catalysis for Renewable Energy* (ENFL)	D	D			
Symposium in Honor of Umit Ozkan: Energy & Fuels Distinguished Researcher* (ENFL)		D	D	D	A
C1 Catalytic Chemistry* (ENFL)				D	A
Heterogeneous Catalysis for Environmental & Energy Applications* (ENVR)				DE	

## Division of Cellulose & Renewable Materials

CELL

*T. Elder, S. Murphy, Program Chairs*

Sheraton Philadelphia City Center Hotel	S	M	Tu	W	Th
Advances & New Product Platforms from the Chemical Pulping & Bleaching of Lignocellulosic Materials**	P				
CELL Poster Session	E				
Renewable Biopolymers: Carbohydrates for Food, Nutrition, Health z& Medicine** MAHM		D	P	D	D
Sci-Mix		E			
Renewable Biopolymers: Developing Renewable Materials for Sustainable Healthy Living**			A		
Introduction of Macromolecular Science/ Polymeric Materials into the Foundational Course in Organic Chemistry* (CHED)		D			
Simulations of Crowding, Confinement & Cellular Environments* (COMP)		P	P	P	
Glycoscience at the Crossroad of Health, Materials, & Energy* (CARB)			D	D	
Next-Generation Biofuels & Bioproducts: Advances & Challenges* (AGRO)					D

## Division of Chemical Education

CHED

*D. Rillema, I. Levy, S. Fleming, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Practical Applications of Using Visualization Techniques in Chemical Education	A				
High School Program**	D				
Mobile Devices, Augmented Reality & the Mobile Classroom	D				
Public Outreach	D				
Advances in Teaching Inorganic Chemistry in Laboratories	P				
General Posters	E				
Partnerships with Industry		A			
Advances in Teaching Organic Chemistry		D			
Introduction of Macromolecular Science/ Polymeric Materials into the Foundational Course in Organic Chemistry**		D			
Nanomaterials in Undergraduate Education & Research		D			

## Division of Chemical Education (Continued)

**CHED**
*D. Rillema, I. Levy, S. Fleming, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
The Green Chemistry Commitment**		P			
Undergraduate Research Posters**		P			
Sci-Mix		E			
Successful Student Chapter Posters**		E			
Chemistry & the Premedical Curriculum**			D		
Guiding the Trajectory of Chemistry Education Reform: Honoring Susan Hixson			D		
The Power of Chemistry in Public Health: Drug Development from the Lab Bench to the Consumer**			D		
Women in Chemistry**			D		
Chemistry & Art				A	
Process Oriented Guided Inquiry Learning (POGIL)				A	
NSF Catalyzed Innovations in the Undergraduate Curriculum				D	
Research in Chemical Education				D	
Innovation in Nuclear Magnetic Resonance Spectroscopy in Undergraduate Teaching & Research				P	
General Papers					A
Polymer Science of Everyday Things* (POLY)	D	D	E		

## Division of Chemical Health & Safety

**CHAS**
*L. Stroud, D. Decker, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
CHAS Awards** <i>MAHM</i>	P				
Latest Guidance on Laboratory Waste Management** <i>MAHM</i>		A			
Creating a Safety Culture in Academic Institutions** <i>MAHM</i>		P	D		

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MAHM: Materials for Health & Medicine

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## Division of Chemical Information

**CINF**
*R. Bienstock, Program Chair*

Philadelphia Marriott Downtown	S	M	Tu	W	Th
When Chemists & Computers Collide: Putting Cheminformatics in the Hands of Medicinal Chemists**	A				
Hunting for Hidden Treasures: Chemical Information in Patents & Other Documents**	D	P			
Science & the Law: Analytical Data in Support of Regulation in Health, Food & the Environment** <i>MAHM</i>	D				
Cheminformatics & Drug Repurposing	P				
CINFlash	P				
CINF Scholarship for Scientific Excellence*	E				
Open Notebook Science/Open Chemistry/Electronic Lab Notebook		D			
Future of the History of Chemical Information**		D			
Sci-Mix		E			
Herman Skolnik Award Symposium			D		
Chemical Space: Challengers in Visualization & Mining				A	
Global Opportunities in Chemical Information**				A	
Cheminformatics Opportunities in Personalized Medicine & Chemogenomics				P	
Informatics Approaches to Materials Design				P	
General Papers					A
Legal, Patent & Digital Rights Management in Publishing**					P
Membranes* (COMP)	A				
Drug Discovery* (COMP)	D	D	A	A	A
CSAR 2011-2012 Benchmark Exercise* (COMP)	D				
Material Science* (COMP)	D				
Molecular Mechanics* (COMP)	D	D	D	D	
Computational Approaches to Spectroscopy Analysis* (COMP)	DE				
What You Need To Know About the New U.S. Patent Laws* (SCHB)		A			
Scripting & Programming: Drug Discovery & High-Performance Computing in the Cloud* (COMP)		A			

# PROGRAM SUMMARY

## Division of Chemical Information **CINF**

*R. Bienstock, Program Chair*

Philadelphia Marriott Downtown	S	M	Tu	W	Th
Computational Study of Water* (COMP)		D			
Drug Discovery in Tyrosine Kinase Inhibitors & Drug Resistance* (COMP)		P			
Simulations of Crowding, Confinement & Cellular Environments* (COMP)		P	P	P	
Characterization & Screening of Databases of Porous Materials* (COMP)			A		
Perspectives in Applied Computational Methods* (COMP)			P	D	
Understanding & Predicting the Role of Water in Drug Design* (COMP)			P	P	A
Poster Session* (COMP)			E		

## Division of Chemical Toxicology **TOXI**

*S. Sturla, Program Chair*

DoubleTree by Hilton Philadelphia Center City	S	M	Tu	W	Th
Chemical Research in Toxicology Award Symposium	A				
TOXI Founders Award Symposium	P				
Young Investigators Symposium		A			
Drug Safety**		D			
TOXI Keynote Address		P			
Sci-Mix		E			
Genome Instability**			D		
General Posters			E		
General Papers				A	
Harnessing Nanotechnology for Human Health & Environment: Toxicology & Potential Health Implications of Engineered Nanomaterials** <i>MAHM</i>				P	
Science & the Law: Analytical Data in Support of Regulation in Health, Food & the Environment* (CINF)	A				
Material Science* (COMP)	D				
Drug Discovery* (COMP)	P				
The Power of Chemistry in Public Health: Drug Development from the Lab Bench to the Consumer* (CHED)			D		
Poster Session* (COMP)			E		

## Division of Chemical Toxicology **TOXI**

*S. Sturla, Program Chair*

DoubleTree by Hilton Philadelphia Center City	S	M	Tu	W	Th
Harnessing Nanotechnology for Human Health & Environment: How to Exploit Physicochemical Properties of Engineered Nanomaterials for Health & Societal Applications* (ANYL)				A	

## Division of Chemistry & the Law **CHAL**

*J. Hasford, K. Bianco, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Strengthening Your Patent Rights in Light of Recent Federal Circuit Court Decisions	A				
IP of Drug Discovery	P				
Forensic Chemistry, Science & the Law Presents: Innocence! The Work of the Innocence Project**		D			
Sci-Mix		E			
Recent Trends in Chemical & Pharmaceutical Law: What Every Company, Practitioner & Researcher Needs To Know			A		
Patent Law: A European Perspective			P		
Beyond the Bench: Nontraditional Careers in Chemistry				A	
Tailoring Your IP: How Small, Medium & Large Companies Can Maximize Patent Value				P	
Structural Analogs, Novel Compounds & the Federal Analog Act					A
The Many Faces of CHAL: Where Chemistry Meets the Law					P
Hunting for Hidden Treasures: Chemical Information in Patents & Other Documents* (CINF)	A				
Science & the Law: Analytical Data in Support of Regulation in Health, Food & the Environment* (CINF)	A				
Detection of Counterfeit Drugs* (SOCED)	A				



