

One of Philadelphia's most recognizable sites is this bronze statue commemorating the fictional Rocky Balboa, located near the Philadelphia Museum of Art.



ACS NATIONAL MEETING

252nd ACS National Meeting

Philadelphia, August 21–25

“Chemistry of the People, by the People, for the People” will be the theme in Philadelphia this August. A plenary session on that topic will be held on Sunday, Aug. 21, from 3 to 6 PM and will feature Willie May of the National Institute of Standards & Technology; Kimberly Prather of the University of California, San Diego; and Rolf Halden of Arizona State University. Many notable symposia are scheduled, including

“Chemical Sciences & Human Rights” and “Chemistry in the U.S. & China: Current & Future States of Shared Scientific Interests & Opportunities for Collaboration.”

ACS President Donna Nelson will host 27 technical divisions and five committees in original programming over 860 half-day oral sessions and 145 poster sessions, including Sci-Mix. More than 9,000 papers and nearly 2,800 posters will be presented at the meeting.

In concert with the meeting theme, Nelson will sponsor several presidential events. A symposium to honor the 2016 Citation for Chemical Breakthrough Awards

will be held the morning of Sunday, Aug. 21. On Monday, Aug. 22, “Fracking: Economics vs. Environment” highlights the implications of hydraulic fracturing. Details on these and other presidential events can be found at www.acs.org/philadelphia2016.

Many education-focused programs for high school teachers, undergraduate and graduate students, postdocs, and chemical professionals will be offered. A range of professional development courses will be available; ACS Professional Education Short Courses have a separate registration and fee. For job seekers and employers, the career fair will provide opportunities for on-site interviews, one-on-one career assistance, and career-related workshops.

The exposition will feature more than 250 companies showcasing services, instruments, books, and lab equipment in more than 300 booths.—ALEXANDRA TAYLOR

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MEETING INFO ON THE WEB

www.acs.org/philadelphia2016

Presidential Events

PRES

D. Nelson, Program Chair

Philadelphia Marriott Downtown/ Pennsylvania Convention Center	S	M	Tu	W	Th
Chemical Sciences & Human Rights**	A				
Citation for Chemical Breakthrough Award to Rice University: Symposium Honoring Robert Curl**	A				
Chemistry in the U.S. & China: Current & Future States of Shared Scientific Interests & Opportunities for Cooperation**	P	A			
Building International Communities**	P				
Fracking: Economics vs. Environment**	A				
Broadening Participation in Global Chemistry Experiences: Why Engaging Diverse Chemistry Communities in Global Research Is Critical**		P			
NSF Opportunities		P			
Chemical Business of the People, by the People, for the People** <i>CPPP</i>			D		
Forensics: The Crossroads of Science, Policy & Justice* (COMSCI)		A			
Using New Media to Communicate Chemistry to the Public* (CINF)		P			
Crafting Chemical Communication* (CHED)			D		
Chemists & the Public: What Research Shows about Engagement & Communication*(MPPG)			P		

Multidisciplinary Program Planning Group

MPPG

R. Baum, Program Chair

Pennsylvania Convention Center	S	M	Tu	W	Th
Chemistry of the People, by the People, for the People Plenary Session <i>CPPP</i>	P				
2016 C&EN Talented 12		A			
The Kavli Foundation Emerging Leader in Chemistry Lecture		P			
The Fred Kavli Innovations in Chemistry Lecture		P			
Nanoscience & Nanotechnology for Human Health, Repair & Safety		P			
Addressing the Facts Behind the Fear of Exposure to Chemicals that Threaten Human Reproduction**			A		

Multidisciplinary Program Planning Group (continued)

MPPG

R. Baum, Program Chair

Pennsylvania Convention Center	S	M	Tu	W	Th
Chemists & the Public: What Research Shows about Engagement & Communication			P		
Innovative Chemistry & Materials for Electroenergy Production & Storage* (ENFL)	A	P	D	D	A
Water-Energy Nexus* (ENFL)	A				
Low-Temperature Catalysis* (CATL)	A				
Solar Fuels: Power to the People* (ENFL)	D	A			
Biomass* (ENFL)	D	D			
Unconventional Energy on Heavy Oil & Shale Gas* (ENFL)	D				
Degradation of Materials for Energy & Fuel Production* (ENFL)	D				
Analyzing & Controlling Cell-Material Interactions* (ANYL)	D				
Chemical Microscopy for In Situ & In Vivo Molecular Analysis* (ANYL)	D				
Mobilizing Chemistry Expertise to Solve Humanitarian Problems* (ANYL)	D				
Small Molecules Activated by Homogeneous Metal Catalysts* (CATL)	D				
Chemistry in the U.S. & China: Current & Future States of Shared Scientific Interests & Opportunities for Cooperation* (PRES)	P	A			
Novel Materials for Gas Separation, Storage & Utilization* (ENFL)	P	D			
Forced Degradations in the Pharmaceutical Industry* (ANYL)		A			
Mass Spectrometry for the Masses: Recent Developments in Mass Spectrometry-Enabled Pharmaceutical Discovery, Development & Manufacturing* (ANYL)		A			
All the People, All the Paths in the Chemical Sciences* (WCC)		A			
Forensics: The Crossroads of Science, Policy & Justice* (COMSCI)		A			
Catalysts & Catalytic Technologies for Conversion of Biomass & Its Derivatives* (CATL)		D	D	D	
Chemistry of the People, by the People, for the People* (CHED)		D	D		

Multidisciplinary Program Planning Group (continued)**MPPG***R. Baum, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
Chemistry Data for the People: From Policy to Practice* (CINF)		D			
Chemistry for the People: Reflections from Perkin Medalists* (CHED)		D			
Advances in Chemistry of Energy & Fuels* (ENFL)		P	D	D	
Using New Media to Communicate Chemistry to the Public* (CINF)		P			
ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences: Symposium in Honor of Luis A. Colón* (ANYL)		P			
Computational Chemistry for Energy Application* (ENFL)			D	A	
Impacts of Nanotechnology & Single-Molecule Spectroscopy in Biology & Medicine* (ANYL)			D	D	
Chemical Business of the People, by the People, for the People* (PRES)			D		
Basic Research toward Translational Point-of-Care Devices* (ANYL)			P		
Progress in Coal to Liquids & Gases* (ENFL)				A	
Energy Storage Applications of Ammonia: Synthesis, Storage, Safety & Utilization* (CATL)				A	
CO ₂ Reduction: Electrocatalysis* (CATL)				D	
Citizens First! Using Real-World Contexts for Engaging Students in Learning Chemistry* (CHED)				D	

Academic Employment Initiative**A E I***C. Kuniyoshi, N. Bakowski, Program Chairs*

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

Division of Agricultural and Food Chemistry**AGFD***N. Seeram, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
Recent Advances in Functional Biopolymers	A				
General Papers	D		D	A	D
Flavor Stability: Chemical Changes in Flavor Molecules, Flavor-Food Matrix Interactions, Flavor Encapsulation	P	D			
General Posters	E				
Challenges in Flavor Chemistry Associated with Developing Healthy Foods & Beverages		D			
Chemistry behind Health Effects of Grains	D				
Sci-Mix		E			
AGFD Division Award			A		
USDA-ARS Sterling B. Hendricks Memorial Lectureship: Symposium in Honor of May Berenbaum**			A		
Chemistry, Safety & Technology of GMO Foods**			D	D	
Kenneth A. Spencer Award for Outstanding Achievement in Agricultural & Food Chemistry**			D		
International Student Symposium			P	D	D
Natural & Biobased Antimicrobials for Food Applications				D	A
High-Resolution Mass Spectroscopy Techniques for Identification & Quantification of Phytochemical Metabolites				P	
Glyphosate: Current Status & Future Prospects* (AGRO)	P	D	P		
Advances in Residues Analysis of Bee-Relevant Matrices: Analytical Methods & Sampling Techniques* (AGRO)	P				
Extraction Efficiency: Bridging between Metabolism Studies & Residue Analytical Methods* (AGRO)	P				
Synthetic Biology & Genetically Modified Organisms* (ENVR)		D			
Pollinators: Agrochemicals, Behavior & Disease* (AGRO)	P				
Undergraduate Research Posters* (CHED)	P				

Division of Agricultural and Food Chemistry (continued)**AGFD***N. Seeram, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
Agrochemicals & Pollinators: Current Science & Risk Assessment Approaches* (AGRO)			D		
Cannabis & Agrochemicals: Analytical, Environmental & Regulatory Challenges* (AGRO)			D		
Who Should Regulate Pesticides in Our Food?* (AGRO)				D	D

Division of Agrochemicals**AGRO***J. Gan, Program Chair*

Loews Philadelphia Hotel	S	M	Tu	W	Th
Emerging Mass Spectrometry Trends in Support of Agricultural Research & Development**	A				
Good Laboratory Practices for the Agrochemical Professional**	A				
Innovative Approaches in Designing Agrochemical Metabolism Studies**	A				
Terrestrial Field Dissipation Studies**	A				
Natural Products as Biorational Pesticides in Agriculture	D	P			
Glyphosate: Current Status & Future Prospects**	P	D	P		
Increasing the Value of Water Monitoring Data for Pesticide Fate & Effects Evaluations**	P	D	P		
Advances in Residues Analysis of Bee-Relevant Matrices: Analytical Methods & Sampling Techniques**	P				
Extraction Efficiency: Bridging between Metabolism Studies & Residue Analytical Methods**	P				
Ion Channels & G Protein-Coupled Receptors: Dr. Yoshihisa Ozoe, ACS International Award for Research in Agrochemicals		D	A		
Neonicotinoid Insecticides: Use, Fate & Effects**		D			

Division of Agrochemicals (continued)**AGRO***J. Gan, Program Chair*

Loews Philadelphia Hotel	S	M	Tu	W	Th
Novel Analytical Methods for Analysis of Emerging Contaminants of Concern: Advances & Challenges**		D			
Protection of Agricultural Productivity, Public Health & the Environment		P			
Pollinators: Agrochemicals, Behavior & Disease**		P			
Environmental Fate & Modeling of Agriculturally Related Chemicals**		P			
Sci-Mix		E			
Advances in Agricultural Biotechnology: Interpretation & Correlation of ELISA & LC-MS/MS for Protein Quantitation**			A		
Agrochemicals & Pollinators: Current Science & Risk Assessment Approaches**			D		
Cannabis & Agrochemicals: Analytical, Environmental & Regulatory Challenges**			D		
Fate & Metabolism of Agrochemicals: Early-Career Scientist Symposium			D		
Synthesis & Chemistry of Agrochemicals: Symposium in Memory of Dr. Thomas Bretschneider			P	D	
Environmental Risk Assessment of Down-the-Drain Chemicals**			P		D
Environmental Study Design: Current & Emerging Guidelines**			P		P
Advances & Challenges of Controlling Arthropod Pests: Early-Career Scientist Symposium			P		
Advances in Metabolism, Metabolomics & Mass Spectrometry**			P		
Who Should Regulate Pesticides in Our Food?*				D	D
Computational Chemistry & Toxicology in Chemical Discovery & Assessment (QSARs)**				D	

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

**Primary organizer of a cosponsored symposium.

CPPE: Chemistry of the People, by the People, for the People

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**Division of Agrochemicals
(continued)**
AGRO
J. Gan, Program Chair

Loews Philadelphia Hotel	S	M	Tu	W	Th
Environmental Fate, Transport & Modeling of Agriculturally Related Chemicals**				D	
Controlling Zika Vector Mosquitoes				D	
Innovations in Agrochemical Mode-of-Action Studies & the Impact of Global Human Health Requirements					A
Innovations in Human Health Exposure & Risk Assessment**					A
Subsurface Fate of Pesticides**					A
Advances in Agrochemical Metabolism & Metabolomics**					P
Nanotechnology for Sustainable Agriculture & Food Systems* (ENVR)	A			E	
Advances & Challenges in Food-Energy-Water Nexus* (ENVR)		D		E	
Synthetic Biology & Genetically Modified Organisms* (ENVR)		D			
Combined Biological-Chemical Reactions for Contaminant Transformation* (ENVR)			A	E	
USDA-ARS Sterling B. Hendricks Memorial Lectureship: Symposium in Honor of May Berenbaum* (AGFD)			A		
Chemistry, Safety & Technology of GMO Foods* (AGFD)			D	D	
Kenneth A. Spencer Award for Outstanding Achievement in Agricultural & Food Chemistry* (AGFD)			D		
Microbial & Molecular Tools to Determine the Fate & Biotransformation of Emerging Contaminants* (ENVR)				D	
Advances in Understanding Antibiotics, Antibiotic Resistance Genes & Antibiotic-Resistant Bacteria in Engineered & Natural Environments* (ENVR)				E	D
Occurrence, Behavior & Remediation of Mixed Organic Pollution in Soil & Sediment* (ENVR)				E	D
Bioanalytical Tools for Chemicals of Emerging Concern in the Environment* (ENVR)					A

Division of Analytical Chemistry
ANYL
J. Harris, L. Baker, Program Chairs

Pennsylvania Convention Center	S	M	Tu	W	Th
Advances in Mass Spectrometry	D				
Analyzing & Controlling Cell-Material Interactions** <i>CPPP</i>	D				
Chemical Microscopy for In Situ & In Vivo Molecular Analysis** <i>CPPP</i>	D				
Mobilizing Chemistry Expertise to Solve Humanitarian Problems** <i>CPPP</i>	D				
Analytical Division Poster Session	E				
ACS Award in Analytical Chemistry: Symposium in Honor of William R. Heineman		A			
Forced Degradations in the Pharmaceutical Industry** <i>CPPP</i>		A			
Imaging Single Plasmonic Nanoparticles & Their Assemblies**		A			
Mass Spectrometry for the Masses: Recent Developments in Mass Spectrometry-Enabled Pharmaceutical Discovery, Development & Manufacturing** <i>CPPP</i>		A			
Pioneering Single-Molecule Detection under Ambient, Aqueous Conditions: A Tribute to Richard Keller**		D			
Analysis of Noncovalent Interactions <i>CPPP</i>		P	A		
ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences: Symposium in Honor of Luis A. Colón** <i>CPPP</i>		P			
Analytical Chemistry to Support Industrial Polymer Development** <i>CPPP</i>		P			
Kavli Symposium on Chemical Neurotransmission: What Are We Thinking? ** <i>CPPP</i>		P			
Sci-Mix		E			
ACS Award in Chromatography: Symposium in Honor of Harold M. McNair			A		
New Principles & Applications of Enantiomeric Separations			A		
Analytical Chemistry at the Frontiers of Organic Synthesis: Emerging Tools, Techniques & Strategies** <i>CPPP</i>			A		
Impacts of Nanotechnology & Single-Molecule Spectroscopy in Biology & Medicine** <i>CPPP</i>			D	D	

**Division of Analytical Chemistry
(continued)**

ANYL

J. Harris, L. Baker, Program Chairs

Pennsylvania Convention Center	S	M	Tu	W	Th
Multidimensional Chromatography <i>CPPP</i>			P	A	
Basic Research toward Translational Point-of-Care Devices** <i>CPPP</i>			P		
2016 ACS Analytical Division Awards Symposium			P		
Single-Cell Assays: Honoring ACS Analytical Division Chemical Instrumentation Awardee Nancy Allbritton** <i>CPPP</i>				A	
Spectroscopy in Kinetics & Reaction Progress Monitoring				D	
Advances in Analytical Separations <i>CPPP</i>				P	D
Advances in Electrophoresis & Electrokinetics				P	
Advances in Electrochemistry					D
Vibrational Nanospectroscopy for Chemical & Biochemical Analysis** <i>CPPP</i>					D
New Directions in Chemometrics: Making Sense of Big & Small Chemical Data Sets**					D
Emerging Mass Spectrometry Trends in Support of Agricultural Research & Development* (AGRO)	A				
Good Laboratory Practices for the Agrochemical Professional* (AGRO)	A				
WCC Merck Research Award Symposium* (WCC)	A				
Polymers & the National Nanotechnology Initiative (NNI)* (POLY)	D				
Forensics: The Crossroads of Science, Policy & Justice* (COMSCI)	A				
Chemistry of the People, by the People, for the People* (CHED)	D	D			
Novel Analytical Methods for Analysis of Emerging Contaminants of Concern: Advances & Challenges* (AGRO)		D			
Undergraduate Research Posters* (CHED)		P			
Advances in Agricultural Biotechnology: Interpretation & Correlation of ELISA & LC-MS/MS for Protein Quantitation* (AGRO)			A		
Advances in Metabolism, Metabolomics & Mass Spectrometry* (AGRO)			P		

**Division of Analytical Chemistry
(continued)**

ANYL

J. Harris, L. Baker, Program Chairs

Pennsylvania Convention Center	S	M	Tu	W	Th
Advances in Agrochemical Metabolism & Metabolomics* (AGRO)					P

**Division of Biochemical
Technology**

BIOT

P. Tessier, S. Tobler, Program Chairs

Located with Primary Sponsor	S	M	Tu	W	Th
Shedding Light on the Dark Genome: Methods, Tools & Case Studies* (CINF)		A			

Division of Biological Chemistry

BIOL

V. Bandarian, L. Hedstrom, Program Chairs

Pennsylvania Convention Center	S	M	Tu	W	Th
Eli Lilly Award in Biological Chemistry	A				
Graduate Student & Postdoctoral Symposium <i>CPPP</i>	P	P	P		A
Young Investigators in Biological Chemistry	P			P	
Gordon Hammes Award Lecture	P				
Current Topics in Biochemistry	E		E		
Repligen Award for the Chemistry of Biological Processes		A			
Enzyme Specificity		P			
Sci-Mix		E			
Pfizer Award in Enzyme Chemistry			A		
National Fresenius Award: Symposium in Honor of Douglas A. Mitchell			P		
ACS Infectious Diseases Young Investigators Award Symposium			P		
Ronald Breslow Award for Achievement in Biomimetic Chemistry: Symposium in Honor of Thomas W. Muir				A	

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**Division of Biological Chemistry
(continued)****BIOL***V. Bandarian, L. Hedstrom, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Protein Engineering & Design				P	
WCC Merck Research Award Symposium* (WCC)	A				
Analyzing & Controlling Cell-Material Interactions* (ANYL)	D				
Tetrahedron Prize for Creativity in Organic Chemistry Symposium* (ORGN)		P			
Undergraduate Research Posters* (CHED)		P			
Kavli Symposium on Chemical Neurotransmission: What Are We Thinking?* (ANYL)		P			
Impacts of Nanotechnology & Single-Molecule Spectroscopy in Biology & Medicine* (ANYL)			D	D	
Single-Cell Assays: Honoring ACS Analytical Division Chemical Instrumentation Awardee Nancy Allbritton* (ANYL)				A	

Division of Business Development & Management**BMGT***D. Daly, Program Chair*

Located with Primary Sponsor	S	M	Tu	W	Th
Fracking: Economics vs. Environment* (PRES)		A			
Industrial Innovations in Polymer Chemistry: The Interface between Inorganic Chemistry & Polymer Science* (POLY)		P			
Kavli Symposium on Chemical Neurotransmission: What Are We Thinking?* (ANYL)		P			
Connectivity & the Global Reach of Chemistry: Honoring the Life & Scientific Contributions of Ernest L. Eliel* (ORGN)			A		
Addressing the Facts behind the Fear of Exposure to Chemicals that Threaten Human Reproduction* (MPPG)			A		
Women in Innovation: Science Policy & Government* (PROF)			P		

