



ACS NATIONAL MEETING

# 253rd ACS National Meeting

San Francisco, April 2–6

**“Advanced Materials, Technologies, Systems & Processes”** will be the theme in San Francisco this April. Many notable symposia are scheduled, including “Communicating Science in the 21st Century to Diversified Audiences” and “Teaching, Researching & Community Building in the Global Chemical Enterprise.”

ACS President Allison Campbell will host 29 technical divisions and six committees in

original programming, including 1,100 half-day oral sessions and 144 poster sessions. More than 14,500 papers and nearly 5,700 posters will be presented at the meeting.

Campbell will sponsor several presidential events. On Sunday and Monday, April 2–3, the two-day symposium “LGBT Graduate & Postdoctoral Student Chemistry Research” will include scientific talks by LGBT graduate and postdoctoral students and a panel discussion on issues that affect LGBT students. Sunday afternoon, “Holy Grails in Chemistry: Celebrating the 50th Anniversary of *Accounts of Chemical Research Journal*” will assess the progress made in critical areas

of chemistry since they were highlighted in a 1995 issue of the journal. On Monday, April 3, “Science for a Sustainable Energy Future” will focus on scientific advances in energy storage and chemical and biological approaches to energy conversion. Details on these and other presidential events can be found at [www.acs.org/sanfran2017](http://www.acs.org/sanfran2017).

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 feature on-site interviews, one-on-one career assistance, and workshops.

The exposition will feature more than 250 companies showcasing services, instruments, books, and lab equipment in more than 400 booths.—ALEXANDRA TAYLOR

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## MEETING INFO ON THE WEB

[www.acs.org/sanfran2017](http://www.acs.org/sanfran2017)

# Presidential Events

PRES

A. Campbell, Program Chair

San Francisco Marriott Marquis/ Moscone Center	S	M	Tu	W	Th
Holy Grails in Chemistry: Celebrating the 50th Anniversary of <i>Accounts of Chemical Research Journal</i> **	PE				
Science for a Sustainable Energy Future **		D			
PHYS Division Awards Symposium *(PHYS)	D	D	D	A	
LGBT Graduate & Postdoctoral Student Chemistry Research Symposium *(PROF)	D	D			
Best Practices in Selecting & Presenting Safety Training Content *(CHAS)	P				
ACS Award in the Chemistry of Materials: Symposium in Honor of Douglas A. Keszler *(INOR)	E		D		
Celebrating 90 years of the WCC: Reflections of Past Chairs *(WCC)		A			
Chemical Forensics *(ANYL)		D	D		
Excellence in Graduate Polymer Research *(POLY)		D	DE		
Teaching, Researching & Community Building in the Global Chemical Enterprise *(IAC)		D			
Rising Star Award Symposium *(WCC)		P			
Producing Knowledgeable, Well-Rounded, T-Shaped Chemists for the 21st Century: Current Perspectives from High School, Undergraduate & Graduate Educators *(PROF)			A		
GSSPC: Water Sustainability *(CHED)			D		
Communicating Science in the 21st Century to Diversified Audiences *(CHED)				D	
What Have We Learned & Where Are We Going: Post-Settlement in the University of California *(CHAS)				D	
Current Best Practices for Chemistry REU Programs *(CHED)					A

# Multidisciplinary Program Planning Group

MPPG

K. Beers, Program Chair

Moscone Center	S	M	Tu	W	Th
Spotlight on Advanced Materials, Technologies, Systems & Processes in the <i>Journal of the American Chemical Society</i>	A				
Advanced Materials, Technologies, Systems & Processes Plenary Session	P				