## Division of Colloid & Surface Chemistry

COLL

R. Nagarajan, Program Chair

Pennsylvania Convention Center	S	M	Tu	W	Th
Basic Research in Colloids, Surfactants & Nanomaterials <i>MAHM</i>	A			D	D
Chemistry & Physics in Tribology	D	D	A		
Functional Nanoparticles for Biomedical Application <i>MAHM</i>	D	DE	A	D	
Inorganic Surfaces & Colloids: Environment, Health & Toxicity <i>MAHM</i>	D	A			
Mineral Scales in Biological & Industrial Systems	D	D			
Molecular Processes at Solid Surfaces	D	D	A		
Half a Century of Fine Particles Science: Honoring Egon Matijevic at 90 <i>MAHM</i>	P	D	A	D	
<i>Nano Letters</i> Young Investigator Lectureship Award Symposium		A			
Abiotic/Biotic Interfaces** <i>MAHM</i>		P	A	D	D
Structure, Dynamics & Reactivity at Charged Interfaces**		P	A	D	D
Fundamental Research in Colloid & Surface Science		E			
Kinetics & Thermodynamics of Self-assembling Systems <i>MAHM</i>		E	A	D	D
<i>Langmuir</i> Award Lectures			P		
Applications of Vibrational Spectroscopy to Studies of Environmental Interfaces				D	
Membranes* (COMP)	A				
Material Science* (COMP)	D				
Recent Advances in Studies of Molecular Processes at Liquid Interfaces* (COMP)	P	D	D	D	A
Nanoscience & Nanotechnology for Health & Medicine* (MAHM)		P			
Simulations of Crowding, Confinement & Cellular Environments* (COMP)		P	P	P	
Emerging Quantitative Applications of Nonlinear Optical Measurements to Address Key Bottlenecks in Biological Sciences* (ANYL)		P	D	A	
Modeling of Biomolecular Systems at Multiresolution* (COMP)			D	D	D
Advances in Methods & Applications of SPM to Polymer Materials* (POLY)			E		
Poster Session* (COMP)			E		

## Division of Computers in Chemistry

COMP

E. Esposito, S. Wildman, Program Chairs

Pennsylvania Convention Center/ Philadelphia Marriott Downtown	S	M	Tu	W	Th
Membranes**	A				
Drug Discovery**	D	D	A	A	A
CSAR 2011–2012 Benchmark Exercise**	D				
Exploring Potential Energy Surfaces in Quantum Chemistry: A Tribute to H. Bernhard Schlegel**	D	D	D	D	
Material Science**	D				
Molecular Mechanics**	D	D	D	D	
Computational Approaches to Spectroscopy Analysis**	DE				
Continuum Solvation Modeling in Biological Systems: Developments & Applications**	P	D	D	D	D
Quantum Chemistry**	P	A	A	A	A
Recent Advances in Studies of Molecular Processes at Liquid Interfaces**	P	D	D	D	A
Scripting & Programming: Drug Discovery & High-Performance Computing in the Cloud**		A			
Computational Study of Water**		D			
Drug Discovery in Tyrosine Kinase Inhibitors & Drug Resistance**		P			
Simulations of Crowding, Confinement & Cellular Environments**		P	P	P	
Sci-Mix		E			
Characterization & Screening of Databases of Porous Materials**			A		
Modeling of Biomolecular Systems at Multiresolution**			D	D	D
Perspectives in Applied Computational Methods**			P	D	
Understanding & Predicting the Role of Water in Drug Design**			P	P	A

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# PROGRAM SUMMARY

## Division of Computers in Chemistry (Continued)

COMP

*E. Esposito, S. Wildman, Program Chairs*

Pennsylvania Convention Center/ Philadelphia Marriott Downtown	S	M	Tu	W	Th
Chemical Computing Group Excellence Award**			E		
Poster Session**			E		
OpenEye Outstanding Junior Faculty Award**			E		
Undergraduate Research Posters* (CHED)		P			
Entrepreneurship: Drug Discovery Innovation at Start-up, Small & Medium-sized Biotechnology Companies* (SCHB)			D		
The Power of Chemistry in Public Health: Drug Development from the Lab Bench to the Consumer* (CHED)			D		
From Fragments to Leads: Medicinal Chemistry in Fragment-based Drug Discovery* (MEDI)				P	

## Division of Energy & Fuels

ENFL

*Y. Hu, T. Gardner, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Advances in Analytical Methods in Petroleum Upstream Applications	A				
Catalysis for Renewable Energy**	D	D			
1st International Symposium on Graphene for Energy & Fuels	D	D	D		
4th International Symposium on Hydrogen from Renewable Sources & Refinery Applications	D	D	D		
8th International Symposium on Hydrotreating/Hydrocracking Technologies	D	D			
Frontiers in Energy & Fuels Research	D				
Green Chemistry in Energy & Fuels**	D	D			
Nanomaterials & Nanotechnologies for Energy & Fuels	D				
Solar Cells & Solar Energy**	D				
Hydrogen Storage & Utilization	P				
Metal-organic Frameworks for Energy & Fuels		D	D	D	A
Jet Fuels		D			

## Division of Energy & Fuels (Continued)

ENFL

*Y. Hu, T. Gardner, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Symposium in Honor of Eli Ruckenstein for His Catalysis Contributions		D			
Symposium in Honor of Umit Ozkan: Energy & Fuels Distinguished Researcher**		D	D	D	A
Sci-Mix		E			
Theory & Simulation in Energy & Fuel Production & Utilization			D	D	A
Advances in Fuel Cells			D		
Storch Award: Honoring Michael Siskin			D		
Heavy Hydrocarbon Resources: Characterization, Upgrading & Utilization			D	D	
Spectroscopy & Microscopy in Catalysis: The In Situ Age			D	D	A
1st International Symposium on Excellence in Energy & Fuels Graduate Research		P			
Advances in Energy & Fuel Processes, Systems, Materials & Utilization			P		
Bioenergy & Biofuels				D	A
Advances in Batteries				D	A
C1 Catalytic Chemistry**				D	A
Electron-Transfer Processes in Energy Production & Application				D	A
Characterization & Screening of Databases of Porous Materials* (COMP)			A		
Geochemistry & Environmental Issues Associated with Shale Gas Extraction* (GEOC)			A		
Poster Session* (COMP)			E		

## Division of Environmental Chemistry

ENVR

*D. Dionysiou, Program Chair*

Loews Philadelphia Hotel	S	M	Tu	W	Th
Addressing the Complex Site: Chemistry, Toxicology & Fate of Mixed Pollutants Across Environmental Media** MAHM	D			E	
Interactions of Nanomaterials with Emerging Environmental Contaminants** MAHM	D	A		E	
Materials for Water Sustainability** MAHM	D	D		E	

## Division of Environmental Chemistry (Continued)

ENVR

*D. Dionysiou, Program Chair*

Loews Philadelphia Hotel	S	M	Tu	W	Th
Innovative Materials & Technologies for Detection & Inactivation of Environmental Pathogens** <i>MAHM</i>		A			
Green Chemistry & the Environment**		D	A	E	
Innovative Technologies for Green, Grey, Brown & Black Water Reclamation & Reuse**		P		E	
Sci-Mix		E			
Environmental Biotechnology & Sustainability: Applications to Drinking Water, Industrial Waste Treatment & Site Remediation**			D	E	
Special Symposium in Honor of Paul L. Bishop**			D	E	
Environmental Chemistry of Fe-Oxides & Fe-Hydroxides			D	E	
C. Ellen Gonter Environmental Chemistry Award Symposium			P		
Heterogeneous Catalysis for Environmental & Energy Applications**				DE	
Spectroscopic Identification of Interfacial Chemical Species in Natural & Engineered Environments				DE	
Nanomaterials in Medicine, Food & the Environment** <i>MAHM</i>				DE	A
General Posters				E	
K-12 Environmental Scientists Forum				E	
Measurements & Methods in Environmental Nanotechnology**				E	A
Colloid Transport through Porous Media: Experimental Techniques & Parameterization through Modeling					A
Natural Products for Pest Management* (AGRO)	A				
Pesticide Environmental Fate Properties: Measurement, Prediction, Limitations & Reliability* (AGRO)	A				
Science & the Law: Analytical Data in Support of Regulation in Health, Food & the Environment* (CINF)	A				
Food Safety: New Technologies for the Protection of the Food Supply* (AGFD)	D	A			