Division of Catalysis Science & Technology**CATL***K. Ramasamy, Program Chair*

Sonesta Philadelphia Downtown	S	M	Tu	W	Th
Low-Temperature Catalysis**	A				
Symposium in Honor of Israel E. Wachs: Celebrating Three Decades in Academia	D	D			
Mixed Oxide Catalysis	D				
Small Molecules Activated by Homogeneous Metal Catalysts**	D				
Advanced Nanoscale Chemical Imaging of Catalyst Materials	P				
In Situ & Operando Spectroscopy of Catalysts**		D	A		
Catalysts & Catalytic Technologies for Conversion of Biomass & Its Derivatives**		D	D	D	
Computational Catalysis		D	D		
Sci-Mix		E			
Catalysis in Automotive Emission Control			D		
Life Cycle of Catalysts: Preparation, Activation, Deactivation & Regeneration			P		
General Catalysis			E	D	A
Energy Storage Applications of Ammonia: Synthesis, Storage, Safety & Utilization**				A	
CO ₂ Reduction: Electrocatalysis**				D	
Biomass* (ENFL)	D	D			
Novel Nanomaterials* (ENFL)	P	D	D	D	A
Computational Chemistry for Energy Application* (ENFL)			D	A	
Green Chemistry Innovations & Opportunities in Industry for Young Professionals* (I&EC)			P		
Mesoporous Zeolites* (ENFL)				P	A
Heterogeneous Catalysis for Selective Oxidation & Reduction toward a Green Production* (ENFL)				P	A

Division of Chemical Education**CHED***I. Levy, M. Orgill, P. Daubenmire, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Integrating the General & Organic Chemistry Curricula	A				

**Division of Chemical Education
(continued)****CHED***I. Levy, M. Orgill, P. Daubenmire, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Green Chemistry Education: By the People & for the People** <i>CPPP</i>	D				
High School Program**	D				
Undergraduate Research Papers**	D				
Context-Based Learning in Chemistry: Research on Structure, Function, Use & Outcomes	P				
General Posters	E				
General Papers		A	P	P	A
Chemistry of the People, by the People, for the People** <i>CPPP</i>	D	D			
Research in Chemistry Education	D				
Chemistry for the People: Reflections from Perkin Medalists** <i>CPPP</i>	D				
Chemistry Explained by Teachers for Teachers: The Chemistry behind Everyday Things**	P				
Undergraduate Research Posters**	P				
Successful Student Chapters**	E				
Sci-Mix	E				
Engaging Undergraduates with X-ray Crystallography			A		
Crafting Chemical Communication** <i>CPPP</i>		D			
GSSPC: From Bench-to-Bench & Beyond: Engaging People with High-Impact Chemistry**		D			
Effective Team-Teaching in Undergraduate Chemistry Programs				A	
Advances in Teaching Inorganic Chemistry Lecture & Laboratory				D	
Citizens First! Using Real-World Contexts for Engaging Students in Learning Chemistry** <i>CPPP</i>				D	
Present & Future Impact of the Internet, Web Apps & High-Speed Networking Technology on Local & Global Chemistry Education					A
Bringing Cheminformatics into the College Chemistry Classroom* (CINF)	A				

**Division of Chemical Education
(continued)****CHED***I. Levy, M. Orgill, P. Daubenmire, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Polymer Science for Everyday Things: Polymers for Beauty, Sports & Leisure* (POLY)	P	D	AE		
Division of Chemical Health & Safety Awards* (CHAS)	P				
Social & Chemical Science of Diversity Equity* (CMA)		P			
Kavli Symposium on Chemical Neurotransmission: What Are We Thinking?*(ANYL)		P			
Diversity & Inclusion in STEM: LGBTQ+ Safe Zone Training for the Chemistry Community* (PROF)		P			
Safety & Ethics in Our Chemical Community* (CHAS)			A		
Chemical Safety in the K-12 Classroom* (CHAS)			P		

Division of Chemical Health & Safety**CHAS***D. Decker, J. Pickel, F. Wood-Black, Program Chairs*

Philadelphia Marriott Downtown	S	M	Tu	W	Th
Division of Chemical Health & Safety Awards** <i>CPPP</i>	P				
Americans with Disabilities Act & Accommodations in the Laboratory** <i>CPPP</i>		P			
Sci-Mix		E			
Ask Dr. Safety: Chemical Security in Research Institutions** <i>CPPP</i>			A		
Safety & Ethics in Our Chemical Community** <i>CPPP</i>			A		
Chemical Safety in the K-12 Classroom** <i>CPPP</i>			P		

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Division of Chemical Health & Safety (continued)**CHAS***D. Decker, J. Pickel, F. Wood-Black, Program Chairs*

Philadelphia Marriott Downtown	S	M	Tu	W	Th
Chemical Safety in Public Policy** <i>CPPP</i>				A	
Biochemistry of Cannabis**				P	
Green Chemistry Innovations & Opportunities in Industry for Young Professionals* (I&EC)			P		
Using Public Information to Support a Chemical Safety Culture* (CINF)				A	

Division of Chemical Information**CINF***E. Alvaro, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
Bringing Cheminformatics into the College Chemistry Classroom**	A				
Effectively Harnessing the World's Literature to Inform Rational Compound Design**	D				
Beyond Citations: Challenges & Opportunities in Altmetrics	P				
CINF Scholarships for Scientific Excellence	E				
Shedding Light on the Dark Genome: Methods, Tools & Case Studies**		A			
Chemistry Data for the People: From Policy to Practice** <i>CPPP</i>		D			
Using New Media to Communicate Chemistry to the Public** <i>CPPP</i>		P			
Sci-Mix		E			
Herman Skolnik Award Symposium			D		
Using Public Information to Support a Chemical Safety Culture**				A	
General Papers				P	A
Kavli Symposium on Chemical Neurotransmission: What Are We Thinking?* (ANYL)		P			
Connectivity & the Global Reach of Chemistry: Honoring the Life & Scientific Contributions of Ernest L. Eliel* (ORGN)			A		
New Directions in Chemometrics: Making Sense of Big & Small Chemical Data Sets* (ANYL)					D

Division of Chemical Toxicology**TOXI***A. Bryant-Friedrich, Program Chair*

Philadelphia Downtown Courtyard by Marriott	S	M	Tu	W	Th
Chemical Research in Toxicology Young Investigator Award	A				
Founders Award Lecture & Symposium	P				
Young Investigators Symposium		A			
Asbestos Fate, Exposure, Remediation & Adverse Health Effects		P			
Chemical Toxicology in the Study of Health Disparities among Ethnic/Racial Groups			A		
Needs & Directions for the Future of Toxicology in Pharmaceutical Development**			P		
General Poster Session			E		
Division of Chemical Toxicology Keynote Address			E		
General Orals				A	
DNA Repair & Its Role in Defining Human Susceptibility to Disease				P	
Increasing the Value of Water Monitoring Data for Pesticide Fate & Effects Evaluations* (AGRO)	P	D	P		
Pollinators: Agrochemicals, Behavior & Disease* (AGRO)		P			
Agrochemicals & Pollinators: Current Science & Risk Assessment Approaches* (AGRO)			D		
Computational Chemistry & Toxicology in Chemical Discovery & Assessment (QSARs)* (AGRO)				D	
Innovations in Human Health Exposure & Risk Assessment* (AGRO)					A

Division of Chemistry & the Law**CHAL***K. Bianco, J. Kennedy, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Strengthening Your Patent Rights in Light of Recent Federal Circuit Court Decisions	P				
Beyond the Bench: Careers in Intellectual Property		A			

**Division of Chemistry & the Law
(continued)****CHAL***K. Bianco, J. Kennedy, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
IP Considerations & Pitfalls in Collaborative Research & Licensing Agreements		P			
Sci-Mix		E			
Strategic Patent Planning for Small & Midsize Chemical & Pharmaceutical Companies			A		
Patent Litigation Primer			P		
Developments in Pharmaceutical Patent Law				A	
The Many Faces of CHAL: Where Chemistry Meets the Law				P	
Safety & Ethics in Our Chemical Community* (CHAS)			A		

Division of Colloid & Surface Chemistry**COLL***R. Nagarajan, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
Nanoparticles: Synthesis, Characterization & Their Application in Catalysis	D	A			
Basic Research in Colloids, Surfactants & Nanomaterials	D	D	A	D	A
Plasmonic Colloidal Nanostructures: From Creation to Applications	D	D	A	D	
Characterization, Reactivity, Sorption & Thermochemical Properties of Mixed Oxides: Symposium in Honor of Alexandra Navrotsky	D	D	A		
Composite Colloids for SERS Biodetection	D	D			
Polymer Adhesives & Adhesion by Design: Fundamentals to Applications	D	D			
Synergy at the Bio-Nano Interface	D	D			
Control of Amphiphile Self-Assembling at the Molecular Level	D				
Fundamental Research in Colloids, Surfaces & Nanomaterials	E				
Nanostructured Interfaces: From Fundamentals of Sensing & Catalysis to Applications		P	A	D	A
Sci-Mix		E			

Division of Colloid & Surface Chemistry (continued)**COLL***R. Nagarajan, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
Elucidating the Molecular-Level Interactions between Biological Membranes & Engineered Nanomaterials			A	D	A
Nanoparticles for Measuring/Controlling Cell Signaling			A	D	A
Bioconjugate Chemistry Lecturer Award			A		
Langmuir Lectures, ACS Materials & Interfaces Award Lecture			P		
Colloidal & Interfacial Chemistry for Water Treatment & Recycling				D	A
Surface Modification to Control Cell-Surface Interactions				D	A
Analyzing & Controlling Cell-Material Interactions* (ANYL)	D				
Molecular Modeling of Surface-Mediated Electrochemical & Sorption Reactions at Environmental Interfaces* (GEOC)	P				
Imaging Single Plasmonic Nanoparticles & Their Assemblies* (ANYL)		A			
Impacts of Nanotechnology & Single-Molecule Spectroscopy in Biology & Medicine* (ANYL)				D	D
Polymer Science at the Interface of Industry, Government & Academics* (POLY)			PE	D	A

Division of Computers in Chemistry**COMP***H. L. Woodcock, M. Feig, J. Shen, Program Chairs*

Sonesta Philadelphia Downtown	S	M	Tu	W	Th
Quantum Mechanics**	A	A	A		
Modeling Water & Solvation in Biochemistry: Developments & Applications**	D	D	A		

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Division of Computers in Chemistry (continued)
COMP
H. L. Woodcock, M. Feig, J. Shen, Program Chairs

Sonesta Philadelphia Downtown	S	M	Tu	W	Th
Designing Functional Biomaterials: Connecting Experiment with Theory & Simulation**	D	D			
Drug Discovery	D		P	D	A
Designing Chemical Libraries for Screening	D				
Emerging Technologies in Computational Chemistry	P				
QM/MM Simulation of Chemical & Biochemical Reaction Pathways: Recent Developments & Applications**		D	D	D	
Sharing Pharmaceutical Industry Data: Outlook & Opportunities		D			
Molecular Mechanics		P	D	D	A
Sci-Mix		E			
Polypharmacology: How Little Can One Afford? How Much Can You Predict?			D		
Material Science			P	D	A
NVIDIA GPU Award			E		
OpenEye Outstanding Junior Faculty Award in Computational Chemistry			E		
Poster Session			E		
The Chemical Computing Group Excellence Award for Graduate Students			E		
Wiley Computers in Chemistry Outstanding Postdoc Award			E		
Computational Study of Water				D	
WCC Merck Research Award Symposium* (WCC)	A				
Advanced Potential Energy Surfaces* (PHYS)	D	D	A	D	
Shedding Light on the Dark Genome: Methods, Tools & Case Studies* (CINF)		A			
Tetrahedron Prize for Creativity in Organic Chemistry Symposium* (ORGN)		P			
Undergraduate Research Posters* (CHED)		P			
Computational Chemistry & Toxicology in Chemical Discovery & Assessment (QSARs)* (AGRO)				D	

Division of Energy & Fuels
ENFL
X. Wang, D. Heldebrant, Program Chairs

Pennsylvania Convention Center	S	M	Tu	W	Th
Innovative Chemistry & Materials for Electroenergy Production & Storage** <i>CPPP</i>		D	D	D	A
Water-Energy Nexus** <i>CPPP</i>	A				
Energy & Fuels Joint Award for Excellence in Publishing	A				
Solar Fuels: Power to the People** <i>CPPP</i>	D	A			
U. S. A.-China Symposium on Energy**	D	D	D	D	
Biomass** <i>CPPP</i>	D	D			
Unconventional Energy on Heavy Oil & Shale Gas** <i>CPPP</i>	D				
Degradation of Materials for Energy & Fuel Production** <i>CPPP</i>	D				
Novel Nanomaterials**	P	D	D	D	A
Novel Materials for Gas Separation, Storage & Utilization** <i>CPPP</i>	P	D			
ENFL Storch Award Symposium		D	D		
2D Materials: Graphene & Beyond & Their Device Applications**		P	D	D	A
Advances in Chemistry of Energy & Fuels** <i>CPPP</i>		P	D	D	
Sci-Mix		E			
Computational Chemistry for Energy Application** <i>CPPP</i>			D	A	
Progress in Coal to Liquids & Gases** <i>CPPP</i>				A	
Mesoporous Zeolites**				P	A
Heterogeneous Catalysis for Selective Oxidation & Reduction toward a Green Production**				P	A
Advances in Analytical Methods in Petroleum Upstream Applications					A
Low-Temperature Catalysis* (CATL)	A				
Small Molecules Activated by Homogeneous Metal Catalysts* (CATL)	D				
In Situ & Operando Spectroscopy of Catalysts* (CATL)		D	A		
Catalysts & Catalytic Technologies for Conversion of Biomass & Its Derivatives* (CATL)		D	D	D	
Chemistry of Biomass Wastes Conversion to Energy & Chemicals* (ENVR)			D	AE	

**Division of Energy & Fuels
(continued)**

ENFL

X. Wang, D. Heldebrant, Program Chairs

Pennsylvania Convention Center	S	M	Tu	W	Th
Green Chemistry Innovations & Opportunities in Industry for Young Professionals* (I&EC)			P		
Energy Storage Applications of Ammonia: Synthesis, Storage, Safety & Utilization* (CATL)				A	
CO ₂ Reduction: Electrocatalysis* (CATL)				D	

**Division of Environmental
Chemistry**

ENVR

D. Dionysiou, Program Chair

Loews Philadelphia Hotel	S	M	Tu	W	Th
Advances in Innovative Designs & Process Cost Estimation Techniques for Advanced Water Purification Technologies <i>CPPP</i>	A			E	
Nanotechnology for Sustainable Agriculture & Food Systems** <i>CPPP</i>	A			E	
Formation & Transformation of Atmospheric Aerosols: Air Pollution to Climate Change: Symposium in Honor of Professor Renyi Zhang <i>CPPP</i>	D	D	A	E	
Innovative Materials & Technologies for Environmental Sustainability** <i>CPPP</i>	D	D	A	E	
Aquatic Chemistry: Symposium in Honor of Professor Alan T. Stone <i>CPPP</i>	D	D	D	E	
Poly- & Perfluoroalkyl Substances: Environmental Behavior & Pollution Control <i>CPPP</i>	D	D		E	
Advances in Understanding PPCP Fate in Wastewater Collection & Treatment Systems <i>CPPP</i>	D			E	
Impacts of Energy Systems on Water Treatment <i>CPPP</i>	D			E	
Advancing Teaching & Learning in Environmental Chemistry Courses: Innovative Tools & Techniques <i>CPPP</i>	P			E	
Next-Generation Techniques for Prevention & Precise Growth of Biofilms at the Interface of Nanomaterials & Electrochemistry <i>CPPP</i>	P			E	
Understanding Nanomaterial Behavior: Breakthroughs & Challenges <i>CPPP</i>		A			

**Division of Environmental
Chemistry (continued)**

ENVR

D. Dionysiou, Program Chair

Loews Philadelphia Hotel	S	M	Tu	W	Th
Chemistry of Environmental Sorptive & Oxidative Processes: Symposium in Honor of Joseph J. Pignatello <i>CPPP</i>		D	D	DE	
Advances & Challenges in Food-Energy-Water Nexus** <i>CPPP</i>		D		E	
Synthetic Biology & Genetically Modified Organisms**		D			
Developing International Policies for Nanoparticles in the Environment		P		E	
Sci-Mix		E			
Combined Biological-Chemical Reactions for Contaminant Transformation** <i>CPPP</i>			A	E	
Chemistry of Biomass Wastes Conversion to Energy & Chemicals** <i>CPPP</i>			D	AE	
Water Purification Systems** <i>CPPP</i>			D	E	
Elements Old & New: Discoveries, Developments, Challenges & Environmental Implications** <i>CPPP</i>			D		
Applied Catalysis for Environmental Applications <i>CPPP</i>			P	DE	
Nanotechnology for Environmental Solutions & Remediation <i>CPPP</i>			P	DE	
C. Ellen Gonter Graduate Student Awards			P		
Disinfection By-Products: What Have We Learned about Dissolved Organic Matter Precursors? <i>CPPP</i>				D	
Microbial & Molecular Tools to Determine the Fate & Biotransformation of Emerging Contaminants** <i>CPPP</i>				D	
Nanomaterials in the Environment & Biological Systems <i>CPPP</i>				DE	D
Recent Advances in Remediation Strategies & Technologies for the Cleanup of Hazardous Waste Sites <i>CPPP</i>				DE	
Creating & Exploiting Salinity Gradients <i>CPPP</i>				PE	

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Division of Environmental Chemistry (continued)**ENVR***D. Dionysiou, Program Chair*

Loews Philadelphia Hotel	S	M	Tu	W	Th
Advances in Understanding Antibiotics, Antibiotic Resistance Genes & Antibiotic-Resistant Bacteria in Engineered & Natural Environments** <i>CPPP</i>				E	D
Crystal Defects on Surface Reactivity & Heterogeneous Photocatalysis <i>CPPP</i>				E	D
Occurrence, Behavior & Remediation of Mixed Organic Pollution in Soil & Sediment** <i>CPPP</i>				E	D
General Posters				E	
Bioanalytical Tools for Chemicals of Emerging Concern in the Environment** <i>CPPP</i>					A
Innovative Chemistry & Materials for Electroenergy Production & Storage* (ENFL)	A	P	D	D	A
Water-Energy Nexus* (ENFL)	A				
Good Laboratory Practices for the Agrochemical Professional* (AGRO)	A				
Innovative Approaches in Designing Agrochemical Metabolism Studies* (AGRO)	A				
Terrestrial Field Dissipation Studies* (AGRO)	A				
Solar Fuels: Power to the People* (ENFL)	D	A			
U. S. A. -China Symposium on Energy* (ENFL)	D	D	D	D	
Geochemistry of the Subsurface: CO ₂ Sequestration, Unconventional Oil & Gas Extraction, Geothermal Reservoirs & Radioactive Waste Disposal* (GEOC)	D	D		E	
Biomass* (ENFL)	D	D			
Unconventional Energy on Heavy Oil & Shale Gas* (ENFL)	D				
Degradation of Materials for Energy & Fuel Production* (ENFL)	D				
Novel Nanomaterials* (ENFL)	P	D	D	D	A
Glyphosate: Current Status & Future Prospects* (AGRO)	P	D	P		
Increasing the Value of Water Monitoring Data for Pesticide Fate & Effects Evaluations* (AGRO)	P	D	P		
Novel Materials for Gas Separation, Storage & Utilization* (ENFL)	P	D			