# Multidisciplinary Program Planning Group (continued)

MPPG

K. Beers, Program Chair

Moscone Center	S	M	Tu	W	Th
Advanced Materials, Technologies, Systems & Processes: Implementation of Chemistry into Practice		A			
The Kavli Foundation Emerging Leader in Chemistry Lecture		P			
The Fred Kavli Innovations in Chemistry Lecture		P			
Nanoscience & Nanotechnology for Advanced Materials & Technologies		P			
Next Generation Smart Materials *(POLY)	A	D	D	D	A
Catalysis for Unconventional Energy Sources *(ENFL)	D	A			
Polymeric Materials for Performance & Sustainability *(POLY)	D	D	AE	D	A
Catalytic Materials from Molecular Insight *(COMP)	D	D	D		
Advanced Materials & Technologies for Solar Energy Conversion & Storage *(ENFL)	D	D	D		
Computations for CO <sub>2</sub> Capture, Conversion & Sequestration *(ENFL)	D	D			
Janus Particles: Synthesis, Characterization & Applications *(PMSE)	D	D			
LGBT Graduate & Postdoctoral Student Chemistry Research Symposium *(PROF)	D	D			
Incorporating Polymer Science into the Classroom *(POLY)	D				
Innovative Chemistry & Materials for Electrochemical Energy Storage *(ENFL)	P	D	D	D	A
Holy Grails in Chemistry: Celebrating the 50th Anniversary of <i>Accounts of Chemical Research Journal</i> *(PRES)	PE				
ACS Award in the Chemistry of Materials: Symposium in Honor of Douglas A. Keszler *(INOR)	E		D		
Support & Activator Effects on Metal-Mediated Polymerization *(PMSE)		D	D		
50th Anniversary Celebration of Macromolecules *(POLY)		D			
Science for a Sustainable Energy Future *(PRES)		D			
Industrial Innovations in Polymer Chemistry *(POLY)		P			
Chemistry Is Central to Applied Materials *(INOR)			AE	A	
Functional Porous Materials for Sustainable Energy *(ENFL)			D	D	A
Biomass & Biofuel Processing *(ENFL)			D	D	
Polymers Under Deformation *(PMSE)			D	D	
State-of-the-Art Methods for Modeling Materials Chemistry *(COMP)			D	D	

**Multidisciplinary Program  
Planning Group (continued)****M P P G***K. Beers, Program Chair*

<b>Moscone Center</b>	<b>S</b>	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>
Polymer Chemistry (RSC) Lectureship *(POLY)			D		
Advances in Polysaccharides: Practice & Applications *(CELL)			P	D	D
Undergraduate Laboratory Experiments Involving Advanced Materials *(CHED)				D	
Frontiers in Glycoanalytics *(CELL)				P	A
Reactive Extrusion: Advances at the Nexus of Polymer Processing, Materials Technology & Green Chemistry *(CELL)				P	D

**Division of Agricultural & Food  
Chemistry****A G F D***N. Seeram, Program Chair*

<b>Hilton San Francisco Union Square</b>	<b>S</b>	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>
Chemistry & Biological Effects of Maple Food Products	D				
Chemistry of Korean Foods & Beverages**	D				
Withycombe-Charalambous Graduate Student Symposium**	P				
General Posters	E				
Structure & Chemistry of Proteins of Food Safety & Food Manufacturing Interest		A			
Artisanal Foods <b>AMTSP</b>		D	A		
Chemistry & Biological Activities of Phenolic Compounds from Fruits & Vegetables		D	D	D	
General Papers		P	P	D	D
Sci-Mix		E			
Chemistry of Tree Nuts			D		
Bliss Point: Food Satiety & Food Mood Effects				A	
Chemistry of Cellulosic Natural Products				P	
Synthetic Biology in Food & Agriculture					A
Coffee & Cocoa Products					D
Nanocellulose Processing & Analysis *(CELL)	D	D			
Valorization of Renewable Resources & Residuals into New Materials & Multiphase Systems *(CELL)	D	P	D	D	D
Undergraduate Research Posters *(CHED)		P			
Developments in the Fields of Celluloses & Lignocelluloses: In Honor of Dr. Rajai Atalla *(CELL)			D	D	D