## Division of Environmental Chemistry (Continued)

ENVR

*D. Dionysiou, Program Chair*

Loews Philadelphia Hotel	S	M	Tu	W	Th
Kinetics & Mechanism in the Atmosphere* (PHYS)	D	D	D	D	A
Neuroactive Compounds from Natural Products* (AGFD)	D				
Pesticides & Fumigant Emissions from Agricultural Systems* (AGRO)		A			
MRLs & Ag Chemicals* (AGRO)		D	A		
Discovering Bioactive Compounds* (AGFD)		D	D		
Undergraduate Research Posters* (CHED)		P			
Ensuring the Sustainability of Critical Materials & Alternatives: Addressing the Fundamental Challenges in Separation Science & Engineering* (ANYL)			D		
Is Your Analytical Method Good Enough?* (AGRO)			D	A	
Harnessing Nanotechnology for Human Health & Environment: How To Exploit Physicochemical Properties of Engineered Nanomaterials for Health & Societal Applications* (ANYL)				A	
Physical Methods in Food Analysis* (AGFD)				D	
Perfecting Communication of Chemical Risk* (AGRO)				P	
Harnessing Nanotechnology for Human Health & Environment: Toxicology & Potential Health Implications of Engineered Nanomaterials* (TOXI)				P	
Fate & Exposure of Urban Applied Pesticides in the Context of Human & Ecological Risk Assessments* (AGRO)					A
Next Generation Biofuels & Bioproducts: Advances & Challenges* (AGRO)					A

\*Cosponsored symposium with primary organizer shown in parentheses; located with primary organizer.

\*\*Primary organizer of a cosponsored symposium.

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# PROGRAM SUMMARY

## Division of Geochemistry

**GEOC**

*M. Taillefert, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
Applications of Advanced Analytical Methods in Petroleum Geochemistry		A			
Molecular Approaches To Investigate Processes at the Mineral-Water Interface		P			
Sci-Mix		E			
Geochemistry & Environmental Issues Associated with Shale Gas Extraction**			A		
Trace Metal-Mineral Interactions in the Environment			P		
Undergraduate Research Posters* (CHED)		P			
Poster Session* (COMP)			E		

## Division of the History of Chemistry

**HIST**

*S. Rasmussen, Program Chair*

Sheraton Philadelphia City Center Hotel	S	M	Tu	W	Th
General Papers	A				
Chemistry Books Edited by E. F. Smith**	P				
Celebrating the Sesquicentennial of the Land Grant College Act**			D		
Sci-Mix		E			
Characters in Chemistry			D		
Marie Maynard Daly: Her Life & Legacy**				P	
Future of the History of Chemical Information* (CINF)		A			

## Division of Industrial & Engineering Chemistry

**I & E C**

*M. Moore, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
Hydrocarbons from Biomass: Progress & Perspectives	D				
Thermodynamics & Kinetics: The Basic Science of Separations**	D				
Symposium in Honor of 2009 & 2010 ACS Fellows in I&EC**			D		
Sci-Mix		E			
I&EC Graduate Award Symposium			D		

## Division of Industrial & Engineering Chemistry (Continued)

**I & E C**

*M. Moore, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
Extraction of Uranium from Seawater			DE		
General Posters			E		
DfE Chemical Alternatives Assessments, Methodology & Implementation**				A	
General Papers				D	
Industrial Applications in Homogenous Catalysis**					A
Green Chemistry in Energy & Fuels* (ENFL)	A				
Analytical Chemistry & Quality Management: Two Sides of the Same Coin* (ANYL)	A				

## Division of Inorganic Chemistry

**I N O R**

*S. Koch, N. Radu, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Inorganic Catalysts	A		E		
Coordination Chemistry	A		PE	DE	
2012 Reaxys PhD Prize Winners Symposium	A				
Bioinorganic Chemistry	AE			PE	
Chemistry of Materials	DE			P	
Organometallic Chemistry	DE	P	E	DE	
Nanoscience	P		AE	DE	
Young Investigator Award Symposium	P				
Environmental & Energy Related Inorganic Chemistry	PE			P	
Lanthanide & Actinide Chemistry	PE				
Memorial Symposium for Michelle Millar: Exploration of Enzymes & Their Functions Using Synthetic Inorganic Chemistry**	PE	A			
Advanced Metal Nanostructures for Catalysis	E	D			
Progress & Challenges in Crystal Growth, Design & Characterization of Materials		D	AE		
Biochalcogen Chemistry: The Biological Chemistry of Sulfur, Selenium & Tellurium		D	DE		

**MAHM**

## Division of Inorganic Chemistry (Continued)

**INOR**
*S. Koch, N. Radu, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Main Group Chemistry Meets Polymer & Materials Science**		D	E		
Synthetic Inorganic Chemistry: A Great Future Built on 50+ Years of Success		D	DE		
N-Heterocyclic Carbenes in Catalysis		P	D	AE	
Sci-Mix		E			
Inorganic Spectroscopy			A	E	
ExxonMobil Solid State Chemistry Faculty Fellow Award: Honoring Michael Shatruk			P		
Inorganic Nanoscience Award: Honoring Daniel R. Gamelin			P		
2012 Organometallics Symposium**			PE		
Main Group Chemistry				AE	
Electrochemistry				PE	
Material Science* (COMP)	D				
ACS Catalysis Lectureship for the Advancement of Catalytic Science Award Symposium* (CATL)		D	A		
50 Years of NIGMS-Supported Chemistry Enabling Biomedical Research* (BIOL)		D			
Undergraduate Research Posters* (CHED)		P			
Characterization & Screening of Databases of Porous Materials* (COMP)			A		
Main Group Chemistry Meets Polymer & Materials Science* (PMSE)			D		
Poster Session* (COMP)			E		
2012 Organometallics Symposium* (ORGN)				A	
Industrial Applications in Homogenous Catalysis* (I&EC)					A

## Division of Medicinal Chemistry

**MEDI**
*J. Barrish, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
Personalized Health Care in Oncology	A				
General Oral Session	D		A	A	
First Time Disclosures of Clinical Candidates	P				
General Poster Session**	E			E	

## Division of Medicinal Chemistry (Continued)

**MEDI**
*J. Barrish, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
Cellular Targets & Chemical Biology**	A				
New Strategies for Targeting Parkinson's Disease & Other Neurodegenerative Conditions <b>MAHM</b>	A				
Peptide Hormones & Therapeutics	P				
Validating the Glutamatergic Hypothesis: How Far Have We Come?	P				
Sci-Mix	E				
MEDI Predoctoral Awardees: Where Are They Now?			A		
A Medicinal Chemist's Toolbox: A Tactical & Strategic Inventory			P		
MEDI Awards Symposium			P		
Bioisosteres Redux: Strategic Deployment in the Design & Development of Drug Candidates				A	
Drug Delivery Technologies: Getting Your Compounds to the Clinic <b>MAHM</b>				A	
Process Chemistry: The Role of Organic Synthesis in Early Clinical Drug Development**				P	
From Fragments to Leads: Medicinal Chemistry in Fragment-Based Drug Discovery**				P	
Small-Molecule Modulation of Cell Stress Response Pathways: From Chemical Design to Clinical Opportunities				P	
Membranes* (COMP)	A				
Science & the Law: Analytical Data in Support of Regulation in Health, Food & the Environment* (CINF)	A				
When Chemists & Computers Collide: Putting Cheminformatics in the Hands of Medicinal Chemists* (CINF)	A				
Drug Discovery* (COMP)	D	D	A	A	A