Division of Environmental Chemistry (continued)**ENVR***D. Dionysiou, Program Chair*

Loews Philadelphia Hotel	S	M	Tu	W	Th
Advances in Residues Analysis of Bee-Relevant Matrices: Analytical Methods & Sampling Techniques* (AGRO)	P				
Extraction Efficiency: Bridging between Metabolism Studies & Residue Analytical Methods* (AGRO)	P				
Neonicotinoid Insecticides: Use, Fate & Effects* (AGRO)	D				
Novel Analytical Methods for Analysis of Emerging Contaminants of Concern: Advances & Challenges* (AGRO)	D				
2-D Materials: Graphene & Beyond & their Device Applications* (ENFL)	P	D	D	A	
Advances in Chemistry of Energy & Fuels* (ENFL)	P	D	D		
Pollinators: Agrochemicals, Behavior & Disease* (AGRO)	P				
Undergraduate Research Posters* (CHED)	P				
Environmental Fate & Modeling of Agriculturally Related Chemicals* (AGRO)	P				
Chemistry, Safety & Technology of GMO Foods* (AGFD)			D	D	
Agrochemicals & Pollinators: Current Science & Risk Assessment Approaches* (AGRO)			D		
Experimental Studies of the Molecular-Scale Processes at Environmental Interfaces* (GEOC)			P	DE	A
Environmental Risk Assessment of Down-the-Drain Chemicals* (AGRO)			P		D
Environmental Study Design: Current & Emerging Guidelines* (AGRO)			P		P
Green Chemistry Innovations & Opportunities in Industry for Young Professionals* (I&EC)			P		
Advances in Metabolism, Metabolomics & Mass Spectrometry* (AGRO)			P		
Progress in Coal to Liquids & Gases* (ENFL)					A
Computational Chemistry & Toxicology in Chemical Discovery & Assessment (QSARs)* (AGRO)					D
Environmental Fate, Transport & Modeling of Agriculturally Related Chemicals* (AGRO)					D

Division of Environmental Chemistry (continued)**ENVR***D. Dionysiou, Program Chair*

Loews Philadelphia Hotel	S	M	Tu	W	Th
Heterogeneous Catalysis for Selective Oxidation & Reduction toward a Green Production* (ENFL)				P	A
Innovations in Human Health Exposure & Risk Assessment* (AGRO)					A
Subsurface Fate of Pesticides* (AGRO)					A
Advances in Agrochemical Metabolism & Metabolomics* (AGRO)					P

Division of Fluorine Chemistry**FLUO***N. Vasdev, Program Chair*

Philadelphia Marriott Downtown	S	M	Tu	W	Th
Radiopharmaceutical Chemistry** CPPP	E	D			
Polymeric Materials as Imaging Agents & Theranostics* (POLY)			D		

Division of Geochemistry**GEOC***A. Ilgen, Program Chair*

Philadelphia Marriott Downtown	S	M	Tu	W	Th
Geochemistry of the Subsurface: CO ₂ Sequestration, Unconventional Oil & Gas Extraction, Geothermal Reservoirs & Radioactive Waste Disposal**	D	D		E	
Molecular Modeling of Surface-Mediated Electrochemical & Sorption Reactions at Environmental Interfaces**	P				
Sci-Mix		E			
Interfacial Biogeochemical Controls on Inorganic Contaminants			A		
Experimental Studies of the Molecular Scale Processes at Environmental Interfaces**			P	DE	A

Division of the History of Chemistry**HIST***S. Rasmussen, Program Chair*

Philadelphia Marriott Downtown	S	M	Tu	W	Th
HIST Tutorial & General Papers	A			A	
A Salute to Ted Benfey at 90: Science, History, Culture & a Commitment to Humanism	P				
Chemistry in America: 1676–1876 CPPP		D			
Sci-Mix		E			
Charles C. Price, 1965 ACS President: Exploring His Legacy after 50 Years			A		
HIST Award Symposium Honoring Ursula Klein			P		
Citation for Chemical Breakthrough Award to Rice University: Symposium honoring Robert Curl* (PRES)	A				
Connectivity & the Global Reach of Chemistry: Honoring the Life & Scientific Contributions of Ernest L. Eliel* (ORGN)			A		
Elements Old & New: Discoveries, Developments, Challenges & Environmental Implications* (ENVR)			D		
Chemical Business of the People, by the People, for the People* (PRES)			D		

Division of Industrial & Engineering Chemistry**I & EC***E. Rosenberg, Program Chair*

Philadelphia Downtown Courtyard by Marriott	S	M	Tu	W	Th
Advances in Green Chemistry	P				
General Papers		D			
Sci-Mix		E			
Division of Industrial & Engineering Chemistry Graduate Student Award			A		

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Division of Industrial & Engineering Chemistry (continued)

I & E C

E. Rosenberg, Program Chair

Philadelphia Downtown Courtyard by Marriott	S	M	Tu	W	Th
Green Chemistry Innovations & Opportunities in Industry for Young Professionals**			P		
General Posters			E		
Ask Dr. Safety: Chemical Security in Research Institutions* (CHAS)			A		

Division of Inorganic Chemistry

I N O R

N. Radu, S. Koch, Program Chairs

Pennsylvania Convention Center	S	M	Tu	W	Th
Bioinorganic Chemistry	AE		E	A	
Inorganic Catalysts	AE				
Lanthanide & Actinide Chemistry	D		AE		
Chemistry of Materials	D	P	D	P	
Organometallic Chemistry	DE	A	PE	DE	
Inorganic Young Investigator Awards	P				
Organometallics Distinguished Author Award Lectureship	P				
Main-Group Chemistry	PE		P		
Nanomaterials in Biology & Medicine	E	D	D		
Understanding Cluster Cofactors through Biomimetic Models	E	D			
Inorganic Chemistry Lectureship		A			
Secondary Coordination Sphere Influences: Stability, Reactivity & Everything in Between		D	D		
Manipulation of Energy & Electron Transfer in Molecules & Devices		D	DE	A	
DIC Young Investigator Awardees: Where Are They Now?		D			
Coordination Chemistry		P	E	DE	
Sci-Mix		E			
Industrial Inorganic Chemistry			A		
Inorganic Nanoscience Award			A		
Solid-State Inorganic Chemistry			PE		
Electrochemistry				AE	

Division of Inorganic Chemistry (continued)

I N O R

N. Radu, S. Koch, Program Chairs

Pennsylvania Convention Center	S	M	Tu	W	Th
Environmental & Energy-Related Inorganic Chemistry				AE	
Inorganic Spectroscopy				AE	
Nanoscience				PE	
Radiopharmaceutical Chemistry* (FLUO)	E	D			
Organometallics Distinguished Author Award* (ORGN)		A			
Eminent Scientist Lecture* (SOCED)		A			
Undergraduate Research Posters* (CHED)		P			
Industrial Innovations in Polymer Chemistry: The Interface between Inorganic Chemistry & Polymer Science* (POLY)		P			
Connectivity & the Global Reach of Chemistry: Honoring the Life & Scientific Contributions of Ernest L. Eliel* (ORGN)				A	
GSSPC: From Bench-to-Bench & Beyond: Engaging People with High-Impact Chemistry* (CHED)				D	
Polymeric Materials as Imaging Agents & Theranostics* (POLY)				D	
New Trends in Organometallic Chemistry Leading to Organic Synthesis* (ORGN)				P	

Division of Medicinal Chemistry

M E D I

W. Young, Program Chair

Pennsylvania Convention Center	S	M	Tu	W	Th
Renaissance of Estrogen Receptor-Based Therapy	A				
General Orals	D			D	
Role of Water in Ligand Design & Optimization	P				
General Posters	E			E	
Small Change, Big Impact: Strategic Minor Structural Modifications in Drug Design		A			
Small-Molecule Approaches for the Treatment of Lupus		A			
Solute Carrier (SLC) Membrane Transporters as Emerging Drug Targets		A			

**Division of Medicinal Chemistry
(continued)****MEDI***W. Young, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
Medicinal Chemistry of Chemical Biology		P			
Medicinal Chemist's Toolbox: Scaffolds & Privileged Scaffolds in Drug Design		P			
Nucleic Acid Therapeutics		P			
Sci-Mix		E			
Emerging Isosteric Replacement Methods: A Fundamental Strategy in Drug Design			A		
Gut Reaction: Opportunities & Challenges of Gut-Specific Drug Targeting			A		
MEDI Award Symposium			P		
Modulation of the Ubiquitin-Proteasome Pathway			P		
Epigenetics				A	
First-Time Disclosures				P	
WCC Merck Research Award Symposium* (WCC)	A				
New Reactions & Methodology* (ORGN)	D	D	D	DE	
Effectively Harnessing the World's Literature to Inform Rational Compound Design* (CINF)	D				
Regional Small Chemical Businesses: Case Histories & Lessons Learned* (SCHB)	P				
Radiopharmaceutical Chemistry* (FLUO)	E	D			
Shedding Light on the Dark Genome: Methods, Tools & Case Studies* (CINF)		A			
Forced Degradations in the Pharmaceutical Industry* (ANYL)		A			
Mass Spectrometry for the Masses: Recent Developments in Mass Spectrometry Enabled Pharmaceutical Discovery, Development & Manufacturing* (ANYL)		A			
Heterocycles & Aromatics* (ORGN)	D	A	E		
International Drug Discovery & Development Collaborations* (SCHB)		D			
Tetrahedron Prize for Creativity in Organic Chemistry Symposium* (ORGN)		P			
Undergraduate Research Posters* (CHED)		P			
Polymeric Materials as Imaging Agents & Theranostics* (POLY)			D		
Needs & Directions for the Future of Toxicology in Pharmaceutical Development* (TOXI)			P		

Division of Nuclear Chemistry & Technology**NUCL***J. Terry, A. Hixon, D. Hobart, Program Chairs*

Philadelphia Downtown Courtyard by Marriott	S	M	Tu	W	Th
Nuclear Forensics	D	A			
Physicochemical Characterization of Actinides & Fission Products		P	A		
Nuclear Modeling & Simulation			P	A	
Glenn T. Seaborg Award for Nuclear Chemistry: Symposium in Honor of E. (Earl) Philip Horwitz				D	D
Radiopharmaceutical Chemistry* (FLUO)	E	D			
Polymeric Materials as Imaging Agents & Theranostics* (POLY)			D		

Division of Organic Chemistry**ORGN***M. McIntosh, R. Broene, Program Chairs*

Pennsylvania Convention Center	S	M	Tu	W	Th
Nanomaterials	AE				
New Reactions & Methodology	D	D	D	DE	
Synthetic Expansion of Nucleic Acid Function	D				
Asymmetric Reactions & Syntheses	DE	A			
Physical Organic Chemistry: Calculations, Mechanisms, Photochemistry & High-Energy Species	DE	A			
JOC/OL Lectureship Symposium	P				
Small Splashes, Big Waves: Research at Primarily Undergraduate Institutions	P				
Total Synthesis of Complex Molecules	E	P	A		
Chemistry of Fullerenes, Carbon Nanotubes & Graphene	E		A		
Materials, Devices & Switches	E			D	
Flow Chemistry & Continuous Processes	E				
Organometallics Distinguished Author Award**		A			

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**Division of Organic Chemistry
(continued)**
ORGN
M. McIntosh, R. Broene, Program Chairs

Pennsylvania Convention Center	S	M	Tu	W	Th
Heterocycles & Aromatics		D	A	E	
Role of Organic Chemistry in Early Clinical Drug Development: New Advances in Drug Discovery & Process Chemistry		D			
Young Investigator Symposium		D			
Tetrahedron Prize for Creativity in Organic Chemistry Symposium**		P			
Sci-Mix		E			
Connectivity & the Global Reach of Chemistry: Honoring the Life & Scientific Contributions of Ernest L. Eliel**			A		
Cope Award Symposium			D		
Young Academic Investigator Symposium			D		
New Trends in Organometallic Chemistry Leading to Organic Synthesis**			P		
Biologically Related Molecules & Processes			PE	D	
Metal-Mediated Reactions & Syntheses			PE	D	
Molecular Recognition & Self-Assembly			PE	D	
Peptides, Proteins & Amino Acids			E	A	
Technical Achievements in Organic Chemistry				D	
WCC Merck Research Award Symposium* (WCC)	A				
Regional Small Chemical Businesses: Case Histories & Lessons Learned* (SCHB)	P				
International Drug Discovery & Development Collaborations* (SCHB)		D			
Analytical Chemistry at the Frontiers of Organic Synthesis: Emerging Tools, Techniques & Strategies* (ANYL)			A		
Green Chemistry Innovations & Opportunities in Industry for Young Professionals* (I&EC)			P		

Division of Physical Chemistry
PHYS
G. Engel, Program Chair

DoubleTree by Hilton Hotel Philadelphia Center City	S	M	Tu	W	Th
Physical Chemistry of Atmospheric Processes <i>CPPP</i>	D	D	A	A	D

**Division of Physical Chemistry
(continued)**
PHYS
G. Engel, Program Chair

DoubleTree by Hilton Hotel Philadelphia Center City	S	M	Tu	W	Th
Dynamics of Natural & Artificial Systems For Energy Conversion: Insights Gained from Spectroscopic Methods & Theory	D	D	A	D	D
Intrinsically Disordered Proteins: Structure, Function & Interactions <i>CPPP</i>	D	D	A	D	D
Advanced Potential Energy Surfaces**	D	D	A	D	
Physical Chemistry Meets AMO	D	D	A		
Frontiers of Solar System Chemistry: Planets to Comets & Beyond	D	P	A	D	D
Advances in Biological Imaging <i>CPPP</i>	P	D		D	D
Metal & Semiconductor Nanoclusters with Atomic Precision: Fundamentals & Applications		D	A	D	D
Sci-Mix		E			
PHYS Division Awards Symposium			P		
Accelerating Discovery: Citizen Science, Big Data & Machine Learning for Physical Chemistry <i>CPPP</i>				D	D
PHYS Poster Session				E	
Quantum Mechanics* (COMP)	A	A	A		
Modeling Water & Solvation in Biochemistry: Developments & Applications* (COMP)	D	D	A		
Designing Functional Biomaterials: Connecting Experiment with Theory & Simulation* (COMP)	D	D			
QM/MM Simulation of Chemical & Biochemical Reaction Pathways: Recent Developments & Applications* (COMP)		D	D	D	
Pioneering Single-Molecule Detection under Ambient, Aqueous Conditions: A Tribute to Richard Keller* (ANYL)		D			
Impacts of Nanotechnology & Single-Molecule Spectroscopy in Biology & Medicine* (ANYL)			D	D	
Vibrational Nanospectroscopy for Chemical & Biochemical Analysis* (ANYL)					D

Division of Polymer Chemistry

POLY

M. Jeffries-El, T. White, C. Lipscomb, Program Chairs

Sheraton Philadelphia Downtown Hotel	S	M	Tu	W	Th
Materials Genome Approach to Structure & Function	D	D	D	D	
3rd Symposium on Poly(2-Oxazoline)s & Polypeptoids	D	D	DE	A	
Advanced Functional Biopolymers & Biomaterials**	D	D	DE	D	D
Functional Renewable Polymers**	D	D	E		
General Topics: New Synthesis & Characterization of Polymers	D		E	D	A
Polymers & the National Nanotechnology Initiative (NNI)**	D				
Polymer Science for Everyday Things: Polymers for Beauty, Sports & Leisure**	P	D	AE		
Biomacromolecules/Macromolecules Young Investigator Award		A			
Industrial Polymer Science Award in Honor of Joel Oxman		A			
Sequence-Controlled Polymers		P	DE	D	
Industrial Innovations in Polymer Chemistry: The Interface between Inorganic Chemistry & Polymer Science**		P			
Sci-Mix		E			
Polymeric Materials as Imaging Agents & Theranostics** <small>CPPP</small>			D		
Advances in Functional Polymers with Sophisticated Branched Structures			PE	D	A
Polymer Science at the Interface of Industry, Government & Academics**			PE	D	A
POLY/PMSE Awards Symposium & Reception				E	
WCC Merck Research Award Symposium* (WCC)	A				
Porous Polymers* (PMSE)	D	D	D	D	
Designing Functional Biomaterials: Connecting Experiment with Theory & Simulation* (COMP)	D	D			
Oligomers & Polymers with Precisely Designed Microstructures: Synthesis, Properties & Applications* (PMSE)	P	D	D	D	
Radiopharmaceutical Chemistry* (FLUO)	E	D			
International Drug Discovery & Development Collaborations* (SCHB)		D			

Division of Polymer Chemistry (continued)

POLY

M. Jeffries-El, T. White, C. Lipscomb, Program Chairs

Sheraton Philadelphia Downtown Hotel	S	M	Tu	W	Th
Analytical Chemistry to Support Industrial Polymer Development* (ANYL)		P			
Chemistry Explained by Teachers for Teachers: The Chemistry behind Everyday Things* (CHED)		P			
Undergraduate Research Posters* (CHED)		P			
Henkel Award for Outstanding Graduate Research in Polymer Chemistry: Symposium in Honor of Maxwell Robb* (PMSE)				A	
GSSPC: From Bench-to-Bench & Beyond: Engaging People with High-Impact Chemistry* (CHED)				D	
Green Chemistry Innovations & Opportunities in Industry for Young Professionals* (I&EC)				P	
Joint PMSE/POLY Poster Session* (PMSE)				E	

Division of Polymeric Materials: Science & Engineering

PMSE

A. Tsou, B. Olsen, X. Jia, C. Stafford, M. Grunlan, Program Chairs

Sheraton Philadelphia Downtown Hotel	S	M	Tu	W	Th
Bioderived & Bioinspired Polymers	D	D	D	D	
Porous Polymers**	D	D	D	D	
General Papers/New Concepts in Polymeric Materials	D				D
Oligomers & Polymers with Precisely Designed Microstructures: Synthesis, Properties & Applications**	P	D	D	D	
Journal of Polymer Science Award: Symposium in Honor of Cyrille Boyer	P				
Polymer & Polymer Hybrid Electronics & Biosensors		D	D	D	D