**Division of Agricultural & Food  
Chemistry (continued)****A G F D***N. Seeram, Program Chair*

<b>Hilton San Francisco Union Square</b>	<b>S</b>	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>
Advances in Polysaccharides: Practice & Applications *(CELL)			P	D	D
Biobased Gels & Porous Materials *(CELL)				D	D
Advances in Resource Recovery & Conservation in Water Systems *(ENVR)				PE	D

**Division of Agrochemicals****A G R O***S. Jackson, Program Chair*

<b>Located with Primary Sponsor</b>	<b>S</b>	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>
Contaminants of Emerging Concern in Natural & Engineered Systems *(ENVR)	D	D		E	
Hollyweird Chemistry *(CPRC)	P	D			
Contaminants in Urban & Coastal Estuarine Ecosystems *(ENVR)				PE	D

**Division of Analytical Chemistry****A N Y L***L. Baker, K. Phinney, Program Chairs*

<b>Hilton San Francisco Union Square</b>	<b>S</b>	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>
Synthesis & Characterization of Materials for Energy Applications ** <b>AMTSP</b>	D	D	D	D	
Coherent Multidimensional Spectroscopy in Materials Science ** <b>AMTSP</b>	D	D			
Advances in Separations	D				
Analytical Neuroscience	D				
New Analytical Advances in Accelerator Mass Spectrometry (AMS)	D				
Analytical Division Poster Session	E				
ACS Award in Chromatography: Symposium in Honor of Robert T. Kennedy		A			
Chemical Forensics **		D	D		
Biomedical Advances in Cancer Detection & Therapeutics Using Advanced Analytical Techniques		D			
ACS Award in Analytical Chemistry: Symposium in Honor of Donald F. Hunt		P			

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

\*\*Primary organizer of a cosponsored symposium.

AMTSP: Advanced Materials, Technologies, Systems & Processes

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

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



## Division of Analytical Chemistry ANYL (continued)

L. Baker, K. Phinney, Program Chairs

Hilton San Francisco Union Square	S	M	Tu	W	Th
Sci-Mix	E				
Metamorphosis of Supercritical Fluid Chromatography to Chromatographic Systems Using Carbon Dioxide			A		
Kathryn C. Hach Award for Entrepreneurial Success: Symposium in Honor of David R. Walt **			A		
Advanced Materials, Discovery, Characterization & Safety			D		
New Applications of Supercritical Fluid Chromatography			P		
Frank H. Field & Joe L. Franklin Award for Outstanding Achievement: Symposium in Honor of Vicki H. Wysocki **			P		
Hierarchical Characterization of Materials Using Atomic Spectrometry & Related Techniques <i>AMTSP</i>				A	
Active Learning in the Undergraduate Analytical Chemistry Curriculum **				D	
Recent Innovations in Nano-Biosensing Applications of Wearable or Implantable Sensors for Systems in Biology <i>AMTSP</i>				P	D
Advances in Analytical Electrochemistry					D
Advances in Analytical Mass Spectrometry					D
Advances in Analytical Spectroscopy					D
Accurate Mass/High-Resolution Mass Spectrometry for Environmental Monitoring & Remediation *(ENVR)	D	A		E	
Contaminants of Emerging Concern in Natural & Engineered Systems *(ENVR)	D	D		E	
Nanocellulose Processing & Analysis *(CELL)	D	D			
LGBT Graduate & Postdoctoral Student Chemistry Research Symposium *(PROF)	D	D			
Separation of Macromolecules & Particulates *(POLY)	D				
Environmental Chemistry: Undergraduate & Graduate Classroom, Laboratory & Local Community Learning Experiences *(ENVR)		P		E	
Undergraduate Research Posters *(CHED)		P			
ACS Award in Industrial Chemistry: Symposium in Honor of Jane Frommer *(I&EC)		P			
Developments in the Fields of Celluloses & Lignocelluloses: In Honor of Dr. Rajai Atalla *(CELL)			D	D	D

## Division of Analytical Chemistry ANYL (continued)

L. Baker, K. Phinney, Program Chairs

Hilton San Francisco Union Square	S	M	Tu	W	Th
Applications of X-Ray & Neutron Scattering Techniques in Energy Technologies *(ENFL)			D	D	
Frontiers in Glycoanalytics *(CELL)				P	A