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# PROGRAM SUMMARY

## Division of Medicinal Chemistry (Continued)

**MEDI**
*J. Barrish, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
CSAR 2011-2012 Benchmark Exercise* (COMP)	D				
Molecular Mechanics* (COMP)	D	D	D	D	
Scripting & Programming: Drug Discovery & High-Performance Computing in the Cloud* (COMP)		A			
Eminent Scientist Lecture & Luncheon* (SOCED)		A			
50 Years of NIGMS-Supported Chemistry Enabling Biomedical Research* (BIOL)	D				
Computational Study of Water* (COMP)	D				
Drug Safety* (TOXI)		D			
Drug Discovery in Tyrosine Kinase Inhibitors & Drug Resistance* (COMP)		P			
Simulations of Crowding, Confinement & Cellular Environments* (COMP)		P	P	P	
Undergraduate Research Posters* (CHED)		P			
Entrepreneurship: Drug Discovery Innovation at Start-up, Small & Medium-Sized Biotechnology Companies* (SCHB)			D		
Glycoscience at the Crossroad of Health, Materials & Energy* (CARB)			D	D	
The Power of Chemistry in Public Health: Drug Development from the Lab Bench to the Consumer* (CHED)			D		
Innovative Chemistry Research for Health & Medicine: East Meets West* (IAC)			D		
Modeling of Biomolecular Systems at Multiresolution* (COMP)			D	D	D
Perspectives in Applied Computational Methods* (COMP)			P	D	
Understanding & Predicting the Role of Water in Drug Design* (COMP)			P	P	A
Poster Session* (COMP)			E		

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## Division of Nuclear Chemistry & Technology

**NUCL**
*K. Nash, J. Braley, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Celebrating the 100th Anniversary of the Birth of Glenn T. Seaborg & Charles Coryell	D	A			
General Topics in Nuclear & Radiochemistry	P				
Francis P. Garvan-John M. Olin Medal: Honoring Sue B. Clark**		D	D		
Young Investigators in Nuclear & Radiochemistry			P	D	
High-Energy-Density Physics & Chemistry				D	

## Division of Organic Chemistry

**ORGN**
*A. Abdel-Magid, R. Gawley, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Young Investigators	A				
Beckwith Memorial Symposium on Free Radical Chemistry	D				
Heterocycles & Aromatics	D	P	A		
Materials for Health & Medicine <b>MAHM</b>	D				
Total Synthesis of Complex Molecules	D	A			
Asymmetric Reactions & Syntheses	D	A			
Studying the Role of the Protein Backbone through Isosteric Substitution	P				
Asymmetric Reactions & Syntheses, Heterocycles & Aromatics, Total Synthesis of Complex Molecules, Physical Organic Chemistry: Calculations, Mechanisms, Photochemistry & High-Energy Species	E				
Process Chemistry: The Role of Organic Chemistry in Early Clinical Drug Development	A				
Peptides, Proteins & Amino Acids	A				
New Reactions & Methodology	D	D	D		
Physical Organic Chemistry: Calculations, Mechanisms, Photochemistry & High-Energy Species	D				
Celebration of International Chemistry	D				
Biologically Related Molecules & Processes	P	D			
Tetrahedron Prize for Creativity in Organic Chemistry	P				
Molecular & Supramolecular Chirality**	P				

**Division of Organic Chemistry  
(Continued)**
**ORGN**
*A. Abdel-Magid, R. Gawley, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Sci-Mix		E			
Microwave-Assisted Organic Chemistry: Honoring Ajay K. Bose**			A		
Arthur C. Cope & Arthur C. Cope Scholars Award Symposium			D		
Molecular Recognition & Self-Assembly			D	P	
Young Academic Investigators			D		
Material, Devices & Switches			P	D	
Metal-Mediated Reactions & Syntheses			P	D	
Materials for Health & Medicine, Biologically Related Molecules & Processes, Materials Devices & Switches, Metal-Mediated Reactions & Syntheses & Organometallics <i>MAHM</i>			E		
Advances in Biocatalysis				A	
2012 Organometallics Symposium**				A	
Technical Achievements in Organic Chemistry Award Symposium				D	
Advances in Antimicrobial Chemistry & Chemical Biology				P	
Molecular Recognition & Self-Assembly, New Reactions & Methodology, Peptides, Proteins & Amino Acids				E	
Material Science* (COMP)	D				
Chirality: Analytical Chemistry Challenges & Innovations* (ANYL)		A			
50 Years of NIGMS-Supported Chemistry Enabling Biomedical Research* (BIOL)		D			
Entrepreneurship: Drug Discovery Innovation at Start-up, Small & Medium-Sized Biotechnology Companies* (SCHB)			D		
Design & Applications of Organic & Metal-Organic Porous Materials* (PMSE)			D	D	
Glycoscience at the Crossroad of Health, Materials & Energy* (CARB)			D	D	
The Power of Chemistry in Public Health: Drug Development from the Lab Bench to the Consumer* (CHED)			D		
Teva Pharmaceuticals Scholars Inaugural Grant Symposium* (G&A)			P		
2012 Organometallics Symposium* (INOR)			P		
Poster Session* (COMP)			E		

**Division of Organic Chemistry  
(Continued)**
**ORGN**
*A. Abdel-Magid, R. Gawley, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Process Chemistry: The Role of Organic Synthesis in Early Clinical Drug Development* (MEDI)				P	
General Poster Session* (MEDI)				E	

**Division of Physical Chemistry**
**PHYS**
*M. Gruebele, Program Chair*

Philadelphia Marriott Downtown	S	M	Tu	W	Th
PHYS Undergraduate Workshop	A				
Dynamics & Jamming in Complex Environments	D	D	D	D	A
Kinetics & Mechanism in the Atmosphere**	D	D	D	D	A
Bridging the Gap Between Ab Initio & Classical Simulations	D	D	D	D	
Photochemistry in Biology	D	D	A	D	
Solvent Dynamics at Biomolecular Interfaces: Experiment & Theory**	D	D	D	D	A
Electron & Energy Transfer Phenomena: At the Intersection of Electronic Structure Theory & Chemical Dynamics	D	D	A	D	A
Synthesis, Spectroscopy, Theory & Applications of Nanocrystals & Nanowires	P	D	D	D	A
Sci-Mix		E			
PHYS Postdoctoral Awards			P		
PHYS Awards Symposium			P		
PHYS Poster Session				E	
Membranes* (COMP)	A				
Solar Cells & Solar Energy* (ENFL)	D				
CSAR 2011-2012 Benchmark Exercise* (COMP)	D				
Exploring Potential Energy Surfaces in Quantum Chemistry: A Tribute to H. Bernhard Schlegel* (COMP)	D	D	D	D	
Material Science* (COMP)	D				
Molecular Mechanics* (COMP)	D	D	D	D	
Computational Approaches to Spectroscopy Analysis* (COMP)	DE				

# PROGRAM SUMMARY

## Division of Physical Chemistry (Continued)

PHYS

*M. Gruebele, Program Chair*

Philadelphia Marriott Downtown	S	M	Tu	W	Th
Continuum Solvation Modeling in Biological Systems: Developments & Applications* (COMP)	P	D	D	D	D
Conventional & Differential Ion Mobility Spectrometry* (ANYL)	P	A			
Quantum Chemistry* (COMP)	P	A	A	A	A
Recent Advances in Studies of Molecular Processes at Liquid Interfaces* (COMP)	P	D	D	D	A
Computational Study of Water* (COMP)		D			
Simulations of Crowding, Confinement & Cellular Environments* (COMP)		P	P	P	
Emerging Quantitative Applications of Nonlinear Optical Measurements to Address Key Bottlenecks in Biological Sciences* (ANYL)		P	D	A	
Undergraduate Research Posters* (CHED)		P			
Characterization & Screening of Databases of Porous Materials* (COMP)			A		
Modeling of Biomolecular Systems at Multiresolution* (COMP)			D	D	D
Understanding & Predicting the Role of Water in Drug Design* (COMP)			P	P	A
Poster Session* (COMP)			E		

## Division of Polymer Chemistry

POLY

*S. Iacono, S. Lin-Gibson, J. Youngblood, Program Chairs*

Sheraton Philadelphia City Center Hotel	S	M	Tu	W	Th
Industrial Polymer Scientist Award: Honoring B. N. Gaddam	A				
Advances in Methods & Applications of SPM to Polymer Materials**	D	D	AE		
Polymer Science of Everyday Things**	D	D	E		
Polymers at the Interface with Biology: Opportunities in Antimicrobial Materials, Immunology, Delivery & Imaging <b>MAHM</b>	D	D	E		
Green Polymer Chemistry: Biocatalysis & Biobased Materials <b>MAHM</b>	P	D	DE	D	A
Sci-Mix		E			
Computational Polymer Modeling			DE	D	D