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

**Primary organizer of a cosponsored symposium.

CPMP: Chemistry of the People, by the People, for the People

A = AM AE = AM/EVE P = PM D = AM/PM

E = EVE DE = AM/PM/EVE PE = PM/EVE

**Division of Polymeric Materials
Science & Engineering
(continued)**
PMSE

*A. Tsou, B. Olsen, X. Jia, C. Stafford, M. Grunlan,
Program Chairs*

Sheraton Philadelphia Downtown Hotel	S	M	Tu	W	Th
Polymers Designed for 3-D Printing Applications: Evaluation of the Fundamental & Applied Aspects of the Field		D	D	D	
Roy W. Tess Award: Symposium in Honor of Mark Soucek		D			
Fire & Polymers		DE	D	D	
Sci-Mix		E			
Henkel Award for Outstanding Graduate Research in Polymer Chemistry: Symposium in Honor of Maxwell Robb**			A		
Eastman Chemical Student Award in Applied Polymer Science			P		
Joint PMSE/POLY Poster Session**			E		
Recent Advances in Modeling & Simulations of Synthetic Polymers & Biopolymers				D	A
Advanced Functional Biopolymers & Biomaterials* (POLY)	D	D	DE	D	D
Polymer Science for Everyday Things: Polymers for Beauty, Sports & Leisure* (POLY)	P	D	AE		
Chemistry Explained by Teachers for Teachers: The Chemistry behind Everyday Things* (CHED)		P			
Undergraduate Research Posters* (CHED)		P			
Kavli Symposium on Chemical Neurotransmission: What Are We Thinking? (ANYL)		P			
Connectivity & the Global Reach of Chemistry: Honoring the Life & Scientific Contributions of Ernest L. Eliel* (ORGN)			A		
Polymer Science at the Interface of Industry, Government & Academics* (POLY)			PE	D	A

Division of Professional Relations
PROF

R. D. Libby, Program Chair

Hilton Garden Inn Philadelphia Center City	S	M	Tu	W	Th
Chemical Angel Network: Chemists Investing in Chemical Companies**	P				

**Division of Professional Relations
(continued)**
PROF

R. D. Libby, Program Chair

Hilton Garden Inn Philadelphia Center City	S	M	Tu	W	Th
Building Opportunities in the Chemical Profession: Exploiting the Power of Diversity & Inclusion**		A			
Diversity & Inclusion in STEM: LGBTQ+ Safe Zone Training for the Chemistry Community** <i>CPPP</i>		P			
Sci-Mix		E			
Women in Innovation: Science Policy & Government**			P		
WCC Merck Research Award Symposium* (WCC)	A				
Regional Small Chemical Businesses: Case Histories & Lessons Learned* (SCHB)	P				
Getting Your First Industrial Job* (YCC)	P				
All the People, All the Paths in the Chemical Sciences* (WCC)	A				
International Drug Discovery & Development Collaborations* (SCHB)		D			
Social & Chemical Science of Diversity Equity* (CMA)		P			
Chemistry of the City of Brotherly Love* (YCC)		P			
Green Chemistry Innovations & Opportunities in Industry for Young Professionals* (I&EC)			P		
Global Careers in Chemistry* (YCC)			P		

Rubber Division
RUBB

L. Goss, Program Chair

Located with Primary Sponsor	S	M	Tu	W	Th
Chemistry Explained by Teachers for Teachers: The Chemistry behind Everyday Things* (CHED)		P			

Division of Small Chemical Businesses**SCHB***J. Sabol, Program Chair*

Hilton Garden Inn Philadelphia Center City	S	M	Tu	W	Th
Entrepreneurs' Poster Session	A				
Regional Small Chemical Businesses: Case Histories & Lessons Learned**	P				
International Drug Discovery & Development Collaborations**		D			
Sci-Mix		E			
Polymers & the National Nanotechnology Initiative (NNI)* (POLY)	D				
Chemical Angel Network: Chemists Investing in Chemical Companies* (PROF)	P				
Kavli Symposium on Chemical Neurotransmission: What Are We Thinking?*(ANYL)		P			
Diversity & Inclusion in STEM: LGBTQ+ Safe Zone Training for the Chemistry Community* (PROF)		P			
Connectivity & the Global Reach of Chemistry: Honoring the Life & Scientific Contributions of Ernest L. Eliel* (ORGN)			A		
Safety & Ethics in Our Chemical Community* (CHAS)			A		
Chemical Business of the People, by the People, for the People* (PRES)			D		
Women in Innovation: Science Policy & Government* (PROF)			P		
Polymer Science at the Interface of Industry, Government & Academics* (POLY)			PE	D	A
Biochemistry of Cannabis* (CHAS)				P	

Committee on Chemical Safety**CCS***E. Howson, Program Chair*

Located with Primary Sponsor	S	M	Tu	W	Th
Building Opportunities in the Chemical Profession: Exploiting the Power of Diversity & Inclusion *(PROF)	A				
Americans with Disabilities Act & Accommodations in the Laboratory*(CHAS)	P				

Committee on Chemists with Disabilities**CWD***L. Hoffman, Program Chair*

Located with Primary Sponsor	S	M	Tu	W	Th
Building Opportunities in the Chemical Profession: Exploiting the Power of Diversity & Inclusion* (PROF)	A				
Americans with Disabilities Act & Accommodations in the Laboratory* (CHAS)	P				

Committee on Corporation Associates**CORP***D. Grob Schmidt, Program Chair*

Located with Primary Sponsor	S	M	Tu	W	Th
Safety & Ethics in Our Chemical Community* (CHAS)			A		

Committee on Environmental Improvement**CEI***C. Middlecamp, Program Chair*

Located with Primary Sponsor	S	M	Tu	W	Th
Nanotechnology for Sustainable Agriculture & Food Systems* (ENVR)	A			E	
Innovative Materials & Technologies for Environmental Sustainability* (ENVR)	D	D	A	E	
Functional Renewable Polymers* (POLY)	D	D	E		
Green Chemistry Education: By the People & for the People* (CHED)	D				
Chemistry of the People, by the People, for the People* (CHED)	D	D			
Advances & Challenges in Food-Energy-Water Nexus* (ENVR)	D		E		
Synthetic Biology & Genetically Modified Organisms* (ENVR)	D				
Chemistry, Safety & Technology of GMO Foods* (AGFD)			D	D	
Water Purification Systems* (ENVR)			D	E	

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**Primary organizer of a cosponsored symposium.

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E = EVE DE = AM/PM/EVE PE = PM/EVE

Committee on Environmental Improvement (continued)

C E I

C. Middlecamp, Program Chair

Located with Primary Sponsor	S	M	Tu	W	Th
Elements Old & New: Discoveries, Developments, Challenges & Environmental Implications* (ENVR)			D		
Green Chemistry Innovations & Opportunities in Industry for Young Professionals* (I&EC)			P		
Citizens First! Using Real-World Contexts for Engaging Students in Learning Chemistry* (CHED)				D	

Committee on Ethics

E T H C

K. Vitense, Program Chair

Located with Primary Sponsor	S	M	Tu	W	Th
Safety & Ethics in Our Chemical Community* (CHAS)			A		
Who Should Regulate Pesticides in Our Food? (AGRO)				D	D

International Activities Committee

I A C

E. Contis, Program Chair

Located with Primary Sponsor	S	M	Tu	W	Th
Chemical Sciences & Human Rights* (PRES)	A				
Chemistry in the U.S. & China: Current & Future States of Shared Scientific Interests & Opportunities for Cooperation* (PRES)	P	A			
Building International Communities* (PRES)	P				
Broadening Participation in Global Chemistry Experiences: Why Engaging Diverse Chemistry Communities in Global Research Is Critical* (PRES)		P			

Committee on Local Section Activities

L S A C

M. Rudd, Program Chair

Located with Primary Sponsor	S	M	Tu	W	Th
Diversity & Inclusion in STEM: LGBTQ+ Safe Zone Training for the Chemistry Community* (PROF)		P			

Committee on Minority Affairs

C M A

J. Sarquis, Program Chair

Philadelphia Marriott Downtown	S	M	Tu	W	Th
Social & Chemical Science of Diversity Equity** ^{CPPP}		P			
All the People, All the Paths in the Chemical Sciences* (WCC)		A			
Building Opportunities in the Chemical Profession: Exploiting the Power of Diversity & Inclusion* (PROF)		A			
Diversity & Inclusion in STEM: LGBTQ+ Safe Zone Training for the Chemistry Community* (PROF)		P			
New Trends in Organometallic Chemistry Leading to Organic Synthesis* (ORGN)			P		

Nomenclature, Terminology & Symbols

N O M

M. Mosher, Program Chair

Located with Primary Sponsor	S	M	Tu	W	Th
Elements Old & New: Discoveries, Developments, Challenges & Environmental Implications* (ENVR)			D		

Committee on Science

C O M S C I

A. Meyers, Program Chair

Pennsylvania Convention Center	S	M	Tu	W	Th
Forensics: The Crossroads of Science, Policy & Justice** ^{CPPP}		A			
Synthetic Biology & Genetically Modified Organisms* (ENVR)		D			
Chemistry, Safety & Technology of GMO Foods* (AGFD)			D	D	

Diversity & Inclusion Advisory Board**D & I***K. Booksh, Program Chair*

Located with Primary Sponsor	S	M	Tu	W	Th
Diversity & Inclusion in STEM: LGBTQ+ Safe Zone Training for the Chemistry Community* (PROF)		P			

Society Committee on Education**SOCED***M. Boucher, Program Chair*

Philadelphia Marriott Downtown/Sheraton Philadelphia Downtown Hotel	S	M	Tu	W	Th
Eminent Scientist Lecture**		A			
High School Program* (CHED)	D				
Undergraduate Research Papers* (CHED)	D				
Undergraduate Research Posters* (CHED)		P			
Successful Student Chapters* (CHED)		E			

Women Chemists Committee**W C C***K. Woznack, Program Chair*

Pennsylvania Convention Center	S	M	Tu	W	Th
WCC Merck Research Award Symposium**	A				
All the People, All the Paths in the Chemical Sciences** ^{CPPP}		A			
Women in Innovation: Science Policy & Government* (PROF)			P		

Younger Chemists Committee**Y C C***D. Williams, Program Chair*

Philadelphia Marriott Downtown	S	M	Tu	W	Th
Getting Your First Industrial Job**	P				
Chemistry of the City of Brotherly Love** ^{CPPP}		P			
Global Careers in Chemistry**			P		
All the People, All the Paths in the Chemical Sciences* (WCC)		A			
Diversity & Inclusion in STEM: LGBTQ+ Safe Zone Training for the Chemistry Community* (PROF)		P			
Green Chemistry Innovations & Opportunities in Industry for Young Professionals* (I&EC)			P		

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ACS NATIONAL MEETING

General meeting information

Your meeting registration entitles you to a range of programming, including 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.

Registration

All attendees, including speakers and poster presenters, must register for the meeting 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:
Up to June 29

STANDARD REGISTRATION:
June 30–Aug. 25

**ON-SITE ATTENDEE
REGISTRATION:**
Pennsylvania Convention Center—
Grand Hall

**SATELLITE REGISTRATION AND
PROGRAM PICK-UP LOCATIONS:**
Sheraton Philadelphia Downtown
Hotel
Sonesta Philadelphia Downtown

Early registration. U.S. residents who register by June 29 will receive their badge credentials by mail before the meeting. International registrants (this includes Canada and Mexico) must pick up their badge credentials at ACS Attendee Registration.

Standard & on-site registration. Attendees who register after June 29 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 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/philadelphia2016 until Aug. 25. A valid

credit card is required to register online, and online registrations are real-time transactions.

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

Fax/mail. Submit the registration form (page 77) via fax by Aug. 25 at (508) 743-9604, or mail it to ACS Registration, c/o CDS, 107 Waterhouse Rd., Bourne, MA 02532.

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 (PACC), Grand Hall, on Saturday, 3 to 6 PM; Sunday, 7:30 AM to 7:30 PM; Monday, 7:30 AM to 9 PM; Tuesday, 7:30 AM to 5 PM; Wednesday, 7:30 AM to 4 PM; and Thursday, 7:30 AM to 1 PM.

REGISTRATION PAYMENTS. Registration fees can be paid by check, money order, credit card (American Express, Discover, 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. **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), by fax at (508) 743-9604, by e-mail at acs@xpressreg.net, or by mail at 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 July 20 to guarantee the registrant a full refund less a \$50 administrative fee. Refund requests made after July 20 will not be honored. Your registration badge credentials and a copy of your registration confirmation must be attached to your request. All refunds will

REGISTRATION CATEGORY	FEE	
	EARLY BY JUN. 29	STANDARD JUN. 30
MEMBERS		
ACS member or society affiliate	\$415	\$500
Postdoctoral member	415	500
Emeritus or retired member	210	255
50-year member	No fee	No fee
Unemployed member (Dues waiver required)	No fee	No fee
Precollege teacher	105	105
Graduate student	210	210
Undergraduate	105	105
One-day registrant	210	255
NONMEMBERS		
Chemical scientist	\$730	\$880
Postdoctoral scientist	730	880
Visitor: Nonchemical scientist or chemical technician	415	500
Precollege teacher	105	105
Graduate student	415	415
Undergraduate	210	210
One-day registrant	415	500
Guest of registrant ^a	45	45
EXPOSITION-ONLY VISITORS		
Adult, exposition only	\$50	\$50
Student, exposition only	25	25

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

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 it to (508) 743-9604 (save your fax confirmation sheet).

Social event ticket cancellations/refunds. Social event cancellations received by July 20 entitle the registrant to a full refund. Refund requests made after July 20 will not be honored. Event tickets and a copy of your registration confirmation must be attached to your request.

Abstract cancellations/refunds. Abstract USB flash drives (thumb drives) and their shipping costs are nonrefundable.

MEMBER REGISTRATION. You must enter a valid ACS membership number during registration 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 only) or (614) 447-3776 (international) or by e-mail at service@acs.org.

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

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

EXPO-ONLY ADMISSION. All meeting attendees with a valid badge receive compli-

mentary admittance into the exposition as part of their registration. Individuals who want to visit the exposition without registering for the meeting's technical sessions can register for an expo-only adult badge for \$50 or \$25 for students with school identification. Register online or in person at ACS Attendee Registration.

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

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

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, including event locations, at www.acs.org/philadelphia2016.

The following social events require a ticket, 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 July 20. No tickets will be refunded after that date.

► Sunday, Aug. 21

CHED (Division of Chemical Education) High School-College Interface Luncheon/\$45

(Ticket included at no charge with high school teacher registration.)
Noon to 1 PM, Pennsylvania Convention Center

IAC (Committee on International Activities) Networking Globally: Science & Human Rights/no charge

4 to 5:15 PM, Philadelphia Marriott Downtown

IAC International Welcome Reception/no charge

(International registrants only)
5:30 to 7:30 PM, Philadelphia Marriott Downtown

Heroes of Chemistry Awards/\$150 (members)/\$300 (nonmembers)

6 to 10 PM, Loews Philadelphia Hotel

► Monday, Aug. 22

YCC Fun Run/\$25 (regular)/\$15 (undergraduates)

6:45 to 8:30 AM, Pennsylvania Convention Center

WCC Women Chemists Enterprise Breakfast/\$40 (regular)/\$20 (student)

7:30 to 9 AM, Philadelphia Marriott Downtown

ACS Women Chemists of Color Networking Event/no charge

10:30 AM to 12 PM, Philadelphia Marriott Downtown

Committee on Minority Affairs Luncheon/\$50 (regular)/\$25 (student)

11:30 AM to 1:30 PM, Philadelphia Marriott Downtown

Undergraduate Eminent Scientist Lecture & Luncheon/\$35

(Ticket included at no charge with undergraduate registration.)
11:30 AM to 1:30 PM, Sheraton Philadelphia Downtown Hotel

CHAL (Chemistry & the Law Division) Drug & Power Luncheon/\$40

Noon to 1:30 PM, Pennsylvania Convention Center

ACS Graduate & Postdoctoral Scholars Reception/no charge

(All graduate students should receive a ticket with registration. Postdocs are invited to attend.)
7 to 8:30 PM, Pennsylvania Convention Center

► Tuesday, Aug. 23

Senior Chemists Committee Breakfast/\$20

7:30 to 9:30 AM, Philadelphia Marriott Downtown

University of Minnesota Alumni Breakfast/\$5.00

7:30 to 9:30 AM, Pennsylvania Convention Center

Increasing Successful Awards Nominations from Underrepresented Groups/no charge

9:15 to 10:45 AM, Philadelphia Marriott Downtown

CINF (Chemical Information Division) Luncheon/\$25

Noon to 1:30 PM, Loews Philadelphia Hotel

COLL (Division of Colloid & Surface Chemistry) Luncheon/\$45

Noon to 1:30 PM, Philadelphia Marriott Downtown

WCC—Women Chemists Committee Luncheon/\$50 (regular)/\$25 (student)

Noon to 1:30 PM, Philadelphia Marriott Downtown

Purdue University Department of Chemistry Alumni Reception/\$25

4:30 to 7 PM, Loews Philadelphia Hotel

CACS (Chinese American Chemical Society Dinner)/\$35

5:30 to 9 PM, Joy Tsin Lau Chinese Restaurant, 1026 Race St.

ANYL (Division of Analytical Chemistry) Dinner/\$40 (regular)/\$20 (student)

6 to 9 PM, Chemical Heritage Foundation, 315 Chestnut St.

ENFL (Division of Energy & Fuels) Awards Dinner/\$60

6 to 9 PM, R2L, 50 South 16th St.

ENVR (Division of Environmental Chemistry) Reception/\$20

6 to 8 PM, Ladder 15, 1528 Sansom St.

ENVR (Division of Environmental Chemistry) Dinner/\$60

7:30 to 9 PM, Ocean Prime, 124 South 15th St.

Accommodations

ACS has contracted a wide selection of hotel rooms with competitive rates for the national meeting in Philadelphia. ConferenceDirect is the official housing bureau. ACS does not endorse booking hotel reservations through any other source. Reserve your hotel room directly through ConferenceDirect by July 26. A listing of official hotels with their guaranteed ACS rates and amenities is on page 62. All attendees who make reservations through ConferenceDirect will receive complimentary internet access in their rooms and are automatically entered in the ACS Housing Drawing (see ad on page 66 for details).

Late housing. Some hotels may have rooms available after July 26. A listing of these hotels will be posted on the

ACS meeting website at www.acs.org/philadelphia2016.

On-site housing. An on-site housing desk will be available during the meeting in the registration area of the Pennsylvania Convention Center to assist with last-minute housing changes or needs.

RESERVATION METHODS. All registrants will receive confirmation for reservations made directly through ConferenceDirect. Review this document carefully for accuracy. Each confirmation contains a unique number that is proof of your reservation through ConferenceDirect. 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 ConferenceDirect. You will not receive a separate confirmation from the hotel.

Published ACS rates apply to hotel stays between Aug. 16 and Aug. 27. To extend your stay beyond these dates, you must reserve additional nights directly through the hotel.

Internet. Reserve online at www.acs.org/philadelphia2016. Online reservations require a valid credit card (American Express, Discover, MasterCard, or VISA), and a confirmation will be sent directly to your e-mail address within 24 hours.

Telephone. Call ConferenceDirect at (844) 293-7040 (U.S./Canada only) or (704) 837-4855 (international), Monday through Friday, 8:30 AM to 9 PM EDT. Telephone reservations require a valid credit card (American Express, Discover, MasterCard, or VISA), and you will receive an acknowledgment to your e-mail address within 24 hours.

E-mail/fax/mail. Scan and e-mail the ACS Housing Form (page 64 and available online) to acshousing@conferencedirect.com. Fax the form to (704) 927-1439, or mail it with a check for the amount of one night's room and tax to ConferenceDirect, 5600 Seventy-Seven Center Dr., Suite 240, Charlotte, NC 28217. Checks should be made payable to ACS/ConferenceDirect.

Housing forms 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.