## Division of Biochemical Technology BIOT

M. O'Malley, V. Roy, Program Chairs

InterContinental San Francisco	S	M	Tu	W	Th
Biosimilars	A				
David Perlman Memorial Lectureship	A				
Biophysical & Biomolecular Processes <i>AMTSP</i>	D	D	D	A	
Upstream Processes <i>AMTSP</i>	D	D	D	D	A
Downstream Processes <i>AMTSP</i>	D	D	D	D	D
Biobased Products	D	D	D	P	
Start-up Road <i>AMTSP</i>	E	D			
Emerging Technologies <i>AMTSP</i>		A	D	D	A
James M. Van Lanen Distinguished Service Award & Marvin J. Johnson Award in Microbial & Biochemical Technology		A			
Sci-Mix		E			
W. H. Peterson Awards & BIOT Young Investigator Award			A		
Poster Session <i>AMTSP</i>			E		
Alan S. Michaels Award in the Recovery of Biological Products			E		
Quality by Design				A	D
2017 E.V. Murphree Award in Industrial & Engineering Chemistry: Symposium in Honor of Eleftherios T. Papoutsakis **				A	
Drug Product & Delivery				D	D
D.I.C. Wang Award Lecture				E	
Biotechnology & Bioengineering Elmer Gaden Award Lecture					A
Biotechnology & Bioengineering Daniel IC Wang Award					E
Cellulose Structure & Biosynthesis *(CELL)	D	D	A		
Science for a Sustainable Energy Future: Energy Storage *(PRES)		D			
Undergraduate Research Posters *(CHED)		P			
Kathryn C. Hach Award for Entrepreneurial Success: Symposium in Honor of David R. Walt *(ANYL)			A		

Division of Biological Chemistry  
(continued)

B I O L

L. Hedstrom, Program Chair

Moscone Center	S	M	Tu	W	Th
Graduate Student & Postdoctoral Fellow Symposium	A			P	A
Ronald Breslow Award for Achievement in Biomimetic Chemistry: Symposium in Honor of Benjamin G. Davis	A				
ACS Award in Pure Chemistry: Symposium in Honor of Neal K. Devaraj	P				
Goodman Award: Symposium in Honor of Jennifer Doudna	P				
Current Topics in Biochemistry	E		E		
Early Career Investigators in Biological Chemistry		A			
Nucleic Acid Therapeutics: Mechanisms & Applications		D			
Sci-Mix		E			
Metalloprotein-Initiated Signaling Transduction Response to Redox Stress **			A		
Chemical Epigenetics			A		
ACS Chemical Biology Award Symposium **			P		
Mid-Career Investigators in Biological Chemistry				A	
Self-Assembly of Small Molecules in the Cellular Milieu <small>AMTSP</small>				A	
Chemical Probes for Bacterial Imaging **				P	
National Fresenius Award: Symposium in Honor of Neal K. Devaraj *(ORGN)	A				
Cellulose Structure & Biosynthesis *(CELL)	D	D	A		
LGBT Graduate & Postdoctoral Student Chemistry Research Symposium *(PROF)	D	D			
Spectroscopic Elucidation of Metalloenzyme Mechanism: Current Successes & Future Challenges *(INOR)	P		D		
Holy Grails in Chemistry: Celebrating the 50th Anniversary of <i>Accounts of Chemical Research Journal</i> *(PRES)	PE				
Science for a Sustainable Energy Future *(PRES)		D			
Undergraduate Research Posters *(CHED)		P			
Rising Star Award Symposium *(WCC)		P			
ACS Award in Industrial Chemistry: Symposium in Honor of Jane Frommer *(I&EC)		P			
ACS Award for Computers in Chemical & Pharmaceutical Research: Symposium in Honor of Yvonne C. Martin *(COMP)			D		
Chemical Biology: Enabling Drug Discovery *(ORGN)				A	