## Division of Polymer Chemistry (Continued)

POLY

*S. Iacono, S. Lin-Gibson, J. Youngblood, Program Chairs*

Sheraton Philadelphia City Center Hotel	S	M	Tu	W	Th
Bioconjugate Polymers			DE	D	
DSM Polymer Technology Award: Advanced Polymer Networks			P		
Energy & Materials			E	D	A
General Topics: New Synthesis & Characterization of Polymers			E		
POLY/PMSE Plenary Lecture & Awards Reception**				E	
Material Science* (COMP)	D				
AkzoNobel Award for Outstanding Graduate Research in Polymer Chemistry: Honoring Garret Miyake* (PMSE)		A			
Renewable Biopolymers: Carbohydrates for Food, Nutrition, Health & Medicine* (CELL)		D	P	D	D
Introduction of Macromolecular Science/ Polymeric Materials into the Foundational Course in Organic Chemistry* (CHED)		D			
Undergraduate Research Posters* (CHED)		P			
Renewable Biopolymers: Developing Renewable Materials for Sustainable Healthy Living* (CELL)			A		
Characterization & Screening of Databases of Porous Materials* (COMP)			A		
Poster Session* (COMP)			E		

## Division of Polymeric Materials: Science & Engineering

PMSE

*J. Baghdachi, Program Chair*

Sheraton Philadelphia City Center Hotel	S	M	Tu	W	Th
PMSE Young Investigator's Symposium	D	P			
ACS Polymer Award: Honoring John Reynolds**	D				

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**Division of Polymeric Materials:  
Science & Engineering  
(Continued)**
**PMSE**
*J. Baghdachi, Program Chair*

Sheraton Philadelphia City Center Hotel	S	M	Tu	W	Th
Polymeric Biomaterials <i>MAHM</i>	D	D	D		
Roy W. Tess Award: Honoring Benny D. Freeman	D	D			
AkzoNobel Student Award Symposium**	P				
Field Responsive Polymeric Materials		A	D		
AkzoNobel Award for Outstanding Graduate Research in Polymer Chemistry: Honoring Garret Miyake**		A			
WCU International Symposium on Energy Storage & Conversion**		D	D	D	
<i>Journal of Polymer Science</i> Award: Honoring Christopher Bielawski**		P			
Sci-Mix		E			
Main Group Chemistry Meets Polymer & Materials Science**			D		
Design & Applications of Organic & Metal-Organic Porous Materials**			D	D	
Joint PMSE/POLY Poster Session			E		
Polymeric Materials & Surfaces for Cell Differentiation** <i>MAHM</i>				D	
General Papers/New Concepts in Polymeric Materials				D	D
Polymers for Personal Care & Cosmetics** <i>MAHM</i>				D	
Polymer Science of Everyday Things* (POLY)	D	P	E		
Material Science* (COMP)	D				
Introduction of Macromolecular Science/ Polymeric Materials into the Foundational Course in Organic Chemistry* (CHED)		D			
Main Group Chemistry Meets Polymer & Materials Science* (INOR)		D			
Undergraduate Research Posters* (CHED)		P			
Characterization & Screening of Databases of Porous Materials* (COMP)			A		
Poster Session* (COMP)			E		
POLY/PMSE Plenary Lecture & Awards Reception* (POLY)				E	

**Division of Professional Relations**
**PROF**
*R. Libby, Program Chair*

Philadelphia Downtown Courtyard by Marriott	S	M	Tu	W	Th
International Activities: Here's How We Did It**	P				
Beyond the Bench: Nontraditional Careers in Chemistry**		D			
Sci-Mix		E			
Value of GLBT Diversity & Inclusion to Innovation in the Chemical Enterprise			A		
Ethics in Industry: NOT an Oxymoron!**			P		
True Stories of Success & Best Practices from Chemical Entrepreneurs* (SCHB)	A				
Science & the Law: Analytical Data in Support of Regulation in Health, Food & the Environment* (CINF)	A				
Marketing & Technical Sales for Start-up & Growing Businesses* (SCHB)	P				
Young Chemist International Collaborations* (YCC)	P				
How Small Businesses Increase Sales & Grow Using Social Media* (SCHB)	P				
What You Need To Know About the New U.S. Patent Laws* (SCHB)		A			
Entrepreneurship: Drug Discovery Innovation at Start-up, Small & Medium-Sized Biotechnology Companies* (SCHB)			D		
Global Opportunities in Chemical Information* (CINF)				A	
Legal, Patent & Digital Rights Management in Publishing* (CINF)					P

**Rubber Division**
**RUBB**
*J. Walker, Program Chair*

Located with Primary Sponsor	S	M	Tu	W	Th
Introduction of Macromolecular Science/ Polymeric Materials into the Foundational Course in Organic Chemistry* (CHED)		D			

# PROGRAM SUMMARY

## Division of Small Chemical Businesses

SCHB

*J. Sabol, Program Chair*

Philadelphia Downtown Courtyard by Marriott	S	M	Tu	W	Th
True Stories of Success & Best Practices from Chemical Entrepreneurs**	A				
Marketing & Technical Sales for Start-up & Growing Businesses**	P				
How Small Businesses Increase Sales & Grow Using Social Media**	P				
What You Need To Know About the New U.S. Patent Laws**		A			
Making Running for Elected Office a Part of Your Career**		P			
Sci-Mix		E			
Entrepreneurship: Drug Discovery Innovation at Start-up, Small & Medium-Sized Biotechnology Companies**			D		
Terahertz Spectroscopy Moves from the Laboratory to the Commercial Sector**				D	
Hunting for Hidden Treasures: Chemical Information in Patents & Other Documents* (CINF)	A				
Analytical Chemistry & Quality Management: Two Sides of the Same Coin* (ANYL)	A				
International Activities: Here's How We Did It* (PROF)	P				
Memorial Symposium for Michelle Millar: Exploration of Enzymes & Their Functions Using Synthetic Inorganic Chemistry* (INOR)	P	A			
Business Plan Competition for CEC* (BMGT)		A			
Beyond the Bench: Nontraditional Careers in Chemistry* (PROF)		D			
Commercialization through Partnerships with Industry & Investors* (COMSCI)			P		
Ethics in Industry: NOT an Oxymoron!* (PROF)			P		

## Division of Small Chemical Businesses (Continued)

SCHB

*J. Sabol, Program Chair*

Philadelphia Downtown Courtyard by Marriott	S	M	Tu	W	Th
Global Opportunities in Chemical Information* (CINF)				A	

## Committee on Environmental Improvement

CEI

*R. Lomneth, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
Chemistry & the Environment Film Series**	E				
Ensuring the Sustainability of Critical Materials & Alternatives: Addressing the Fundamental Challenges in Separation Science & Engineering* (ANYL)			D		

## Committee on Grants & Awards

G & A

*K. Voorhees, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
Teva Pharmaceuticals Scholars Inaugural Grant Symposium** <i>MAHM</i>			P		

## Committee on Science

COMSCI

*M. Chorgade, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
Young Investigator Awardee Forum		A			
Commercialization through Partnerships with Industry & Investors** <i>MAHM</i>			P		
Business Plan Competition for CEC* (BMGT)		A			
Ensuring the Sustainability of Critical Materials & Alternatives: Addressing the Fundamental Challenges in Separation Science & Engineering* (ANYL)			D		

## International Activities Committee

I A C

*M. Hurrey, J. Benham, Program Chairs*

Philadelphia Marriott Downtown	S	M	Tu	W	Th
International Sustainable Development: Institutional Frameworks**		A			
Innovative Chemistry Research for Health & Medicine: East Meets West** <b>MAHM</b>			D		

## Society Committee on Education

SOCED

*M. Carroll, Program Chair*

Sheraton Philadelphia City Center Hotel/Pennsylvania Convention Center	S	M	Tu	W	Th
Detection of Counterfeit Drugs**	A				
Eminent Scientist Lecture & Luncheon**		A			
Chemistry & the Environment Film Series* (CEI)	E				
Introduction of Macromolecular Science/ Polymeric Materials into the Foundational Course in Organic Chemistry* (CHED)			D		
Undergraduate Research Posters* (CHED)		P			
Successful Student Chapter Posters* (CHED)			E		
Chemistry & the Premedical Curriculum* (CHED)				D	

## Women Chemists Committee

W C C

*A. Charlebois, A. Debaillie, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Past Chairs Celebrating 85 Years of WCC		A			
Women in Chemistry* (CHED)			D		
Francis P. Garvan-John M. Olin Medal: Honoring Sue B. Clark* (NUCL)			D	D	
Marie Maynard Daly: Her Life & Legacy* (HIST)				P	

## Younger Chemists Committee

Y C C

*A. Myers, T. Matos, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Young Chemist International Collaborations**	P				
True Stories of Success & Best Practices from Chemical Entrepreneurs* (SCHB)	A				
How Small Businesses Increase Sales & Grow Using Social Media* (SCHB)	P				
What You Need To Know About the New U.S. Patent Laws* (SCHB)		A			
Beyond the Bench: Nontraditional Careers in Chemistry* (PROF)		D			
Making Running for Elected Office a Part of Your Career* (SCHB)		P			
Entrepreneurship: Drug Discovery Innovation at Start-up, Small & Medium-Sized Biotechnology Companies* (SCHB)			D		
Poster Session* (COMP)			E		

\*Cosponsored symposium with primary organizer shown in parentheses; located with primary organizer.