CHECK PAYMENT POLICY. Checks may include the first night's room rate plus tax to hold the reservation, or the expected full amount for all rooms for all nights. When sending check(s) for multiple rooms, please list the names and acknowledgment

numbers corresponding to each reservation that the check applies to. When paying by check, remember to bring a credit card or cash to the hotel to cover incidental charges to the room(s).

Before or on July 14. Make all checks payable to ACS/ConferenceDirect and mail to 5600 Seventy-Seven Center Dr., Suite 240, Charlotte, NC 28217. **Checks must be received by July 14.**

July 15 through July 26: Make all checks payable to the hotel, and mail them directly to the hotel where your reservation is being held. Be sure to include "ACS" and your ConferenceDirect Acknowledgment Number on the check, and attach your acknowledgment/invoice indicating the names corresponding to each reservation. Until the hotel has received your check, make sure you have guaranteed your reservation(s) with a credit card. **Please make sure you have sent your check directly to the hotel by July 26 to allow time for processing.**

RESERVATIONS, CHANGES & CANCELLATION POLICY. Hotel reservations can be guaranteed by credit card (American Express, Discover, MasterCard, or VISA), check, or money order. Make checks payable in U.S. dollars to ACS/ConferenceDirect, 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 ConferenceDirect. If paying by credit card, this will be reflected on your credit card statement as early as July 26 or soon after. All hotel rooms are subject to 15.50% room and occupancy tax (subject to change without notice).

Reservation modifications and cancellations can be made with the housing bureau until July 26. After this date, you will need to contact your hotel directly to make any new reservations, modifications, and/or cancellations.

Cancellations must be made at least 72 hours prior to the scheduled date of arrival at the hotel for refund of one night's room and tax deposit.

In addition to this cancellation policy, the housing bureau, ConferenceDirect, will charge a \$25 cancellation fee for any cancellations made on or after July 26. Should you cancel, this charge will appear on your credit card statement as "ConferenceDirect LLC."

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 after July 26.

SUITES. Send your suite requests by e-mail to acshousing@conferencedirect.com (subject: ACS Suite Request). They will attempt to find you a suite at an official ACS property that fits your needs.

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

Sheraton Philadelphia University City Hotel, 3549 Chestnut St., Philadelphia, PA 19104
\$159 per night, single/double occupancy
Direct—(888) 627-7071
Online—philadelphiasheraton.com

Apple Hostels Philadelphia, 32 South Bank St., Philadelphia, PA, 19106
\$34.85 per person per night, dorm room
\$77.06 per night, semiprivate room
\$86.36 per night, private room with shared bathroom
Direct—(215) 922-0222
Online—applehostels.com

KEEP YOUR MEETING COSTS AFFORDABLE. Attendee support of the official hotels allows ACS to use 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 ConferenceDirect at www.acs.org/philadelphia2016.

ACS greener meetings

The American Chemical Society Department of Meetings & Expositions Services and the Committee on Meetings & Expositions are committed to greener meetings. For each national meeting, we collaborate with the destination city, the convention center, and our hotel and vendor partners to reduce our environmental footprint and raise the bar for industry sustainability practices.

Interested in learning more about how

On-site program book no longer free

Copies of the on-site program book will be available for \$10 until June 29 through the online registration process. The standard fee of \$20 will apply after June 29. In response to numerous requests, the author index will be included in the printed program booklet. Satellite registration and on-site program purchase/pickup locations will be located at the Sheraton Philadelphia Downtown and Sonesta Philadelphia Downtown hotels. Credit cards, debit cards, and checks will be accepted at these locations.

In support of ACS's sustainability efforts, we encourage our meeting attendees to download the ACS Philadelphia mobile application or access the ACS Philadelphia digital meeting program with author index in early August. These digital options will provide quick access to the full technical program, along with special features so that you can easily build your schedule.

we're leading the way? Go to www.acs.org/greenermeetings to read about our greener meeting initiatives and access our annual Event Sustainability Report.

For its efforts, ACS has been recognized as a co-winner of the 2016 UFI Sustainable Development Award. Here are a few reasons why:

- ▶ ACS seeks sustainable convention center venues to track energy, waste, and water data for each meeting.
- ▶ ACS offsets staff event emissions in partnership with American Forests (7,739 trees planted in 2015) and shuttle emissions in partnership with Transportation Management Services (TMS) and Carbonfund.org. In 2015, ACS and its partners indirectly offset 3,375 metric tons of CO₂.
- ▶ ACS engages hotel partners to survey and collect information on sustainability initiatives and perform on-site walkthroughs of hotel room block properties to encourage hotels to increase sustainability efforts and validate said efforts. These sustainability initiatives are provided to meeting attendees through the Hotel Sustainability Green Grid, published on the ACS housing page.
- ▶ ACS collaborates with catering partners to bring as many local food items to all food and beverage functions during the meeting.

TAKE THE ACS GREENER MEETINGS PLEDGE. In 2015, 3,935 meeting attendees took the Greener Meetings Pledge. And at the 251st National Meeting & Exposition in San Diego, a record-breaking 7,719 attendees (that's 47% of total attendees) took the pledge, and 2,169 attendees donated \$1.00 toward American Forests tree planting. Take the Greener Meetings Pledge during registration to do your part!

I pledge to

- ▶ Take advantage of linen reuse initiatives at my hotel, turn off the lights when away from my room, and participate in any incentive programs for declining housekeeping service during my stay, such as Starwood's Make a Green Choice program.
 - ▶ Responsibly dispose of recyclable materials (paper, plastic, glass, aluminum) in the Pennsylvania Convention Center and hotels.
 - ▶ Use the meeting mobile app and digital program instead of the printed on-site program.
 - ▶ Enjoy the city, burn calories, and reduce my carbon footprint by walking to and from my hotel.
 - ▶ Use the ACS carbon-offset shuttle service serviced by TMS when walking isn't an option.
 - ▶ Bring a reusable water bottle to avoid the cost and waste associated with disposable, petroleum-based plastic water bottles.
- Suggestions? Send them to the ACS Committee on Meetings & Expositions at greenermeetings@acs.org.

Travel & transportation

TRANSPORTATION DISCOUNTS. ACS has negotiated special travel discounts with the following partners. To get the best rates and avoid service fees, it is recommended to make reservations online (except for Amtrak).

AIRLINES:

Delta

delta.com/meeting; (800) 328-1111
Discount code: NMMMMK

MEETING INFO ON THE WEB

Registration, housing, technical programming, special events, participating exhibitors, and other meeting details are available at www.acs.org/philadelphia2016.



PARTICIPATING HOTEL LIST

American Chemical Society

252nd National Meeting and Exposition - August 21-25, 2016 - Philadelphia, PA

For best rates and availability, make your reservation at www.acs.org/philadelphia2016

Or by phone at (Toll-Free) 844-293-7040 or (International) 704-837-4855

All ACS Sleeping Rooms Include Complimentary Internet

Room rates listed below do not include applicable tax and assessments which are 15.5% per room per night, which are subject to change.

*Additional fees may apply if: A rollaway bed is required, if there are pets in guest rooms, and if smoking occurs in guest rooms (all rooms are nonsmoking rooms).

	Hotels*				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	Pets Allowed*	Fitness Center	Swimming Pool	
	Single (1 person)	Double (2 persons)	Triple (3 persons)	Quad (4 persons)										
1	DoubleTree by Hilton Hotel Philadelphia Center City	\$184	\$205	\$226	\$247	4	12	Yes	Yes	\$28/\$42	Yes	Service	Yes	Yes
2	Embassy Suites Philadelphia Center City	\$216	\$236	\$256	\$276	4	18	No	Yes	\$52	Yes	No	Yes	No
3	Four Points by Sheraton Philadelphia City Center	\$220	\$220	\$240	\$260	4	16	No	Walkable	\$34	Yes	No	Yes	No
4	Hampton Inn Center City Philadelphia	\$184	\$184	\$194	\$204	4	12	No	Walkable	\$28/\$39	No	No	Yes	Yes
5a	Hilton Garden Inn Philadelphia Center City - Standard	\$211	\$211	\$221	\$231	4	18	No	Walkable	\$34	Yes - dinner only	No	Yes	Yes
5b	Hilton Garden Inn Philadelphia Center City - Jr. Suite	\$234	\$234	\$244	\$254	4	18	No	Walkable	\$34	Yes - dinner only	No	Yes	Yes
6	Holiday Inn Express Midtown	\$188	\$198	\$208	\$218	4	18	No	Yes	\$27	No	Service	Yes	Yes
7	Home2 Suites by Hilton Philadelphia Convention Center	\$219	\$219	\$229	\$239	4	17	No	Walkable	\$37/\$43	No	Yes	Yes	Yes
8	Hyatt at The Bellevue	\$209	\$209	\$234	\$259	4	18	Yes	Yes	\$35/\$45	Yes	Yes	Yes	Yes
9	Le Meridien Philadelphia, a Starwood Hotel	\$245	\$245	\$265	\$285	4	16	Yes	Walkable	\$49	Yes	Service	Yes	No
10	Loews Philadelphia Hotel	\$231	\$241	\$266	\$291	4	18	No	Walkable	\$38	Yes	Yes	Yes	Yes
11	Philadelphia Downtown Courtyard by Marriott	\$224	\$244	\$264	\$284	4	12	No	Walkable	\$42	Yes - dinner only	Service	Yes	Yes
12	Philadelphia Marriott Downtown	\$234	\$254	\$274	\$294	4	12	Yes	Walkable	\$49	Yes	Service	Yes	Yes
13	Residence Inn Philadelphia City Center	\$234	\$254	-	-	2	12	No	Walkable	\$52	No	Yes	Yes	No
14	Sheraton Philadelphia Downtown Hotel	\$209	\$232	\$252	\$272	4	18	Yes	Yes	\$32/\$38	Yes	Yes	Yes	Yes
15	Softel Philadelphia	\$239	\$249	\$269	\$289	4	12	Yes	Yes	\$50	Yes	Yes	Yes	No
16	Sonesta Philadelphia Downtown	\$223	\$223	\$223	\$223	4	17	Yes	Yes	\$46	Yes	No	Yes	Yes
17	The Franklin Hotel at Independence Park	\$209	\$209	-	-	2	17	Yes	Yes	\$28/\$38	Yes	Yes	Yes	Yes
18	The Logan Hotel	\$252	\$252	\$292	-	3	18	Yes	Yes	\$55	Yes	Yes	Yes	Yes
19	The Ritz-Carlton, Philadelphia	\$259	\$259	\$294	\$329	4	18	Yes	Yes	\$52	Yes	Yes	Yes	No
20	The Warwick Hotel Rittenhouse Square	\$225	\$225	\$245	\$265	4	18	Yes	Yes	\$34/\$40	Yes	Yes	Yes	No
21	Westin Philadelphia	\$259	\$259	\$259	\$259	4	16	No	Yes	\$40/\$52	Yes	Yes	Yes	No
22	Wyndham Philadelphia Historic District	\$189	\$189	\$209	\$229	4	12	No	Yes	\$30	Yes	Service	Yes	Yes



United Airlines

united.com; (800) 426-1122
Discount code: ZWFB960724

Southwest Airlines (online only)

swabiz.com
Discount code: 99331750

TRAIN:

Amtrak

(800) 872-7245
Discount code: X57Z-939 (phone reservations only)

CAR RENTAL:

Avis

avis.com; (800) 331-1600
Discount code: B923099

Hertz

hertz.com; (800) 654-2240
Discount code: CV# 02UZ0015

AIRPORT GROUND TRANSPORTATION

Philadelphia International Airport is located just 7.2 miles southwest of downtown Philadelphia and is conveniently accessible by I-95, I-76, and Route 291.

SEPTA (Southeastern Pennsylvania Transportation Authority) is the region's public transit system, and it provides bus and regional rail service from the airport to downtown Philadelphia and points beyond.

For more information, call (215) 580-7800 or visit septa.org.

Taxis. All taxi rates are calculated per trip, not per person. Most taxis can accommodate up to three passengers. In some cases, certain vehicle types can accommodate four passengers. There is a \$10 minimum fare from the airport to any destination. Metered fares are an initial \$2.70 plus \$2.30 per mile. An additional \$1.00 per passenger (\$3.00 maximum) after the first passenger will be charged on flat-rate trips between the airport and Center City for passengers over age 12. An additional \$1.50 airport fee will be charged. There is a \$28.50 flat rate from the airport to the central Philadelphia area.

All taxis accept credit cards.

For additional information, contact the ground transportation hotline at (215) 937-6958.

TRAVELING TO MEETING VENUES

The Pennsylvania Convention Center is located at 1101 Arch St., Philadelphia, PA 19104.

ACS shuttle. Complimentary shuttle service will be provided between the Pennsylvania Convention Center and many official ACS hotels, with the exception of hotels within walking distance.

Parking. There are many parking options—both garages and lots—conveniently located within blocks of the Pennsylvania

Convention Center. Contact the Philadelphia Parking Authority (philapark.org) for information.

Parking Panda is offering a discount to meeting attendees. Visit bit.ly/1sER8IW and enter the discount code CHEMEXPO16 for discounted parking near the PACC.

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 receive discounted rates when registering for the meeting.

ACS Member Services is located in the Grand Hall near attendee registration in the Pennsylvania Convention Center and is open Saturday, Aug. 20, 3 to 6 PM; Sunday, Aug. 21, 7:30 AM to 7:30 PM; Monday, Aug. 22, 7:30 AM to 9 PM; Tuesday, Aug. 23, 7:30 AM to 5 PM; Wednesday, Aug. 24, 7:30 AM to 4 PM; and Thursday, Aug. 25, 7:30 AM to 1 PM.

ONLINE SOCIAL NETWORKING TOOLS.

Start discussions and connect with other attendees at the ACS Network and the ACS Facebook page. Follow ACS national meetings on Twitter. Read, comment on, and share C&EN's coverage of ACS meetings.



ACS
Chemistry for Life®

252nd ACS National Meeting & Exposition

August 21 - 25, 2016 | Philadelphia, PA

www.acs.org/Philadelphia2016 | #acsPhiladelphia

SHUTTLE SERVICE SCHEDULE

HOURS OF OPERATION

SUNDAY, August 21

7:00 AM - 10:00 AM 15 minute service
10:00 AM - 4:00 PM 30 minute service
4:00 PM - 7:00 PM 15 minute service
7:00 PM - 11:00 PM 30 minute service

MONDAY, August 22

7:00 AM - 10:00 AM 15 minute service
10:00 AM - 4:00 PM 30 minute service
4:00 PM - 11:00 PM 15 minute service

TUESDAY, August 23

7:00 AM - 10:00 AM 15 minute service
10:00 AM - 4:00 PM 30 minute service
4:00 PM - 11:00 PM 15 minute service

WEDNESDAY, August 24

6:30 AM - 11:00 PM 30 minute service

THURSDAY, August 25

7:00 AM - 6:00 PM 60 minute service



LEGEND

- Route 1
- Route 2
- Route 3
- Route 4
- Walk to Convention Center
- X Boarding Location

Key ... HOTELS ROUTE BOARDING LOCATION

1..... DoubleTree by Hilton Hotel Philadelphia Center City	3	Main Entrance - Broad St
2..... Embassy Suites Philadelphia Center City	1	Main Entrance - 18th Street
3..... Four Points by Sheraton Philadelphia City Center	W.....	Walk to Pennsylvania Convention Center
4..... Hampton Inn Center City Philadelphia.....	W.....	Walk to Pennsylvania Convention Center
5..... Hilton Garden Inn Philadelphia Center City.....	W.....	Walk to Pennsylvania Convention Center
6..... Holiday Inn Express Midtown	3	Walk to Doubletree - Broad St. & Locust
7..... Home2 Suites by Hilton Philadelphia Convention Center.....	W.....	Walk to Pennsylvania Convention Center
8..... Hyatt at The Bellevue	3	Walk to Doubletree - Broad St. & Locust
9..... Le Meridien Philadelphia, a Starwood Hotel.....	W.....	Walk to Pennsylvania Convention Center
10..... Loews Philadelphia Hotel	W.....	Walk to Pennsylvania Convention Center
11..... Philadelphia Downtown Courtyard by Marriott.....	W.....	Walk to Pennsylvania Convention Center
12..... Philadelphia Marriott Downtown	W.....	Walk to Pennsylvania Convention Center
13..... Residence Inn Philadelphia City Center	W.....	Walk to Pennsylvania Convention Center
14.... Sheraton Philadelphia Downtown Hotel	1	Curbside Across 17th Street
15.... Sofitel Philadelphia	3	Main Entrance - 17th St.
16.... Sonesta Philadelphia Downtown	2	Main Entrance - Market St.
17.... The Franklin Hotel at Independence Park (formerly Omni Independence Park)	4	Walk to Wyndham - 4th St. between Market & Arch
18.... The Logan Philadelphia (formerly Four Seasons).....	1	Across street from Main Entrance - 18th St.
19.... The Ritz-Carlton, Philadelphia	2	South Penn Lobby
20.... The Warwick Hotel Rittenhouse Square (formerly Radisson Blu Warwick)	3	Walk to Sofitel - 17th & Sansom St.
21.... Westin Philadelphia	3	Walk to Sofitel - 17th & Sansom St.
22.... Wyndham Philadelphia Historic District	4	Main Entrance - 4th Street



For all shuttle inquiries and wheelchair assistance, please call:

1-800-523-4046



Scan to download this schedule onto your phone or device.



Shuttles are operated by Transportation Management Services.

● Carbon Neutral Shuttles

OFFICIAL HOTEL RESERVATION FORM • RESERVATION DEADLINE: JULY 19, 2016

CONTACT INFORMATION

FIRST NAME		LAST NAME	
COMPANY			
MAILING ADDRESS		CITY	STATE/PROVIDENCE
MAIL ADDRESS		PHONE NUMBER	FAX NUMBER
ZIP CODE/COUNTRY			

HOTEL SELECTION: Please list 4 choices in order of preference. Please reference the Official Hotels listing document.

1.	2.
3.	4.

Arrival Date: _____ Departure Date: _____

ROOM TYPE Single (1 bed/1 person) Double (1 bed/2 persons) Double (2 beds/2 persons) Triple (2 beds/3 persons) Quad (2 beds/4 persons)

Names of all room occupants: 1. _____ 2. _____
3. _____ 4. _____

Check here if you have a disability requiring special services

Special Requests: _____

- NOTE: Your requests will be honored based on availability. There is no guarantee.

IMPORTANT INFORMATION

DEPOSIT/CANCELLATION POLICY:

All reservations require a credit card guarantee. If paying by credit card a one night's room and tax may be reflected on your credit card statement as early as July 26, 2016 (subject to change). Cancellations must be made at least 72 hours prior to scheduled date of arrival at the hotel for refund of one night's room and tax deposit. In addition to this cancellation policy, the housing bureau, ConferenceDirect, will charge a \$25 cancellation fee for any cancellations made on or after July 26, 2016. Should you cancel, this charge will appear on your credit card statement as "ConferenceDirect LLC."