Division of Business  
Development & Management

B M G T

J. Bryant, Program Chair

Hotel Nikko San Francisco	S	M	Tu	W	Th
Chemical Angel Network: Chemists Investing in Chemical Companies **	P				
Holy Grails in Chemistry: Celebrating the 50th Anniversary of <i>Accounts of Chemical Research Journal</i> *(PRES)	PE				
ACS Award in the Chemistry of Materials: Symposium in Honor of Douglas A. Keszler *(INOR)	E		D		
Entrepreneurial Opportunities in Chemistry *(YCC)	E				
Teaching, Researching & Community Building in the Global Chemical Enterprise *(IAC)		D			
Science for a Sustainable Energy Future *(PRES)		D			
Producing Knowledgeable, Well-Rounded, T-Shaped Chemists for the 21st Century: Current Perspectives from High School, Undergraduate & Graduate Educators *(PROF)			A		
Looking Beyond Your Current Boundaries: What's the Next Step? *(PROF)				D	

Division of Carbohydrate  
Chemistry

C A R B

N. Snyder, Program Chair

Grand Hyatt San Francisco	S	M	Tu	W	Th
Wolfrom Award	A				
Isbell Award	P				
Gin New Investigator Award	P				
Hudson Award		A			
Carbohydrate-Based Hybrid Materials for Nanomedicine **		P	A		
Sci-Mix		E			
LPS: Chemistry, Synthesis & Applications **			D		
General Posters			E		
Carbohydrate-Based Nanomaterials & Drug-Delivery Vehicles **				D	
Cellulose Structure & Biosynthesis *(CELL)	D	D	A		

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

\*\*Primary organizer of a cosponsored symposium.

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

**Division of Carbohydrate Chemistry (continued)**

C A R B

*N. Snyder, Program Chair*

Grand Hyatt San Francisco	S	M	Tu	W	Th
Design & Control in Polysaccharide Chemistry: Anselme Payen Award Symposium in Honor of Kevin J. Edgar *(CELL)	D	D	D		
Hollyweird Chemistry *(CPRC)	P	D			
Holy Grails in Chemistry: Celebrating the 50th Anniversary of <i>Accounts of Chemical Research</i> Journal *(PRES)	PE				
Functional Lignocellulosics & Nanotechnology *(CELL)		D	D	D	D
Science for a Sustainable Energy Future *(PRES)		D			
Catalytic Conversion of Lignocellulosic Biomass to Fuels, Chemicals & Materials *(CATL)		P	D		
Advances in Polysaccharides: Practice & Applications *(CELL)			P	D	D
Biobased Gels & Porous Materials *(CELL)				D	D
Frontiers in Glycoanalytics *(CELL)				P	A

**Division of Catalysis Science & Technology**

C A T L

*E. Nikolla, S. Scott, Program Chairs*

Parc 55 San Francisco	S	M	Tu	W	Th
Amorphous Catalytic Materials <i>AMTSP</i>	D	A			
Advanced X-Ray Techniques for Catalyst Characterization ** <i>AMTSP</i>	D	D	A		
Elucidation of Mechanisms & Kinetics on Surfaces ** <i>AMTSP</i>	D	D	D	D	D
Electrocatalysis for Energy Generation & Storage ** <i>AMTSP</i>	D	D			
ACS Award in Surface Chemistry: Symposium in Honor of Cynthia M. Friend ** <i>AMTSP</i>	D	D			
Synthesis of Catalysts by Nontraditional Methods ** <i>AMTSP</i>	D				
Light-Driven Chemistry: Photoelectrochemistry & Photocatalysis ** <i>AMTSP</i>		D	D	D	
Catalytic Conversion of Lignocellulosic Biomass to Fuels, Chemicals & Materials ** <i>AMTSP</i>		P	D		
Operando Methodology at the Junction Between Fundamental Chemistry & Chemical Engineering ** <i>AMTSP</i>			D	D	D
Designed Catalysis: Materials Genome Approach to Heterogeneous Processes ** <i>AMTSP</i>			D	D	D
General Papers <i>AMTSP</i>			P	P	P