\*\*Primary organizer of a cosponsored symposium.

MAHM: Materials for Health & Medicine

A = AM AE = AM/EVE P = PM D = AM/PM  
E = EVE DE = AM/PM/EVE PE = PM/EVE

# 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](http://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, 3 to 6 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 and training requests are not accepted. For wire transfer payments, contact the ACS Finance Department at (202) 872-6106 or e-mail [bankwires@acs.org](mailto: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](mailto: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 the registrant 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).

**Social 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.

REGISTRATION CATEGORY	FEE	
	EARLY BY JULY 24	STANDARD AFTER JULY 24
<b>MEMBERS</b>		
ACS member or society affiliate	\$360	\$435
Postdoctoral member	360	435
Emeritus or retired member	180	220
50-year member	No Fee	No Fee
Unemployed member (Dues waiver required)	No Fee	No Fee
Precollege teacher	90	90
Graduate, less than postdoctoral	180	180
Undergraduate	90	90
One-day registrant	180	220
<b>NONMEMBERS</b>		
Chemical scientist	\$640	\$770
Postdoctoral scientist	640	770
Visitor: Nonchemical scientist or chemical technician	360	435
Precollege teacher	90	90
Graduate, less than postdoctoral	360	360
Undergraduate	180	180
One-day registrant	360	435
Guest of registrant <sup>a</sup>	40	40
<b>EXPOSITION-ONLY VISITORS</b>		
Adult, exposition only	\$50	\$50
Student, exposition only	25	25

<sup>a</sup> 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](http://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<sup>st</sup> Prize

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

A New  
iPad\*

2<sup>nd</sup> Prize

Free Hotel  
Accommodations\*

3<sup>rd</sup> Prize

A New  
iPod\*

Top Reasons

To Book Your Reservation Through Orchid Event Solutions:

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.

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](http://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](mailto: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](http://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](mailto: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](http://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

#### MEETING INFO ON THE WEB

Registration, housing, technical programming, special events, participating exhibitors, and other meeting details are available at [www.acs.org/philly2012](http://www.acs.org/philly2012).

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](http://www.acs.org/expositions).

**CAREER FAIR EMPLOYER REGISTRATION.** ACS Career Fair Employer registration is handled exclusively through ACS Careers at [www.acs.org/careers](http://www.acs.org/careers).

## TICKETED EVENTS

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](http://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](http://womenchemists.sites.acs.org/WCC_workshop_Philadelphia.pdf).  
See description in "Workshops" (page 84)

**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

**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 Phil-  
adelphia, 19 South 22nd St.

**ENFL Awards Dinner/SE-19/\$45**

6:30 to 9:30 PM, Maggiano's Little Italy,  
1201 Filbert St.

**ENVR Dinner & Social/SE-20/\$60**

6:30 to 9:30 PM, Chemical Heritage Foun-  
dation, 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](http://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](http://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.

**ACCOMMODATIONS FOR GUESTS WITH DISABILITIES.** If you require special hotel accommodations because of a disability, please indicate your requirements when you make your reservation. Be sure to reconfirm any special room arrangements directly with your hotel.

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

**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 these properties and ask for the listed ACS rate. Properties are not included on the ACS shuttle route; therefore, daily transportation costs are the responsibility of the attendee.

**Best Western Center City,** 501 North 22nd St.; (215) 568-8300; ACS rate \$99 single/double occupancy.

# American Chemical Society

## 244th National Meeting

### Participating Hotel List

Hotels in Philadelphia, PA

FOR BEST AVAILABILITY, MAKE YOUR RESERVATION VIA THE INTERNET

[www.acs.org/meetings/national](http://www.acs.org/meetings/national)

OR BY PHONE (866) 847-8570 or (801) 505-4140 (international).

**ALL RATES INCLUDE COMPLIMENTARY INTERNET**

Hotels*	Single	Double	Triple	Quad	Maximum Occupants Per Room	No Charge for Children Under This Age	Childcare Information Available	On ACS Shuttle Route	Per Day Hotel Parking Rates	Room-Service Available	Complimentary Internet	Pets Allowed	Fitness Center	Swimming Pool	Accessible Rooms	Smoking Rooms Available	Environmentally Friendly
	(1 person)	(2 persons)	(3 persons)	(4 persons)													
1 - Sonesta Hotel Philadelphia (formerly the Crowne Plaza)	\$205	\$205	\$215	\$225	4	N/A	No	Yes	\$42	Yes	Yes	Service	Yes	Yes	Yes	No	Yes
2 - DoubleTree by Hilton Philadelphia Center City	\$175	\$195	\$215	\$225	4	12	No	Yes	\$25/ \$29	Yes	Yes	Service	Yes	Yes	Yes	No	Yes
3 - Embassy Suites Philadelphia Center City	\$205	\$225	\$245	\$265	4	18	No	Yes	\$37	Yes	Yes	Service	Yes	No	Yes	Yes	Yes
4 - Four Points by Sheraton Philadelphia City Center	\$199	\$199	\$219	\$239	4	16	No	No	\$24	Yes	Yes	No	Yes	No	Yes	No	Yes
5 - Four Seasons Hotel Philadelphia	\$224	\$224	\$264	N/A	3	16	Yes	Yes	\$25/ \$49	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6 - Hampton Inn City Center Philadelphia	\$174	\$174	\$184	\$194	4	17	No	No	\$25/ \$35	No	Yes	Service	Yes	Yes	Yes	No	Yes
7 - Hilton Garden Inn Philadelphia Center City	\$199	\$221	\$231	\$241	4	12	No	No	\$33	Dinner Only	Yes	No	Yes	Yes	Yes	No	Yes
8 - Hotel Palomar Philadelphia	\$189	\$189	\$209	\$229	4	17	No	Yes	\$40	Yes	Yes	Yes	Yes	No	Yes	No	Yes
9 - Hyatt at the Bellevue	\$204	\$204	\$229	\$254	4	18	No	Yes	\$27/ \$37	Yes	Yes	No	Yes	No	No	No	No
10 - Le Meridien Philadelphia	\$229	\$229	\$249	\$269	4	16	Yes	No	\$38	Yes	Yes	Service	Yes	No	Yes	No	Yes
11 - Loews Philadelphia Hotel	\$219	\$229	\$239	\$249	4	17	Yes	No	\$36	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
12 - Philadelphia Downtown Courtyard by Marriott	\$203	\$232	\$252	\$272	4	N/A	No	No	\$45.60	No	Yes	Service	Yes	Yes	Yes	No	Yes
13 - Philadelphia Marriott Downtown	\$228	\$250	\$270	\$290	4	18	No	No	\$45.60	Yes	Yes	Service	Yes	Yes	Yes	No	Yes
14 - Radisson Plaza-Warwick	\$175	\$195	\$215	\$235	4	13	Yes	Yes	\$34	Yes	Yes	Yes	Yes	No	Yes	No	Yes
15 - Sheraton Philadelphia City Center Hotel	\$199	\$219	\$239	\$259	4	18	Yes	Yes	\$38/ \$44	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
16 - Sofitel Philadelphia	\$209	\$209	\$229	\$249	4	16	Yes	Yes	\$41	Yes	Yes	Yes	Yes	No	Yes	No	Yes
17 - The Ritz-Carlton Philadelphia	\$229	\$229	\$264	N/A	3	12	Yes	Yes	\$41	Yes	Yes	Yes	Yes	No	Yes	No	Yes
18 - Westin Philadelphia	\$225	\$225	\$245	\$265	4	17	Yes	Yes	\$36/ \$49	Yes	Yes	Yes	Yes	No	Yes	No	Yes

The rates listed above do not include the current 15.2% room and occupancy tax per room per night, which is subject to change.