CHECK PAYMENT POLICY: Checks may include the first night's room rate plus tax to hold the reservation, or the expected full amount for all rooms for all nights. When sending check(s) for multiple rooms please list the names and acknowledgment numbers corresponding to each reservation that the check applies to. **When paying by check, remember to bring a credit card or cash to the hotel to cover incidental charges to the room(s).**

BY JULY 14TH: Make all checks payable to ACS/ConferenceDirect and mail to: **5600 Seventy Seven Center Drive, Suite 240, Charlotte, NC 28217. CHECKS MUST BE RECEIVED BY JULY 14TH, 2016.**

JULY 15TH THROUGH JULY 26TH: Make all checks payable to the HOTEL and mail them directly to the HOTEL where your reservation is being held. Be sure to include "ACS" and your ConferenceDirect Acknowledgement Number on the check, and attach your acknowledgement / invoice indicating the names corresponding to each reservation. **Until the hotel has received your check, make sure you have guaranteed your reservation(s) with a credit card. PLEASE MAKE SURE YOU HAVE SENT YOUR CHECK DIRECTLY TO THE HOTEL BY JULY 26TH TO ALLOW TIME FOR PROCESSING.**

CREDIT CARD AUTHORIZATION

Credit card Information (for Deposit)

Upon receiving the housing request form a member of the ACS Housing Bureau will contact you via phone for your credit card information. Reservations are not guaranteed till credit card information is provided. To expedite your request, reservations can be made online by going to: <https://resweb.passkey.com/go/acsphiladelphia2016>

RETURN COMPLETED FORM TO CONFERENCEDIRECT at acshousing@conferencedirect.com

HOUSING BUREAU CONTACT INFORMATION:

EMAIL: acshousing@conferencedirect.com

PHONE: (844)293-7040 US Toll-Free or (704)837-4855 International
MON-FRI 8:30am – 9:00pm EST

MAIL: ConferenceDirect
5600 Seventy-Seven Center Drive, Suite 240
Charlotte, NC 28217

FAX: (704)927-1439

ATTENDEE NATIONAL MEETING

E-NEWSLETTER. Receive official updates on ACS national meetings, including locations, registration and accommodation dates, information and discounts, resources, and event details. You can sign up and manage your subscriptions with your free ACS ID. Subscribe at www.e-mailpref.acs.org.

BUSINESS CENTER. The FedEx Office Print & Ship Center in the Pennsylvania Convention Center offers you virtually everything you need to meet your convention exhibiting needs, including packing and shipping, signage, copying, and last-minute office supplies. Located on the 200 level between Exhibit Halls B & C, the FedEx Office is open weekdays from 8 AM to 5 PM and on weekends during show hours.

MEMBER INSURANCE PROGRAM. Do you need help in determining the right amount of financial protection for you and your loved ones? Are you confused about how to plan for your family's financial future? Do you have student debt or a mortgage? Visit the ACS Member Insurance kiosk at exposition booth 827 and learn how we can help you protect what matters most in your life with plans ranging from Life & Health Insurance, International Term Life, Auto & Homeowners Plus, Disability Income, Long-Term Care, Medicare Supplement, Professional Liability, and more. Also learn about our newest offering: Chemical Educators' Legal Liability.

If you are a chemistry educator, visit us for a complimentary 15-minute consultation about Chemical Educators' Legal Liability and learn how this policy provides the unique coverage necessary for you. E-mail hcifuentes@hayscompanies.com to schedule your complimentary consultation.

The ACS Member Insurance Program will also be celebrating its 50th anniversary. We would like to say thank you to ACS members for their participation and support throughout the years. From its inception in 1966 with the Term Life plan, the program has grown to 17 insurance plans. We would like to invite attendees to help us celebrate. Join us at the booth for some sweet treats and giveaways in celebration of this special occasion. Also, we want to celebrate everything that passes your life's litmus test. Tell us how you define true living, and receive a free gift while supplies last.

We look forward to celebrating 50

years of growth and serving our members through plans specially designed for our members' needs. For additional information, visit www.acs.org/insurance.

On-site meeting arrangements

ADA-COMPLIANT MEETING. The Pennsylvania Convention Center (PACC) provides service ramps to entrances and elevated areas, braille instructions and directions throughout the building, and pay phones on each level of the facility with (TDD) hearing-impaired functions. More information is available at paconvention.com.

ACS is dedicated to ensuring that no individual with a disability is excluded, denied services, segregated, or otherwise treated differently because of the absence of auxiliary aids and services identified in the Americans with Disabilities Act. If you require special accommodations to participate in the meeting, communicate your needs to ACS Meeting Services by e-mail at nationalmeetings@acs.org, by fax at (202) 872-6128, or by phone at (202) 872-6111 by June 29 to allow 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.

ASSISTANCE. Our greeters will be positioned throughout the meeting and can help you navigate the on-site program, find a particular session or room, and answer questions. Lost-and-found items at the convention center should be directed to the ACS Operations Office located on Bridge West near Hall A. Messages left at the ACS Operations Office will be conveyed to attendees via the Meeting Mail system, but ACS cannot accept responsibility for the delivery of any messages, mail, or packages.

ATTENDEE BADGES. Attendees and guests must be registered and display their badges at all times 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/philadelphia2016. Use the Meeting Mail terminals located in the PACC. Telephone messages left at the ACS Information Booths 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.

AUDIO TAPING, PHOTOGRAPHY & VIDEO TAPING. The use of any device to capture images (e.g., cameras and camera phones) or sound (e.g., tape and digital rebroadcast) of speakers or presentations is strictly prohibited at all ACS meetings and events without express written consent from ACS.

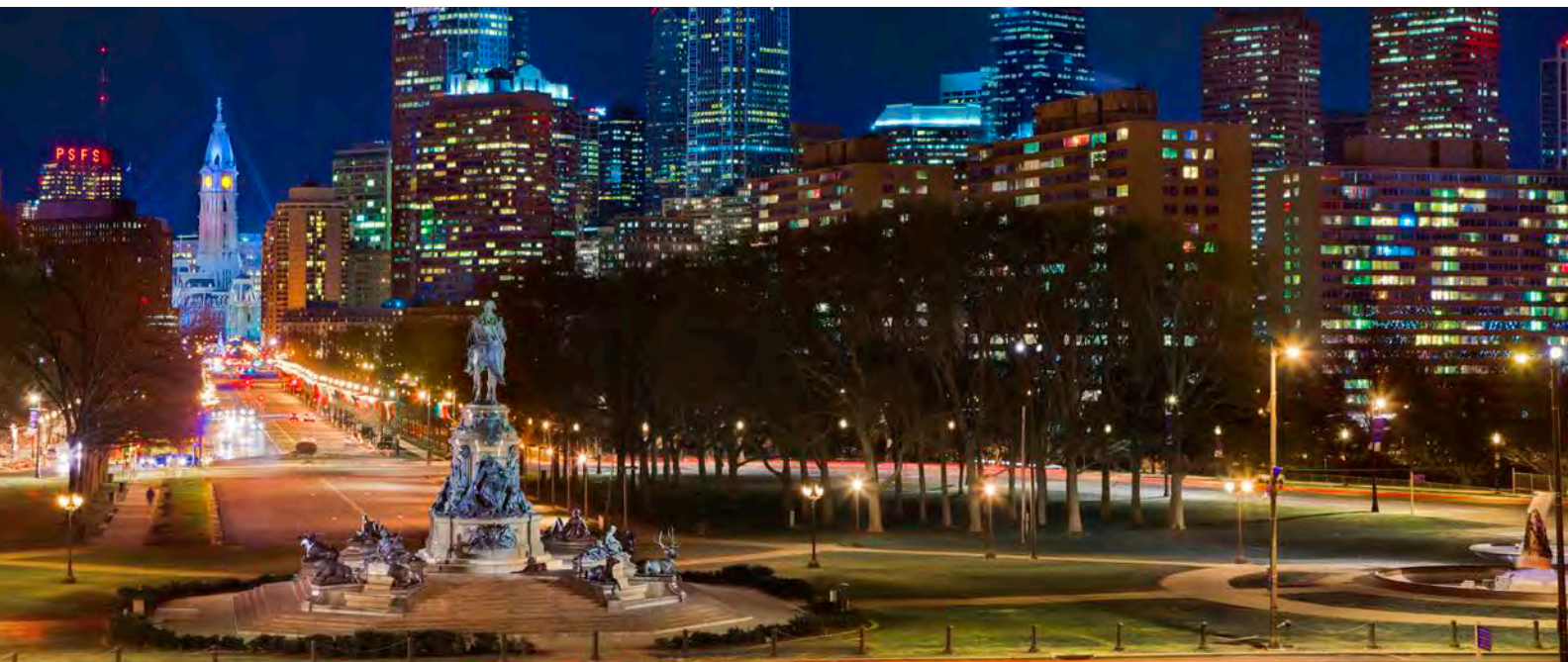
CHILD CARE. Camp ACS will be available to all meeting attendees free of charge from 7 AM to 6 PM on Sunday, Aug. 21, through Thursday, Aug. 25. At Camp ACS, children two (and potty-trained) to 16 years of age can participate in age-appropriate activities, including arts and crafts and active games, while you enjoy the meeting. To ensure your child's participation, register online by July 29 at www.acs.org/philadelphia2016. 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.

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.

EMERGENCIES DURING ACS MEETING EVENTS. ACS will place detailed instructions inside each meeting room to be used if an emergency occurs during an ACS meeting event. These instructions will revolve around following the established

THANK YOU

The society thanks the many volunteers of the ACS Philadelphia Section who are contributing to the 252nd 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.



HOUSING OPENED **MAY 18, 2016**

Enter the ACS Philadelphia, PA Housing Drawing by staying at a hotel booked through the official ACS Housing Bureau, ConferenceDirect! ACS does not endorse booking reservations through any other housing company.

Top 6 Reasons To Book Through ConferenceDirect:

1. Save with discounted rates at the official hotels
2. Automatically entered into the drawing
3. Complimentary internet access
4. Complimentary shuttle service between Pennsylvania Convention Center & many hotels on the ACS housing list
5. Make reservations online or by phone
6. Keep registration fees low helping ACS meet its contractual obligations for the meeting

**DON'T DELAY,
RESERVE YOUR ROOM TODAY!**

acs.org/Philadelphia2016 or 1-844-293-7040

Monday - Friday, 8:30am – 9:00pm EDT.
Housing will close July 26, 2016.

Rooms are limited, so make your reservation today.

1st Prize – iPad
2nd Prize – Kindle

Prize Drawing Rules: All winners will be determined on the basis of a random drawing conducted on or about September 1, 2016. Complete details at www.acs.org/philadelphia2016.

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 Section and its members in handling local arrangements. Volunteers have planned many interesting activities; the Host Local Section booth will be located in the PACC, 12th Street level near Room 107.

INTERNATIONAL REGISTRANTS. Many international visitors are required to hold a visa prior to being admitted to the U.S. because of security measures 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/philadelphia2016.

INTERNET & COMPUTER SERVICES. Use 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, which will be located throughout the PACC.

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 its table.

LUGGAGE & COAT CHECK. A luggage and coat check station will be available during registration hours from Sunday through Thursday at the PACC, 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 PACC:
Attendee Registration: Grand Hall
Career Fair: Hall C
Exhibitor Registration: Bridge East near Hall A
Exposition: Halls A & B
Finance Office: Behind Attendee Registration
Host Local Section Center: 12th Street level near Room 107

Member Services: Grand Hall
Press Center: Room 307
Shuttle Desk: 12th & Arch Streets

The following offices are located at the identified properties:

Operations Offices: Pennsylvania Convention Center, DoubleTree by Hilton Hotel Philadelphia Center City, Hilton Garden Inn Philadelphia Center City, Loews Philadelphia Hotel, Philadelphia Downtown Courtyard by Marriott, Philadelphia Marriott Downtown, Sheraton Philadelphia Downtown Hotel, Sofitel Philadelphia, Sonesta Philadelphia Downtown, and Westin Philadelphia.
Governance Office: Philadelphia Marriott Downtown
Society Programs: Philadelphia Marriott Downtown

MOTHERS ROOM. For your convenience and privacy, ACS will provide a room for nursing mothers at the PACC. Please see the Operations Office, Bridge West near Hall A, for access to the room.

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.

Speaker instructions

All speakers 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 their abstract at abstracts.acs.org (using your ACS ID to log in to the system); mode of presentation (oral or poster); and the time, length, and location of their 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 one hour before the start of their poster session. If you need to withdraw your presentation, please send a withdrawal notice to maps@acs.org and contact your symposium organizer immediately.

TECHNICAL SESSION EQUIPMENT. Each technical session meeting room

Tips for a safe stay in Philadelphia

- ▶ Be aware of you 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 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 has occurred.
- ▶ 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.

will be equipped with the following: LCD projector, screen, 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. Presenters 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 presenters 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. There is a business center located on the 200 level between Halls A and B of the Pennsylvania Convention Center that provides a range of services including copying, incoming and outgoing faxes, computer access, laser printing, and shipping.

POSTER SESSIONS. All materials must be confined to a 4-foot-high by 8-foot-wide display board in the convention center and

a 4-foot-high by 6-foot-wide display board in hotels. Presenters must mount their poster one hour before the scheduled session start time. Poster numbers supplied by ACS will be in the upper corner of each poster board; this number corresponds with the number assigned to each poster in the technical program. Pushpins will be available at the poster session. Presenters 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.

SCI-MIX POSTER SESSION ONLY. Sci-Mix presenters may begin poster setup at 7:15 PM (45 minutes before the session begins). Each presenter may be accompanied by one assistant only, and both people are required to arrive together when entering the hall. After exiting, presenters will not be permitted to reenter the hall until the session begins at 8 PM.

Abstracts & preprints

ONLINE TECHNICAL PROGRAM. The technical program for the 252nd ACS National Meeting is now available at www.acs.org/philadelphia2016. You can search by divisions or committees, symposia, speakers, or keywords from abstracts as well as presidential events and the multi-

disciplinary theme of “Chemistry of the People, by the People, for the People.”

ABSTRACTS (USB FLASH DRIVE). Abstracts of all scientific sessions at the meeting can be purchased in USB flash drive (thumb drive) format through ACS Attendee Registration either online before June 29 or on-site in Philadelphia from Aug. 21 to 25. 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 USB flash drive shipped to you if you place your order before June 29, pay an \$8.00 postage fee per item, and provide a valid street address within the U.S. 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, D.C. 20036; (800) 227-5558. Abstract USB flash drives and their shipping costs are nonrefundable.

PREPRINTS/GRAPHICAL ABSTRACTS. Preprints and graphical abstracts from the following divisions may be ordered directly from each division. You can purchase them via the information below or inquire about these products at the hospitality table for each division near their meeting rooms.

Energy & Fuels. Visit proceedings.com/2256.html

Polymer Chemistry. Kathy Mitchem, e-mail: kathyl@vt.edu

Special & educational events

Presidential events

ACS PRESIDENT DONNA NELSON welcomes attendees to the 252nd ACS National Meeting. The presidential programming continues her theme of addressing building communities in chemistry, as well as other themes of broad interest to ACS members.

Four presidential symposia will highlight the role of chemistry through international partnerships and collaborations around the world. The first symposium, “Chemical Sciences & Human Rights,” will take place on Sunday, Aug. 21, from 8 AM to noon. This will be followed by a two-day symposium, “Chemistry in the U.S. &

China: Current & Future States of Shared Scientific Interests & Opportunities for Cooperation,” that begins on Sunday afternoon at 1:20 PM and begins anew on Monday, Aug. 22, from 8:30 AM to 12:30 PM. A poster session titled “Building International Communities” will run from 4:30 to 6:30 PM on Sunday in the late afternoon. Rounding out the international theme, on Monday from 2 to 6 PM, President Nelson will host a symposium on “Broadening Participation in Global Chemistry Experiences: Why Engaging Diverse Chemistry Communities in Global Research is Critical.”

Other presidential symposia are sure to generate interest for their variety of topics and issues they address. On Sunday morn-

ing from 10:30 AM to 12:05 PM, there will be the symposium to honor the 2016 Citation for Chemical Breakthrough Awards. These awards were developed in 2006 by the Division of the History of Chemistry to recognize “breakthrough publications, books, and patents worldwide in the fields of science embraced by the ACS.”

Programming within the trending topic “Fracking: Economics vs. Environment” will be held on Monday morning from 8 AM to noon. Several ACS symposia have tackled the science and environmental implications of hydraulic fracturing, and President Nelson looks to continue the discussion of these important issues at this symposium. On Monday afternoon, she invites meeting participants to attend

a symposium on “NSF Opportunities” from 1 to 5 PM.

Finally, as part of the meeting theme, and to celebrate our host city of Philadelphia, President Nelson will be organizing an all-day symposium on Tuesday titled “Chemical Business of the People, by the People, for the People” that begins at 8:30 AM and concludes at 5 PM.

Details of these presidential events and other recommended symposia can be found at www.acs.org/philadelphia2016.

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/philadelphia2016.

Undergraduate Program. A vibrant program designed especially for undergraduate students has been planned by the Society Committee on Education’s Undergraduate Programs Advisory Board. This educational and career-oriented program includes technical symposia and workshops on essential skills for employment in chemistry and success in graduate school. Eminent scientist Tobin J. Marks, Vladimir N. Ipatieff Professor of Catalytic Chemistry at Northwestern University, will present “How to Make Plastic Transistors and Solar Cells.”

► Sunday, Aug. 21

Undergraduate Hospitality Center, 8:30 AM to 5 PM

Undergraduate Research Oral Session, 8:30 AM to 5 PM

Networking Basics for Students, (co-sponsored by YCC and Professional Affairs) 9 to 10:15 AM

Graduate School Reality Check, Step I: Getting In (cosponsored by YCC), 10:30 AM to noon

Graduate School Reality Check, Step II: You’re In—Now What? (cosponsored by YCC), noon to 1:30 PM

Networking Social with Graduate School Recruiters, 2 to 5 PM

The Science behind Pixar (cosponsored by YCC), 6 to 8 PM

► Monday, Aug. 22

Undergraduate Hospitality Center, 8:30 AM to 5 PM

Undergraduate Research Oral Session, 8:30 AM to 5 PM

Chemists Are Everywhere! The Spectrum of Careers in Chemistry, 9 to 10 AM

What It Means To Be “We the Chemists” Today, 10:15 to 11:15 AM

Eminent Scientist Lecture & Luncheon with Dr. Tobin J. Marks, Northwestern University (cosponsored by INOR), 11:30 AM to 1:30 PM

Undergraduate Research Poster Session (cosponsored by CHED, AGFD, ENVR, INOR, MEDI, PHYS, POLY, GEOC, and BIOT), 2 to 4 PM

Student Speed Networking with Chemistry Professionals, 3:45 to 4:45 PM

Sci-Mix/Successful Student Chapter Posters, 8 to 10 PM

GRADUATE & POSTDOCTORAL SCHOLARS OFFICE. The Graduate & Postdoctoral Scholars Office, with support from the Graduate Education Advisory Board, provides and promotes programs and resources for graduate students and postdoctoral scholars.

► Sunday, Aug. 21

ChemIDP: Planning for Your Career, 2 to 4 PM

Faculty & Postdoc Afternoon Networking Coffee Break, 4 to 6 PM

► Monday, Aug. 22

Student Speed Networking with Chemistry Professionals, 3:45 to 4:45 PM

Graduate & Postdoctoral Scholars Reception, 7 to 8:30 PM

Academic Employment Initiative (AEI), 8 to 10 PM

For more information about these events and other ACS programs offered to graduate students and postdocs, visit www.acs.org/grad or contact the ACS Graduate & Postdoctoral Scholars Office at GradEd@acs.org or at (800) 227-5558 ext. 4588.