**Division of Catalysis Science & Technology (continued)**

C A T L

*E. Nikolla, S. Scott, Program Chairs*

Parc 55 San Francisco	S	M	Tu	W	Th
Poster Session <i>AMTSP</i>			E		
Single-Site Heterogeneous Catalysts <i>AMTSP</i>				D	A
Subsurface Technologies for Recovery of Fossil & Geothermal Energy *(ENFL)	A				
Catalysis for Unconventional Energy Sources *(ENFL)	D	A			
Molecular Surface Science, Nanomaterials & Catalysis: Symposium in Honor of Gabor Somorjai at 80 *(COLL)	D	D	A	D	
Synthesis & Characterization of Materials for Energy Applications *(ANYL)	D	D	D	D	
Catalytic Materials from Molecular Insight *(COMP)	D	D	D		
Advanced Materials & Technologies for Solar Energy Conversion & Storage *(ENFL)	D	D	D		
C1 Catalysis *(ENFL)	D	D			
Computations for CO <sub>2</sub> Capture, Conversion & Sequestration *(ENFL)	D	D			
Sustainability in Electrocatalytic Fuel & Chemical Production *(INOR)	DE	P			
Holy Grails in Chemistry: Celebrating the 50th Anniversary of <i>Accounts of Chemical Research</i> Journal *(PRES)	PE				
Support & Activator Effects on Metal-Mediated Polymerization *(PMSE)		D	D		
Science for a Sustainable Energy Future *(PRES)		D			
Functional Porous Materials for Sustainable Energy *(ENFL)			D	D	A
State-of-the-Art Methods for Modeling Materials Chemistry *(COMP)			D	D	
ACS Award Lectures *(COLL)			P		
13th International Symposium on Heavy Oil Upgrading, Production & Characterization *(ENFL)				D	A

**Division of Cellulose & Renewable Materials**

C E L L

*M. Roman, Program Chair*

Moscone Center	S	M	Tu	W	Th
Cellulose Structure & Biosynthesis **	D	D	A		
Processing & Properties of Biobased Composites & Blends	D	D	D	A	
Design & Control in Polysaccharide Chemistry: Anselme Payen Award Symposium in Honor of Kevin J. Edgar **	D	D	D		
Nanocellulose Processing & Analysis **	D	D			

## Division of Cellulose & Renewable Materials (continued)

CELL

M. Roman, Program Chair

Moscone Center	S	M	Tu	W	Th
Valorization of Renewable Resources & Residuals into New Materials & Multiphase Systems **	D	P	D	D	D
New Horizons in Sustainable Materials **	D				
General Posters	E				
Chemistry & Physical Chemistry of Thermal Processes for the Circular Carbon Economy ** <i>AMTSP</i>		A			
Functional Lignocellulosics & Nanotechnology ** <i>AMTSP</i>		D	D	D	D
Sci-Mix		E			
Developments in the Fields of Celluloses & Lignocelluloses: In Honor of Dr. Rajai Atalla **			D	D	D
Advances in Polysaccharides: Practice & Applications **			P	D	D
Biobased Gels & Porous Materials ** <i>AMTSP</i>				D	D
Frontiers in Glycoanalytics ** <i>AMTSP</i>				P	A
Reactive Extrusion: Advances at the Nexus of Polymer Processing, Materials Technology & Green Chemistry ** <i>AMTSP</i>				P	D
Holy Grails in Chemistry: Celebrating the 50th Anniversary of <i>Accounts of Chemical Research</i> Journal *(PRES)	PE				
Science for a Sustainable Energy Future: Energy Storage *(PRES)		D			
Carbohydrate-Based Hybrid Materials for Nanomedicine *(CARB)		P	A		
Biomass & Biofuel Processing *(ENFL)			D	D	
LPS: Chemistry, Synthesis & Applications *(CARB)			D		
Carbohydrate-Based Nanomaterials & Drug-Delivery Vehicles *(CARB)				D	