**\*Additional fees may apply:**

If a rollaway bed is required

If there are pets in guestrooms

If smoking occurs in guestrooms

**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](http://www.acs.org/philly2012).

## SUSTAINABILITY PRACTICES

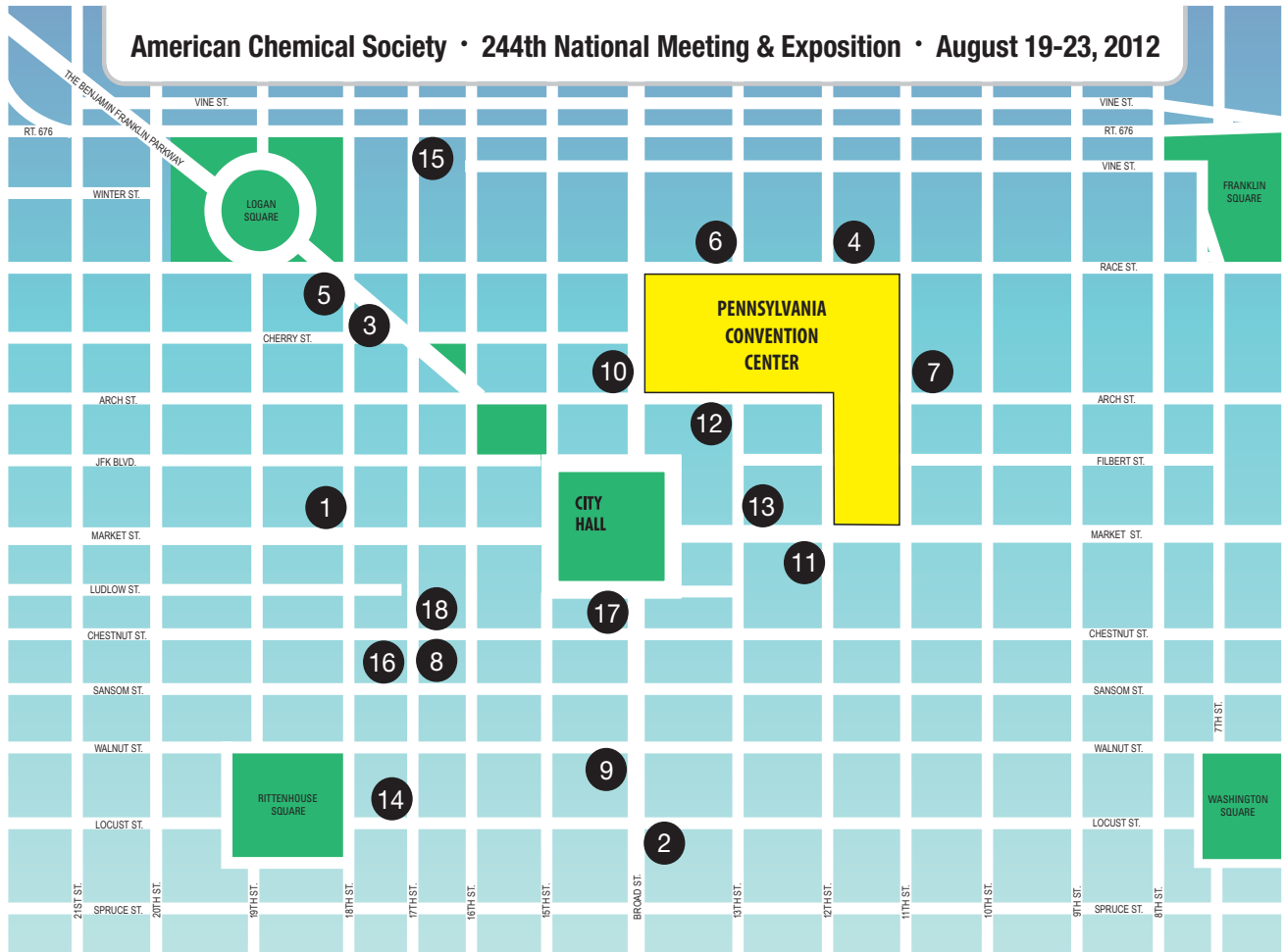
**THE AMERICAN CHEMICAL SOCIETY** is committed to sustainable meetings and event practices that promote social responsibility, support economic development, and reduce the environmental impact locally, nationally, and globally. Since 2008, the ACS Committee on Meetings &

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**



<b>Hotel</b>	<b>Walking time (in minutes) from PCC</b>	<b>Distance (in miles) from PCC</b>
1. Sonesta Hotel Philadelphia (formerly the Crowne Plaza)	within a 15 minute walk to Convention Center	0.6
2. DoubleTree by Hilton Philadelphia Center City	within a 10 minute walk to Convention Center	0.82
3. Embassy Suites Philadelphia Center City	within a 10 minute walk to Convention Center	0.6
4. Four Points by Sheraton Philadelphia City Center	within a 4 minute walk to Convention Center	375 (feet)
5. Four Seasons Hotel Philadelphia	within a 10 minute walk to Convention Center	0.6
6. Hampton Inn City Center Philadelphia	within a 4 minute walk to Convention Center	0.1
7. Hilton Garden Inn Philadelphia Center City	within a 4 minute walk to Convention Center	0.1
8. Hotel Palomar Philadelphia	within a 15 minute walk to Convention Center	0.6
9. Hyatt at the Bellevue	within a 10 minute walk to Convention Center	0.5
10. Le Meridien Philadelphia	within a 4 minute walk to Convention Center	0.3
11. Loews Philadelphia Hotel	within a 4 minute walk to Convention Center	0.2
12. Philadelphia Downtown Courtyard by Marriott	within a 4 minute walk to Convention Center	0.2
13. Philadelphia Marriott Downtown	Connected to Convention Center	
14. Radisson Plaza-Warwick	within a 15 minute walk to Convention Center	0.7
15. Sheraton Philadelphia City Center Hotel	within a 4 minute walk to Convention Center	0.5
16. Sofitel Philadelphia	within a 15 minute walk to Convention Center	0.6
17. The Ritz-Carlton Philadelphia	within a 4 minute walk to Convention Center	0.3
18. Westin Philadelphia	within a 15 minute walk to Convention Center	0.5

the future of corporate social responsibility 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](http://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](http://www.acs.org/committees).

## 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) 328-1111; Discount Code: NM9MB

### United Airlines

(800) 521-4041; Discount Code: 585OW (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](http://septa.org) or call (215) 580-7800 for trip planning and route information.

**Rental Cars.** Courtesy 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 Road-

way. 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](http://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](http://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](http://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](http://www.acs.org/philly2012). Use the Meeting

### **TIPS FOR A SAFE STAY IN PHILADELPHIA**

- Attendees should be aware of their surroundings at all times.
- Don't wear your meeting badge outside the convention center or hotels.
- Don't wear fancy jewelry or carry expensive technology in plain sight.
- Carry your briefcase, tote bag, purse, or laptop carrier close to your body.
- Don't leave valuables in your hotel room. Get a hotel safe deposit box.
- Walk in open and in well-lit areas at night.
- Travel in groups. Don't be a loner, particularly in the evening.
- Use common sense. If someone or someplace looks suspicious, report it and/or avoid it.
- If an emergency occurs during a meeting event, refer to detailed instructions placed by ACS staff inside each meeting room to follow in case of emergencies. Report emergencies to the nearest security guard or to any ACS Operations Office during the meeting.
- If an emergency occurs outside an ACS event, contact police or emergency assistance by dialing 911 or seeking assistance from the facility where the emergency occurs.
- Should a catastrophic event occur while the meeting is under way, follow safety and security instructions issued by the facility where you are located at the time of the event.