HIGH SCHOOL CHEMISTRY TEACHER PROGRAM. The Division of Chemical Education and the ACS Education Division are sponsoring the High School Chemistry Teacher Program. It will include presentations on current pedagogies, resources, and activities that align with the meeting’s theme, “Chemistry of the People, by the People, for the People.” The High School-College Interface Luncheon will bring together educators from all grade

levels with the goal of facilitating an exchange of ideas and networking among teachers.

High school teachers can register for the 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 through Tuesday). Attendees can track professional development (based on clock hours) for sessions attended at the ACS national meeting. Participants should fill out a form to receive a certificate documenting their participation in the conference.

► Sunday, Aug. 21

High School Chemistry Teacher Program, 8:30 AM to 4:30 PM

High School Polymer Program, 8:30 AM to 5 PM

For more information, contact the Office of High School Chemistry at education@acs.org or call (800) 227-5558 ext. 2105.

Workshops

The following workshops require a separate registration process and/or entry fee 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). CHAS member: full registration \$375/early registration

CHAS NRCC certification exams

What: Certification exams of the National Registry of Certified Chemists

When: Sunday, Aug. 21, 8 AM to noon

Where: Pennsylvania Convention Center, Room 106B

How: Advance registration and completion (with approval) of application must be done before July 31. Applications may be downloaded from nrcc6.org.

For additional information, contact Russ Phifer by e-mail at rphifer@nrcc6.org.

\$300; non-CHAS member: full registration \$425/early registration \$350. Early registration ends June 26. K-12 science teachers who are American Association of Chemistry Teacher members: \$99. Need-based scholarships are available for K-12 science teachers; contact scholarships@labsafetyinstitute.org.

Registration is required for all CHAS workshops. Register online at dchas.org/workshop-registration-page.

Laboratory Safety. Friday, Aug. 19, 8 AM to 5 PM. Pennsylvania Convention Center. Sponsored by CHAS. Presenters: James Kaufman and/or Jack Breazeale. This presentation on laboratory safety by the Laboratory Safety Institute 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. Interactive demonstrations will teach you about issues such as creative wiring in the lab and how to work with administrators to keep a safe working environment. This workshop will provide a forum to speak openly about safety in your workplace.

Laboratory Waste Management. Friday, Aug. 19, 8 AM to 5 PM. Pennsylvania Convention Center. Sponsored by CHAS. Presenter: Russ Phifer. This comprehensive course will identify the various regulatory requirements that apply to laboratories that generate hazardous waste, as well as provide insight to the options for on-site management and off-site disposal. The instructor will include discussion of recycling/reclamation techniques, economical handling of waste, and liability issues.

Cannabis Extraction & Analysis. Friday, Aug. 19, 8 AM to 5 PM. Pennsylvania Convention Center. Sponsored by CHAS.

CHAS and CANN (Cannabis Chemistry Subdivision) present a comprehensive review of current methodologies and best practices in the analysis of cannabis products and extraction/processing of cannabis. Participants will learn the latest developments in extraction technologies, how to comply with testing standards, and how to operate safely.

Chemical Reactivity Hazards: Laboratory-Scale Recognition & Control. Saturday, Aug. 20, 8 AM to 5 PM. Pennsylvania Convention Center. Sponsored by CHAS. Presenter: Neal Langerman. The Process

Safety Alliance, in cooperation with the Occupational Safety & Health Administration, is presenting this workshop. The objective is to provide 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. 20, 8 AM to 5 PM. Pennsylvania Convention Center. Sponsored by CHAS. Presenter: Russ Phifer. Take a close look at the Chemical Hygiene Officer (CHO) position, and prepare at the same time for the CHO Certification exam, which will be held on Sunday, Aug. 21, 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.

Meeting New Chemical Safety Expectations in Instructional Laboratories. Saturday, Aug. 20, 8 AM to 5 PM. Pennsylvania Convention Center. Sponsored by CHAS. The 21st-century chemistry laboratory curriculum now includes discovery-based, research-style laboratory work in addition to traditional “cookbook” procedures. To ensure a safe working environment in laboratories using this emerging pedagogy, laboratory safety practices must also evolve away from a strict focus on safety rules to teach risk assessment and management practices. Fortunately, guidelines for this transition are outlined in the ACS guidelines for bachelor’s degree programs, as well as the new NFPA 45-2015 standard.

To flesh out these ideas, this workshop will discuss the cultural context of lab safety concerns and then review and provide practice with job hazard analysis and control banding tools, as described in ACS’s “Identifying and Evaluating Hazards in Research Laboratories” document. Finally, we will address how these tools can be used to address the new NFPA requirements for

a documented hazard/risk assessment and a safety briefing to students in instructional laboratories.

This workshop will be valuable for chemical educators who teach chemistry, present chemical demonstrations, participate in community outreach activities, and/or provide oversight for undergraduate classes and research laboratories. There is extensive opportunity for questions both during the workshop and in follow-up.

Career Launch & Acceleration for Postdoctoral Associates/COACH-the-COACHes Training. Saturday, Aug. 20, 8 AM to 5 PM. Sofitel Philadelphia. Sponsored by COACH. Learn how to assimilate fundamentals of responsible negotiation and communication skills. Attendees will examine the Best Alternative to a Negotiated Agreement (BANTA) concept as a tool to prepare and build confidence, as well as communication styles that are effective for women, projecting confidence, and using powerful rather than weak words. Discussions will focus on making the best impression in the job interview process, succeeding in the negotiating stage, and securing an academic appointment that will position you for career success. This workshop will be held concurrently with the “COACH-the-COACHes” workshop. Preregister at coach.uoregon.edu. Registration is free; travel assistance is available. For more information, contact Priscilla Lewis at coach@uoregon.edu or by phone at (541) 346-0116.

Basics of Entrepreneurship & Commercialization of Research. Saturday, Aug. 20, 8 AM to 5 PM. Sofitel Philadelphia. Sponsored by COACH. Commercialization of research involves taking articles, documentation, know-how, patents, and copyrights created during research activities and getting them to the marketplace for financial and societal gain. This workshop will provide an overview of the basic pathways to commercialization, why an entrepreneur needs a minimum viable product (MVP), and the steps involved in customer and market validation. An overview of intellectual property options, legal issues associated with emerging ventures, team building, and creating and funding companies will be offered. Participants will also have the opportunity to examine their own entrepreneurial mind-set and create a customized plan for developing their entrepreneurial capabilities.

ACS PHYS Undergraduate Research Symposium. Sunday, Aug. 21, 8 AM to noon. Doubletree by Hilton Hotel Philadelphia Center City. This workshop will introduce students to the excitement of modern physical chemistry. PHYS symposium organizers or their designees will present 30-minute overview lectures providing technical and background context that will enable students to benefit from their attendance at subsequent physical chemistry symposia. This workshop is

free and open to the public; no registration is necessary. Graduate-school-bound students are particularly encouraged to attend.

Wikipedia Resources and Edit-A-Thon. Wednesday, Aug. 24. Pennsylvania Convention Center. Workshop on Wiki Education Foundation resources for incorporating Wikipedia assignments into university classrooms, 10 AM to noon. Student editors develop writing and research skills while

expanding access to knowledge through Wikipedia. Edit-a-thon and training to improve coverage of notable chemists and chemistry topics on Wikipedia, 1 to 5 PM. Bring a laptop. Sponsored by the ACS Office of Public Affairs, Simons Foundation, Wiki Education Foundation, Division of Chemical Information, and Committee on Public Relations & Communications. Advance registration requested. Contact Keith Lindblom at k_lindblom@acs.org or call (202)-872-6214.

ACS Career Navigator

ACS Career Navigator is your home for career services, leadership development, professional education, and market intelligence resources. We offer comprehensive and easily identified tools to help you to achieve your career goals by landing a new job, finding a new career path, comparing your salary, and viewing current trends in the chemistry enterprise to make more informed decisions.

Opportunities abound at the ACS national meeting in Philadelphia for career development. Take advantage of the resources and tools the ACS Career Navigator offers to help you succeed in the global scientific enterprise. Are you ready to get started? Refresh your skills and branch into new areas of emerging science and advanced applications with an ACS short course. Take an ACS Leadership Development System course to gain skills that can be immediately applied in school or on the job. If you are an ACS member, stop by the ACS Career Fair in the Pennsylvania Convention Center and speak to a personal career consultant or get a professional head shot taken. In short, whatever your career goals, the ACS Career Navigator is here to help you achieve and exceed them. We'll see you in Philadelphia.

ACS Career Fair

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–Tuesday,

Aug. 21–23, 9 AM to 5 PM. The career fair is the place where the best talent and the best employers in chemistry meet.

The ACS Career Fair provides on-site activities for job seekers to help them reach their 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.

During the career fair, 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
- ▶ Live on-site interviews upon request

On-site job seekers must be ACS members who have registered for the national meeting and complete their career fair registration at www.acs.org/careers (pick up a career fair registration badge in the convention center beginning Sunday, Aug. 21).

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.

One-on-one career consulting. Individual 30-minute appointments with 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 the ACS Career Fair. Sign-up begins at 9 AM on Sunday, Aug. 21, on a first-come, first-served basis.

Career and professional development workshops. More than 20 career-related workshops will help you with everything from improving your résumé, to optimizing job performance, to acing an interview. Workshop times are subject to change. Please consult the online workshop schedule at www.acs.org/careerfair for locations.

▶ Sunday, Aug. 21

New Technologies to Find Jobs & Manage Your Career, 10 to 11:30 AM

Careers in Industrial Chemistry: Identifying Your Role in the Industrial Value Chain, 1 to 3 PM

Setting Yourself Up for Success in an Interview, 1 to 3 PM

Finding Yourself: Identifying a Career that Matches Your Strengths & Values, 1 to 4 PM

Foreign National Scientist: Obtaining a Job in the U.S., 1:30 to 3 PM

Writing Excellent Proposals, 3:30 to 5 PM

Making the Most of Your Interview: Outshine the Competition, 3:30 to 5:30 PM

Résumé Development: Marketing Your Brand for an Industrial Chemistry Position, 3:30 to 5:30 PM

Networking: How to Get Started, 4:30 to 5:30 PM



► **Monday, Aug. 22**

Opportunities for Chemists in the Federal Government, 8 to 10 AM

Working for Yourself, 8 AM to noon

Working in Higher Education, 8 AM to noon

How to Find & Apply for a Chemistry Position in the Federal Government, 10:30 AM to 12:30 PM

Careers in Industrial Chemistry: Identifying Your Role in the Industrial Value Chain, 1 to 3 PM

Setting Yourself Up for Success in an Interview, 1 to 3 PM

Finding Yourself: Identifying a Career that Matches Your Strengths & Values, 1 to 4 PM

Making the Most of Your Interview:

Outshine the Competition, 3:30 to 5:30 PM

Résumé Development: Marketing Your Brand for an Industrial Chemistry Position, 3:30 to 5:30 PM

Networking: How to Get Started, 4:30 to 5:30 PM

► **Tuesday, Aug. 23**

Careers in Industrial Chemistry: Identifying Your Role in the Industrial Value Chain, 8 to 10 AM

Setting Yourself Up for Success in an Interview, 8 to 10 AM

Finding Yourself: Identifying a Career that Matches Your Strengths & Values, 8 to 11 AM

Making the Most of Your Interview: Outshine the Competition, 10:30 AM to 12:30 PM

Résumé Development: Marketing Your Brand for an Industrial Chemistry Position, 10:30 AM to 12:30 PM

Networking: How to Get Started, 11:30 AM to 12:30 PM

Opportunities for Chemists in the Federal Government, 1 to 3 PM

Working for Yourself, 1 to 5 PM

Working in Higher Education, 1 to 5 PM

How to Find & Apply for a Chemistry Position in the Federal Government, 3:30 to 5:30 PM

► **Wednesday, Aug. 24**

Careers in Industrial Chemistry: Identifying Your Role in the Industrial Value Chain, 8 to 10 AM

Setting Yourself Up for Success in an Interview, 8 to 10 AM

Finding Yourself: Identifying a Career that Matches Your Strengths & Values, 8 to 11 AM

Making the Most of Your Interview: Out-

shine the Competition, 10:30 AM to 12:30 PM

Résumé Development: Marketing Your Brand for an Industrial Chemistry Position, 10:30 AM to 12:30 PM

Networking: How to Get Started, 11:30 AM to 12:30 PM

Employers—Find the talent you need at the ACS Career Fair. 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 event, approximately 1,000 global job seekers—from recent grads to seasoned professionals—met with recruiters seeking to fill positions in all facets of chemistry, pharmaceuticals, and biotechnology.

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 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 networking forums.
- Extend your presence for 30 days after the career fair via the ACS jobs database.

Looking for a more traditional career fair experience? Employers can purchase booth space inside the exposition hall, enabling your company to maximize its ability to showcase products and services and connect with job seekers. Employers can sign up for the ACS Career Fair Recruiters Row package online at www.acs.org/careers.

Employers will receive an e-mail confirmation and must visit the ACS Career Fair Information Booth to pick up their blue badge. For more information, please visit www.acs.org/careerfair. You can also contact Heather McNeill at (202) 452-8918 or e-mail her at h_mcnell@acs.org.

ACS Professional Education Short Courses

The following short courses, specifically designed to improve the skills and marketability of chemical scientists and technicians, are offered in conjunction with the national meeting. ACS member, early registration,

and group discount rates are available. A course fee and registration separate from the national meeting are required. For more information on ACS Short Courses, to obtain pricing details, or to view a full course catalog, visit www.proed.acs.org. If you have questions, call (202) 872-4508, fax (202) 872-6336, or e-mail proed@acs.org.

ANALYTICAL

1-D & 2-D NMR Spectroscopy: Structure Determination of Small-Molecule Organic Compounds, Aug. 19–20

Analysis & Interpretation of Mass Spectral Data, Aug. 19–20

Analytical Method Transfer of Pharmaceutical Products, Aug. 21

BIOLOGICAL/PHARMACEUTICAL/MEDICINAL CHEMISTRY

Application of Pharmacokinetics & Safety Pharmacology for Chemists in Drug Development, Aug. 19–20

Essentials of Medicinal Chemistry & Pharmacology, Aug. 19–20

COMPUTERS/STATISTICS/ENGINEERING

Chemical Engineering for Chemists, Aug. 19–20

Experimental Design for Productivity and Quality in Research & Development, Aug. 19–21

ORGANIC/PHYSICAL CHEMISTRY

1-D & 2-D NMR Spectroscopy: Structure Determination of Small-Molecule Organic Compounds, Aug. 19–20

Dispersions in Liquids: Suspensions, Emulsions & Foams, Aug. 19–20

Mastering the Art of Writing Reasonable Organic Reaction Mechanisms, Aug. 19–20

Organic Synthesis: Methods & Strategies for the 21st-Century Chemist, Aug. 19–20

POLYMER CHEMISTRY

Polymeric Coatings, Aug. 19–20

Polymer Science & Technology, Aug. 20–21

PROFESSIONAL DEVELOPMENT

Effective Technical Writing, Aug. 19–20

Mastering the Art of Writing Reasonable Organic Reaction Mechanisms, Aug. 19–20

Write Your Own Patent Applications, Aug. 21

REGULATORY/ENVIRONMENTAL

Intellectual Property Strategies for Technical Professionals, Aug. 21

Methods Development, Validation Procedures & Regulatory Compliance Issues, Aug. 19–20

Write Your Own Patent Applications, Aug. 21
Highlights of FDA and Other cGMP Regulations, Aug. 21
Essential Green Chemistry Tools and Techniques for Pharmaceutical Scientists, Aug. 24

2016 ACS Leadership Development System course offerings

Whether you are a manager, experienced professional, or new to the workforce, we invite you to attend an ACS Leadership Development System course held at the ACS national meeting. The following four-hour facilitated courses require a fee of \$150 each for ACS members and \$300 each for non-members. Register for these courses when you register for the meeting. For more information and full course descriptions, visit www.acs.org/leadershipdevelopment.

Leading change. Sunday, Aug. 21, 1 to 5 PM. If you are involved in shifting team priorities, changing the direction of a project, or reconfiguring teams, understanding how people react to change and how to help yourself and others effectively deal with the changes is a key to increasing your professional success. This four-hour course provides you with a stepwise process to lead change and guide others more effectively through the change process.

Collaborating across boundaries. Monday, Aug. 22, 8 AM to noon. Do you work with people from other departments or 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.

Fostering innovation. Monday, Aug. 22, 1 to 5 PM. Keeping pace in an environment of constant change requires innovation. Whether you are part of a nonprofit, business, or academic environment, the ability to contribute to the creation of new ideas, new processes, and new approaches is a key to success. Coming up with new ideas

is challenging, and few of us have the tools and skills to do this effectively. This course will teach a proven, systematic process to generate ideas. You will learn your innovation style and how to stimulate innovative thinking among team members and colleagues.

Strategic planning. Tuesday, Aug. 23, 8 AM to noon. Gain understanding of the structure and contents of a strategic plan as well as the impact that strategy has on your work and an organization's success. You will learn how to become a “partner in planning” with other leaders as you develop a plan for your unit that aligns with the executive-level strategic goals.

Exposition

SEE WHAT'S NEW INSIDE THE EXPOSITION. Visit the ACS National Exposition at the Pennsylvania Convention Center (PACC), Halls A & B, from Sunday, Aug. 21 through Tuesday, Aug. 23. The show hours will be Sunday, 6 to 8:30 PM, and Monday and Tuesday, 9 AM to 5 PM.

Companies will showcase services, instruments, books, computer hardware, scientific software, and an array of chromatographic, lab, and safety equipment. Technical personnel will 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/philadelphia2016 to learn more about exhibiting companies and to download product information.

Free exhibitor workshops. Free workshops will be hosted by exhibitors on the exposition floor and in private rooms inside the PACC. These workshops will introduce new products and services, build skills with specific tools and techniques, and highlight innovative applications that may improve your productivity. Exhibitor workshop registration is available at www.acs.org/philadelphia2016.

Presentations, prizes & special events.

Don't forget to join us on Sunday from 6 to 8:30 PM for the Attendee Welcome Reception. Have an afternoon break while meeting the ACS president-elect candidates inside the exposition on Monday from 1 to 3 PM. Watch for tweets to visit the exposition for special prizes from Monday through Tuesday. Take another afternoon break on Tuesday from 3 to 5 PM and visit the exhibitors before the exposition closes.

Internet & technology. Use free internet access and leave messages for one another at the Meeting Mail terminals located throughout the meeting and inside the exposition. Also, enjoy free Wi-Fi service at the PACC.

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 at the PACC, Grand Hall.

DARE TO BE DIFFERENT

Learn how to break themold with the *Fostering Innovation* course from the ACS Leadership Development System®.

Visit acs.org/DareToBeDifferent to get started.

Brought to you by the ACS Career Navigator™
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Governance meetings

For the complete list of committee meetings and agendas, please consult www.acs.org/philadelphia2016.

Board & council meetings

ACS BOARD OF DIRECTORS. The ACS Board of Directors meeting, open to members who wish to participate, will be held in the Pennsylvania Convention Center from noon to 1 PM on Sunday, Aug. 21.