## Division of Chemical Education

CHED

T. Miller, I. Levy, C. Muzzi, Program Chairs

San Francisco Marriott Marquis	S	M	Tu	W	Th
Eye Tracking Research in Chemistry Education	A				
Undergraduate Research Papers **	D	D			
Research in Chemistry Education	D			D	
Citizens First! **	D				
Green Chemistry: Theory & Practice **	D				
High School Program **	D				
NMR Spectroscopy in the Undergraduate Curriculum	D				
State of the Art: Applying Chemistry Education Research to Practice	D				

## Division of Chemical Education (continued)

CHED

T. Miller, I. Levy, C. Muzzi, Program Chairs

San Francisco Marriott Marquis	S	M	Tu	W	Th
Celebrating Chemistry Through Outreach: Honoring the Legacy of Christine Jaworek-Lopes	P				
General Posters	E				
ACS-CEI Award for Incorporating Sustainability into Chemistry Education		A			
Chemistry Education Research: Graduate Student Research Forum		A			
Advances in e-Learning & Online Chemical Education		D	A		
ACS Award for Achievement in Research for the Teaching & Learning of Chemistry: Symposium in Honor of Marcy H. Towns **		D			
Curricular Innovations in Undergraduate Chemical Education Impacted by NSF		D			
Fundamentals of Chemistry Outreach Education: From Program Design to Assessment **		D			
International & Multicultural Perspective **		P			
Process-Oriented Guided Inquiry Learning (POGIL)		P			
Undergraduate Research Posters **		P			
Innovating Materials for the Next Generation: Bringing Practical Applications into the Chemistry Classroom ** <i>AMTSP</i>		E			
Successful Student Chapters **		E			
Sci-Mix		E			
Perspectives on Climate Change Literacy & Education: Local to International **			A		
ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences: Symposium in Honor of Sandra Y. McGuire **			A		
Advancing Undergraduate Research ** <i>AMTSP</i>			D	A	
Advances in Teaching Organic Chemistry			D		
George C. Pimentel Award in Chemical Education: Symposium to Honor Thomas A. Holme			D		
GSSPC: Water Sustainability **			D		
Course-Based Undergraduate Research Experiences (CUREs) in Chemistry			P	D	

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

\*\*Primary organizer of a cosponsored symposium.

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

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

## Division of Chemical Education (continued)

C H E D

T. Miller, I. Levy, C. Muzzi, Program Chairs

San Francisco Marriott Marquis	S	M	Tu	W	Th
Simulations, Animations & Other Visualizations in Educating about Chemistry Save Chemistry!			P		
The Role of Research Experiences in the ACS Certified Degree			P		
Writing in Chemistry			P		
Research on Learning in the Lab **				A	
Communicating Science in the 21st Century to Diversified Audiences **				D	
Strategies Promoting Success of Two-Year College Students				D	
Undergraduate Laboratory Experiments Involving Advanced Materials **				D	
Using Chemistry Education Research to Inform the Design & Use of Assessment Materials				D	
General Papers				P	A
Eliciting Attentiveness from Cyber-Savvy Students Without Using Electronic Tools				P	
How Do We Teach Collaboration? Best Practices for Educating Future Researchers & Innovators **					A
Instructors & Researchers: Advancing Graduate Student Education					A
The General Chemistry Course for a Changing World					A
Engaging Students in Physical Chemistry **					A
Current Best Practices for Chemistry REU Programs **					A
Undergraduate Symposium *(AGFD)	A				
LGBT Graduate & Postdoctoral Student Chemistry Research Symposium *(PROF)	D	D			
Incorporating Polymer Science into the Classroom *(POLY)	D				
Blending Chemistry & Culture: Undergraduate Research Abroad Through ACS IREU Program *(IAC)	D				
Textbooks & the Practice of Science: Before, During & After Gutenberg *(CINF)	P	D			
Hollyweird Chemistry *(CPRC)	P	D			
The Importance of Role Models & Mentors in Reaching Gender Equity in Chemical Sciences: A Symposium in Honor of Judith Iriarte-Gross *(WCC)	P		A		
Withycombe-Charalambous Graduate Student Symposium *(AGFD)	P				
Environmental Chemistry: Undergraduate & Graduate Classroom, Laboratory & Local Community Learning Experiences *(ENVR)		P		E	