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](mailto: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](http://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

### **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](http://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:

**Operations Offices:** Pennsylvania Convention Center, DoubleTree by Hilton Philadelphia Center City, Loews Philadelphia Hotel, Philadelphia Downtown Courtyard by Marriott, Philadelphia Marriott Downtown, Sheraton Philadelphia City Center Hotel, Sofitel Philadelphia, Sonesta Hotel Philadelphia (formerly the Crowne Plaza).

**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.** Attendees 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](http://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](mailto: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-

### THANK YOU

The society thanks the many volunteers of the Philadelphia Local Section who are contributing to the 244th ACS National Meeting & Exposition by participating as division officers or program chairs, symposium organizers, session or award presiders, oral and poster presenters, short course or workshop instructors, career consultants, and society governance members.

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](http://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](mailto:jmathews@psu.edu)

**Polymer Chemistry.** Kathy Mitchem  
e-mail: [kathyl@vt.edu](mailto:kathyl@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](http://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](http://www.acs.org/philly2012).

### SUNDAY, AUG. 19

**Double 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.

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### 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

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### 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](http://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.

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### MONDAY, AUG. 20

**Graduate & Postdoctoral Scholar Reception,** 7–8:30 PM

### Academic Employment Initiative Poster Session at Sci-Mix, 8–10 PM

For more information, contact the ACS Graduate & Postdoctoral Scholars Office at (800) 227-5558 ext. 4588 or go to [www.acs.org/grad](http://www.acs.org/grad).

### HIGH SCHOOL TEACHERS PROGRAM.

The Division of Chemical Education and the ACS Education Division are sponsoring the High School Teachers Program. This program will embrace the overarching theme of the Philadelphia meeting, “Materials for Health & Medicine,” by presenting information and activities related to green chemistry. The presentations will also explore new methods of teaching, classroom tools, resources, and activities. The High School/College Interface Luncheon will bring together educators from different levels with the goal of facilitating an exchange of ideas and networking among teachers.

High school teachers can register for this program directly through Attendee Registration; the special registration fee includes course materials, lunch, access to the full ACS meeting (Sunday through Thursday), and entry to the exposition (Sunday to Tuesday). Attendees can track professional development (based on clock hours) for sessions attended at the ACS national meeting. On completion and submission of ACS forms, participants will be mailed a certificate documenting their participation at the meeting.

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### 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](mailto:education@acs.org); (800) 227-5558 ext. 2105.

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## 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 registra-

tion \$300, full registration \$375. Registration is required for all CHAS workshops. Register online at [dchas.org](http://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](http://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](mailto:rphifer@nrcc6.org) or by mail to NRCC, 125 Rose Ann La., West Grove, PA 19390; (610) 322-0657; [nrcc6.org](http://nrcc6.org).

**GREEN CHEMISTRY WORKSHOPS.** Registration is required online through [prod.acs.org](http://prod.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](http://www.acs.org/leaderdevelopment). For more information, contact Kareem Redmond, (202) 872-6015, e-mail [leaders@acs.org](mailto: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](mailto:gci@acs.org) or (202) 872-6173.

**Intermediate-Level Green Chemistry (201).** Monday, Aug. 20, 1 to 4 PM. DoubleTree 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](mailto: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](mailto:gci@acs.org) or (202) 872-6173.

**COACHing Strong Women in the Art of Strategic Persuasion.** Saturday, Aug. 18, 8:30 AM to 5 PM. Sheraton Philadelphia City Center Hotel. *Sponsored by COACH.* 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. Free; preregistration is required at [coach.uoregon.edu](http://coach.uoregon.edu). Travel assistance is available. For more information, contact Priscilla Lewis at [coach@uoregon.edu](mailto: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 COACH.* This workshop for women postdoctoral associates teaches skills in assimilating the fundamentals of responsible negotiations and communication. Attendees will examine the importance of developing alternatives 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. Free; preregistration is required at [coach.uoregon.edu](http://coach.uoregon.edu). Travel assistance is available. For more information, contact Priscilla Lewis at [coach@uoregon.edu](mailto: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](mailto: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 Arribor, 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](mailto:f.guengerich@vanderbilt.edu), or Daniel Liebler at [Daniel.liebler@vanderbilt.edu](mailto: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](mailto:f.guengerich@vanderbilt.edu), or Daniel Liebler at [Daniel.liebler@vanderbilt.edu](mailto: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. 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](mailto:ttroxler@sas.upenn.edu) for questions or visit the website at [rlbl.chem.upenn.edu](http://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](http://proed.acs.org); phone: (202) 872-4508; fax: (202) 872-6336; e-mail: [shortcourses@acs.org](mailto: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. 21–21  
**Chemical Toxicology: A Chemist's Roadmap To Reduce Bioactivation**

**Liabilities in Drug Candidates**, Aug. 18  
**Computer-Assisted Drug Design**, Aug. 21–22  
**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  
**Computer-Assisted Drug Design**, Aug. 21–22  
**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  
**Particle Surface Modification Technologies for Improving Properties & Applications**, Aug. 20  
**Process Research in the Pharmaceutical Industry: The Design & Development of Practical Syntheses**, 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 30 career-related workshops
- Keynote speakers presented live and via webcast
- Request interviews

**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](http://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](http://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:

- Connect with top talent via on-site and online interviews.
- Screen candidates and make appointments in advance.

- 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](http://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](http://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](mailto: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](http://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](http://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](http://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](http://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 lunchtime 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, advisers, 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.

### 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

### 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

### 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

### CHEMISTRY & PUBLIC AFFAIRS

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

Open Meeting  
**Monday, Aug. 20, 8 AM–4 PM**  
Philadelphia Marriott Downtown

### CHEMISTS WITH DISABILITIES

Karl S. Booksh, chair; University of Delaware, Chemistry & Biochemistry Department, Newark, DE 19716

Combined Open Meeting  
and Executive Session  
**Monday, Aug. 20, 8:30 AM–4:30 PM**  
Philadelphia Marriott Downtown

### COMMITTEES

Dawn A. Brooks, chair; 10762 Forest Lake Ct., Indianapolis, IN 46278

Open Executive Session  
**Monday, Aug. 20, 1:30–2:30 PM**  
Philadelphia Marriott Downtown

### 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

### 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

Executive Sessions  
**Sunday, Aug. 19, 9 AM–1 PM**  
and **1:30–5 PM;**  
**Wednesday, Aug. 22,**  
end of council to **2:30 PM**  
Philadelphia Marriott Downtown

### CORPORATION ASSOCIATES

Anne S. DeMasi, chair; 2909 South 19th St., Philadelphia, PA 19145-4741

Open Meeting  
**Monday, Aug. 20, 8 AM–noon**  
Four Seasons Hotel Philadelphia

### COUNCIL POLICY

Carolyn Ribes, vice chair; cribes@dow.com

Open Meeting  
**Tuesday, Aug. 21, 9:30 AM–noon**  
Philadelphia Marriott Downtown

### DIVISIONAL ACTIVITIES

John Pochan, chair; johnpochan@hotmail.com

Open Session  
**Sunday, Aug. 19, 7:30 AM–noon**  
Philadelphia Marriott Downtown

### ECONOMIC & PROFESSIONAL AFFAIRS

Lisa Balbes, chair; 648 Simmons Ave., Kirkwood, MO 63122-2740

Executive Session  
**Saturday, Aug. 18, 8 AM–5:30 PM**  
Pennsylvania Convention Center

Open Executive Session  
**Sunday, Aug. 19, 8 AM–noon**  
Pennsylvania Convention Center

### 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](http://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

Executive Session

**Sunday, Aug. 19, 8 AM–noon**  
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), Binghamton, Vestal Pkwy. East, P.O. Box 6000, Binghamton, NY 16902

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, 100 West 18th Ave., 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, 2200 Bonforte Blvd., Pueblo, CO 81001-4901

Open Meeting

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

Executive Session

**Saturday, Aug. 18, 10:30 AM–5 PM**  
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



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 include a free pass to the Expo! Early Registration and group discounts are available.

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