ACS COUNCIL. The ACS Council meeting will begin at 8 AM, Wednesday, Aug. 24, at the Philadelphia Marriott Downtown. 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 nonmembers 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 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 to the officers listed or ask someone attending the session to speak on your behalf. For further information, contact the officers listed.

► Budget & Finance

Kristin M. Omberg, chair;
b_ffeedback@acs.org

Open Meeting
Saturday, Aug. 20, 8 to 10:30 AM
Philadelphia Marriott Downtown

► Chemical Safety

Elizabeth M. Howson, chair; safety@acs.org

Open Executive Session
Monday, Aug. 22, 8:30 to 11:30 AM
Philadelphia Marriott Downtown

► Chemistry & Public Affairs

Susan B. Butts, chair; sbuttsdc@gmail.com

Open Meeting
Saturday, Aug. 20, 3 to 4:30 PM
Philadelphia Marriott Downtown

► Chemists with Disabilities

John J. Johnston, chair; USDA-FSIS, Fort Collins, CO 80526-8116

Combined Open Meeting
and Executive Session
Sunday, Aug. 21, 8:30 AM to 4:30 PM
Philadelphia Marriott Downtown

► Committees

Wayne E. Jones Jr., chair; Department of Chemistry, Binghamton University (SUNY), Vestal Pkwy. East, Binghamton, NY 13902-6000

Open Session
Monday, Aug. 22, 1:30 to 2:15 PM
Philadelphia Marriott Downtown

► Community Activities

Michael B. McGinnis, chair; dean, College of Science & Mathematics, Norwich University, 158 Harmon Dr., Northfield, VT 05663

Executive Session
Sunday, Aug. 21, 10 AM to noon
Philadelphia Marriott Downtown

CCA/LSAC Joint Open Meeting
Tuesday, Aug. 23, 2 to 3:30 PM
Philadelphia Marriott Downtown

► Constitution & Bylaws

James C. Carver, chair, the Carver Law Firm, Baton Rouge, LA; bylaws@acs.org

Open Meeting
Sunday, Aug. 21, 1:30 to 1:45 PM
Philadelphia Marriott Downtown

Council Policy Committee

The Council Policy Committee will open the floor during its meeting at 11 AM on Tuesday, Aug. 23, to councilors who would like to raise issues of concern that affect them and/or their local sections or divisions. For further information, contact Alan M. Ehrlich, vice chair of CPC, at cpc@acs.org. For more committee meeting details and agendas, please consult the meeting website at www.acs.org or the on-site program distributed during the meeting.

Executive Session

**Sunday, Aug. 21, 9:30 to 11:15 AM and
1:45 to 4:30 PM**

Philadelphia Marriott Downtown

► Corporation Associates

Diane Grob Schmidt,
chair; d_schmidt@acs.org

Open Meeting

Monday, Aug. 22, 8 AM to noon
Philadelphia Marriott Downtown

► Council Policy

Alan M. Ehrlich, vice chair; cpc@acs.org

Open Executive Session

Tuesday, Aug. 23, 9:30 AM to noon
Philadelphia Marriott Downtown

► Divisional Activities

Rodney M. Bennett, chair;
rodbennett@acs.org

Open Session

Sunday, Aug. 21, 8 AM to noon
Philadelphia Marriott Downtown

► Economic & Professional Affairs

Rick Ewing, chair; ewingwre@comcast.net

Executive Session

Saturday, Aug. 20, 8 AM to 3:30 PM
Pennsylvania Convention Center

Open Session

Saturday, Aug. 20, 3 to 5:30 PM
Pennsylvania Convention Center

► Education

Diane Krone, chair;
kroned@alumni.stevens.edu

Open Meeting

Monday, Aug. 22, 3 to 4 PM
Philadelphia Marriott Downtown

Executive Session

Friday, Aug. 19, 1 to 5:30 PM
Pennsylvania Convention Center

► Environmental Improvement

Anthony "Tony" Noce, chair; cei@acs.org

Breakfast/Open Session

Monday, Aug. 22, 7:45 to 9 AM
Loews Philadelphia Hotel

► Ethics

Keith Vitense, chair; Cameron University,
Physical Science Department, 2800 West
Gore Blvd., Lawton, OK 73505-6320

Open Executive Session

Sunday, Aug. 21, 9 AM to 4:30 PM
Philadelphia Marriott Downtown

► International Activities

Ellene Tratras Contis, chair; c/o ACS Office
of International Activities, 1155 16th St.,
N.W., Washington, DC 20036

Open Meeting

Saturday, Aug. 20, 1 to 3 PM
Philadelphia Marriott Downtown

► Local Section Activities

Martin Rudd, chair; Department of Chem-
istry, University of Wisconsin, Fox Valley;
martin.rudd@uwc.edu

LSAC/CCA Joint Open Meeting
Tuesday, Aug. 23, 2 to 3:30 PM
Philadelphia Marriott Downtown

Open Executive Session

Sunday, Aug. 21, 8 AM to noon
Philadelphia Marriott Downtown

► Meetings & Expositions

John Pochan, chair; M&E@acs.org

Open Executive Session

Sunday, Aug. 21, 7 to 10:30 AM
Pennsylvania Convention Center

Closed Executive Session

Sunday, Aug. 21, 10:30 AM to noon
Pennsylvania Convention Center

► Membership Affairs

James M. Landis Jr., chair; 131 Arthur Dr.,
Troy, MI, 48083-1704

Executive Session

Sunday, Aug. 21, 8 AM to 4 PM
Philadelphia Marriott Downtown

Open Meeting

Monday, Aug. 22, 1 to 2 PM
Philadelphia Marriott Downtown

► Minority Affairs

Madeleine Jacobs, chair;
madeleine.s.jacobs@gmail.com

Closed Executive Session

Sunday, Aug. 21, 8 AM to 12:30 PM
Philadelphia Marriott Downtown

Open Session

Sunday, Aug. 21, 12:30 to 2 PM
Philadelphia Marriott Downtown

► Nomenclature, Terminology & Symbols

Michael D. Mosher, chair; University of
Northern Colorado;
michael.mosher@unco.edu

Open Meeting

Monday, Aug. 22, 2 to 5 PM
Philadelphia Marriott Downtown

► Nominations & Elections

D. Richard Cobb, chair; nomelect@acs.org

Open Executive Session

Monday, Aug. 22, 11:30 AM to noon
Philadelphia Marriott Downtown

► Patents & Related Matters

Sadiq Shah, chair; sadiq@utpa.edu

Open Meeting

Saturday, Aug. 20, 9 AM to 5 PM
Pennsylvania Convention Center

► Professional Training

Thomas J. Wenzel, chair; Department of
Chemistry, Bates College; cpt@acs.org

Open Meeting

Sunday, Aug. 21, 4 to 5 PM
Pennsylvania Convention Center

► Project SEED

Anna G. Cavinato, chair; Department of
Chemistry, Eastern Oregon University,
One University Blvd., LaGrande, OR
97850-2807

Open Session

Sunday, Aug. 21, 8 to 9 AM
Philadelphia Marriott Downtown

Closed Executive Session
Saturday, Aug. 20, 1 to 5 PM
 Philadelphia Marriott Downtown

► **Public Relations & Communications**

Jennifer Maclachlan, chair; PID Analyzers, Sandwich, MA; pidgirl@gmail.com

Open Executive Session
Monday, Aug. 22, 8 AM to 1 PM
 Philadelphia Marriott Downtown

► **Publications**

Nicole S. Sampson, chair; Department of Chemistry, Stony Brook University, Stony Brook, NY 11794-3400

Open Meeting
Friday, Aug. 19, 4:30 to 5 PM
 Pennsylvania Convention Center

Executive Session
Friday, Aug. 19, 1 to 5 PM (Closed Executive Session until 4:30 PM)
 Pennsylvania Convention Center

► **Science**

Mark C. Cesa, chair; markcesa@comcast.net

Open Meeting
Saturday, Aug. 20, 8:30 AM to 4:30 PM
 Pennsylvania Convention Center

► **Senior Chemists**

Thomas R. Beattie, chair; silvercircle@acs.org

Open Executive Session
Monday, Aug. 22, 8 AM to 1 PM
 Philadelphia Marriott Downtown

► **Technician Affairs**

Kara M. Allen, chair; cta@acs.org

Closed Executive Session
Sunday, Aug. 21, 8:30 AM to 2 PM
 Philadelphia Marriott Downtown

Open Executive Session
Sunday, Aug. 21, 2 to 2:30 PM
 Philadelphia Marriott Downtown

► **Women Chemists**

Amber Charlebois, chair; Fairleigh Dickinson University, Madison, NJ 07940; afcharleb@gmail.com


Closed Executive Session
Saturday, Aug. 20, 8 AM to 5 PM
 Pennsylvania Convention Center

► **Younger Chemists**

Natalie A. LaFranzo, chair; nlafranzo@gmail.com

Open Session
Sunday, Aug. 21, 8 AM to noon
 Philadelphia Marriott Downtown

Executive Session
Sunday, Aug. 21, noon to 1 PM
 Philadelphia Marriott Downtown



18th Annual
ChemLuminary Awards

FOR THE LOVE OF
CHEMISTRY

TUESDAY
 AUGUST 23RD

Pennsylvania Convention Center
 PHILADELPHIA PENNSYLVANIA

Poster Session
 Terrace Foyer • 8pm

ChemLuminary Awards Ceremony
 Terrace Ballroom One • 9pm

Celebration
 Terrace Ballroom One • 10pm



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ADVANCE REGISTRATION FORM
AMERICAN CHEMICAL SOCIETY • 252nd NATIONAL MEETING & EXPOSITION
AUGUST 21 – 25, 2016 • PHILADELPHIA, PA

4 ways to register: (see Registration Procedures)

Online: <http://www.acs.org/philadelphia2016> (credit cards only).

Phone: 508-743-0192 or 800-251-8629, Monday - Friday, 9 AM to 5 PM EST (credit cards only) by August 25, 2016.

Mail: completed form with payment to: ACS Registration c/o CDS, 107 Waterhouse Road, Bourne, MA 02532 by June 29, 2016.

Fax: completed form with payment to: 508-743-9604 (credit cards only) by August 25, 2016.

– REGISTRANT INFORMATION

Dr. Prof. Mr. Ms. Mrs.

ACS Membership # _____ (Required for member discount)

First Name _____

Last Name _____

Title _____

Company/Institution/Agency _____

Street Address _____

City _____

State/Province _____

Zip/Postal Code _____

Country _____

Phone _____

Ext. _____

Fax _____

E-mail Address _____

Emergency Contact Name _____

Emergency Contact Number _____

Cell Number _____

With your approval, ACS show management will be sending meeting alerts & special offers by text messaging. Regular text messaging rates may apply. Yes I accept or No I do not accept

How would you like to receive your meeting announcements, networking connections, and exhibitor promotions before, during, and after the meeting?

(check all that apply) Mail E-mail Do not contact me

Do you require special services or auxiliary aids in order to participate in the meeting? Yes No Describe _____

DEMOGRAPHICS

1. Professional Affiliation (check one)

- (a) Academia (b) Government (c) Industry (d) Student
 (e) Other _____

2. Highest Degree Received (check one)

- (A) A.S./A.A.S. (Associate Degree) (B) B.S./B.A. (Baccalaureate Degree)
 (C) M.S. (D) Ph.D. (E) Still in school (degree not completed)
 (F) Other _____

3. Professional Concentration (check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> (A) Aerospace/Transportation | <input type="checkbox"/> (S) Inorganic |
| <input type="checkbox"/> (B) Agriculture & Food | <input type="checkbox"/> (T) Law/Legal Affairs |
| <input type="checkbox"/> (C) Analytical | <input type="checkbox"/> (U) Lubricants/Oils |
| <input type="checkbox"/> (D) Biochemistry | <input type="checkbox"/> (V) Marketing/Sales/Business |
| <input type="checkbox"/> (E) Biotechnology | <input type="checkbox"/> (W) Materials |
| <input type="checkbox"/> (F) Chemical Education | <input type="checkbox"/> (X) Metals/Metal Products |
| <input type="checkbox"/> (G) Chemical Information | <input type="checkbox"/> (Y) Nuclear |
| <input type="checkbox"/> (H) Clinical/Diagnostic | <input type="checkbox"/> (Z) Organic |
| <input type="checkbox"/> (I) Colloids & Surfaces | <input type="checkbox"/> (AA) Paint/Coatings |
| <input type="checkbox"/> (J) Combinatorial Chemistry | <input type="checkbox"/> (BB) Personal Care/Cosmetics |
| <input type="checkbox"/> (K) Computing/Molecular Modeling | <input type="checkbox"/> (CC) Pharmaceutical/Medicinal |
| <input type="checkbox"/> (L) Electronics/Semiconductors | <input type="checkbox"/> (DD) Physical |
| <input type="checkbox"/> (M) Energy/Fuels | <input type="checkbox"/> (EE) Polymers/Plastics |
| <input type="checkbox"/> (N) Environmental | <input type="checkbox"/> (FF) Pulp/Paper/Wood |
| <input type="checkbox"/> (O) Forensics | <input type="checkbox"/> (GG) Rubber |
| <input type="checkbox"/> (P) Geochemistry | <input type="checkbox"/> (HH) Soap/Detergent/Cleaners |
| <input type="checkbox"/> (Q) Glass/Ceramics/Composites | <input type="checkbox"/> (II) Textiles/Fiber |
| <input type="checkbox"/> (R) Health & Safety | <input type="checkbox"/> (JJ) Toxicology |
| <input type="checkbox"/> (KK) Other _____ | |

4. Is this your first ACS National Meeting? Yes No

5. What's your primary reason for attending this meeting?

- Present a paper or poster
 Network with other scientists
 Investigate research or technical topics
 Research or buy products inside Exposition
 Search for a job in Career Services
 Obtain new skills and hands-on experience
 Participate in ACS governance activities
 Work during the meeting (staff/exhibitors)
 Other _____

6. Where are you staying (or planning to stay) during the meeting?

Hotel _____ Other _____

7. What mode of transportation will you take to attend the meeting?

Plane Train Car Other _____

REGISTRATION CATEGORIES & FEES

ACS Members

	EARLY <small>from May 18</small>	STANDARD <small>after June 29</small>
<input type="checkbox"/> ACS member or Society affiliate	\$415	\$500
<input type="checkbox"/> Postdoctoral	\$415	\$500
<input type="checkbox"/> Emeritus or retired	\$210	\$255
<input type="checkbox"/> 50-year	No Fee	No Fee
<input type="checkbox"/> Unemployed	No Fee	No Fee
<small>(dues waiver required)</small>		
<input type="checkbox"/> Graduate student	\$210	\$210
<input type="checkbox"/> Undergraduate Student	\$105	\$105
<input type="checkbox"/> Precollege teacher	\$105	\$105
<input type="checkbox"/> One day member registrant	\$210	\$255
	<input type="checkbox"/> Su <input type="checkbox"/> M <input type="checkbox"/> Tu <input type="checkbox"/> W <input type="checkbox"/> Th	

Non-Members

<input type="checkbox"/> Chemical scientist	\$730	\$880
<input type="checkbox"/> Postdoctoral scientist	\$730	\$880
<input type="checkbox"/> Visitor: Non-chemical scientist	\$415	\$500
<input type="checkbox"/> Visitor: Chemical technician	\$415	\$500
<input type="checkbox"/> Graduate Student	\$415	\$415
<input type="checkbox"/> Undergraduate Student	\$210	\$210
<input type="checkbox"/> Pre-College Teacher	\$105	\$105
<input type="checkbox"/> One-day registrant	\$415	\$500
	<input type="checkbox"/> Su <input type="checkbox"/> M <input type="checkbox"/> Tu <input type="checkbox"/> W <input type="checkbox"/> Th	

Guest of Registrant (1) \$45 \$45

(1) Guest Registration - A Spouse or family member of the registering attendee having no affiliation with the field of chemical science and is not eligible to become a member of the ACS. Only one guest registration allowed per full or one-day registration.

Guest Name _____

Exposition Visitors

<input type="checkbox"/> Adult	\$50	\$50
<input type="checkbox"/> Student	\$25	\$25

8. Registration Subtotal \$ _____

PAYMENT

You agree to accept all terms and conditions by submitting this registration to participate in the ACS National Meeting & Exposition.

Pay by: Check - (made payable in U.S. dollars to American Chemical Society)

Credit Card Type: VISA MasterCard American Express Diners

By signing below, the credit card holder agrees to pay the charges listed above in order to participate in the 252nd ACS National Meeting in Philadelphia, PA.

Credit Card Number _____ Exp Date _____

Credit Card Billing Address & Zip _____

Card Holder Name _____

Card Holder Signature _____

SOCIAL EVENT FEES

Event No.	Qty	\$/Ticket	\$ TOTAL
_____	_____	_____	_____
_____	_____	_____	_____

9. Social Event Subtotal \$ _____

If you register before the social event tickets are available, you can later purchase your tickets by contacting the Customer Service office, at 508-743-0192 or 1-800-251-8629, if you are paying by check or money. If you are paying by credit card, you can update your registration online by using your confirmation number.

ABSTRACT FEES

	ACS MEMBER	NON-MEMBER
Flash Drive (pick up) _____	@\$65 ea.	@\$90 ea.
Flash Drive (ship) _____	@\$73 ea.	@\$98 ea.

10. Abstract Subtotal \$ _____

Abstracts ordered by June 29, 2016, will be shipped for delivery prior to the meeting. All other abstracts will be available for pick-up onsite at Attendee Registration. ACS will not be responsible for abstracts not picked up during the meeting. Abstract flash drives will only be shipped to U.S. street addresses (no P.O. boxes)

PROGRAM BOOK FEE

Early rate \$10.00 (May 18, 2016 – June 29, 2016) Qty _____
Standard/Onsite rate \$20.00 (June 30, 2016 – August 25, 2016) Qty _____

The hardcopy pricing of the Onsite Program includes an online version of the Author index that will be available 1 week before the meeting.

11. Program Book Subtotal \$ _____

GRAND TOTAL

12. Grand Total of 8-11 \$ _____

Registrant Procedures: U.S. attendees who register by June 29, 2016, will receive their registration credentials and tickets via mail prior to the meeting. Unless an international attendee has provided a U.S. mailing address on their registration form, their credentials must be picked-up onsite at the Attendee Registration (this includes Canada and Mexico). After June 29, 2016, registrations will continue to be accepted at the standard rate on-line and by phone or fax (credit card payment only) until August 25, 2016.

Registration Cancellation/Refund Policy: By adhering to the following cancellation procedure, cancellations received by July 20, 2016, are entitled to a full refund, less a \$50 administrative fee. Registrants must return a copy of the registration confirmation along with the original registration credentials before payment will be posted to the account. All refunds are issued via the same method used for payment. Refunds are processed within 30 days after the conclusion of the meeting.

1. Submit your written cancellation to the ACS Registration Customer Service Center by mail, fax or e-mail by July 20, 2016.
2. Return your unused registration credentials to ACS by July 20, 2016. If you cancel before receiving your registration credentials, contact the ACS Registration Customer Service Center for further instructions.
3. Refund requests made after July 20, 2016, will not be honored.
4. No cancellation or refund for Abstract flash drives and/or postage charges for mailing will be made.