## Division of Chemical Education (continued)

C H E D

T. Miller, I. Levy, C. Muzzi, Program Chairs

San Francisco Marriott Marquis	S	M	Tu	W	Th
The Write Thing to Do: Ethical Considerations in Authorship & the Assignment of Credit *(CINF)		P			
Processes, Technologies & Sensors for Food-Energy-Water Nexus Research *(ENVR)			A		
Producing Knowledgeable, Well-Rounded, T-Shaped Chemists for the 21st Century: Current Perspectives from High School, Undergraduate & Graduate Educators *(PROF)			A		
Science & Perception of Climate Change *(ENVR)			P	E	
Active Learning in the Undergraduate Analytical Chemistry Curriculum *(ANYL)				D	
How Do We Teach Collaboration? Best Practices for Educating Future Researchers & Innovators *(CHED)					A

## Division of Chemical Health & Safety

C H A S

D. Decker, J. Pickel, F. Wood-Black, Program Chairs

Park Central San Francisco	S	M	Tu	W	Th
Ask Dr. Safety: Chemical & Occupational Safety in the Cannabis Industry **	P				
Best Practices in Selecting & Presenting Safety Training Content **	P				
Cannabis: Emerging Challenges in Regulations, Product Analysis & Processing **		D			
Sci-Mix		E			
Information Flow in Environmental Health & Safety **			D		
What Have We Learned & Where Are We Going: Post-Settlement in the University of California **				D	
Nanocellulose Processing & Analysis *(CELL)	D	D			
Recent Developments in TSCA Regulation: New Requirements for Chemicals in Commerce *(CHAL)			P		
Cannabis: A Growing Sector for Business & Employment *(SCHB)				A	



**Division of Chemical Information****C I N F***E. Alvaro, Program Chair*

Park Central San Francisco	S	M	Tu	W	Th
Careers in Chemical Information	A				
Open Access: Current Landscape, Challenges & Future Directions	D		D		
Materials Informatics & Computational Modeling** <i>AMTSP</i>	D				
Textbooks & the Practice of Science: Before, During & After Gutenberg **	P	D			
CINF Scholarships for Scientific Excellence: Student Poster Competition	E				
Advances in Data Visualization		A			
Advances in High-Throughput Screening **		D			
The Write Thing to Do: Ethical Considerations in Authorship & the Assignment of Credit **		P			
Sci-Mix		E			
Advanced Materials: Issues in Nanoinformatics & Nanosafety Data <i>AMTSP</i>			A		
Text-Mining & Natural Language Processing for Chemical Information: From Documents to Knowledge			D		
Assessment of Chemistry Collections & Services				A	
General Papers				D	
Public-Private Partnerships: Fostering Drug Discovery & Data Sharing **				D	
Should I Move My Computational Chemistry or Informatics Tools to the Cloud? *(COMP)	D	D			
Computer-Aided Peptide Design *(COMP)	D				
Data Science Challenges in Computational Chemistry *(COMP)		P			
Information Flow in Environmental Health & Safety *(CHAS)			D		

**Division of Chemistry & the Law****C H A L***K. Bianco, J. Kennedy, Program Chairs*

Park Central San Francisco	S	M	Tu	W	Th
Strengthening Your Patent Rights in Light of Recent Federal Circuit Court Decisions	P				
Patent Challenges & Chocolate: A Sweet & Sour Symposium		A			
Nontraditional Careers in Chemistry		A			
The Use of Scientific Information in IP-Related Matters		P			
Sci-Mix		E			
An International Perspective: Patent Eligible Subject Matter & Opposition Procedures			A		

**Division of Chemistry & the Law (continued)****C H A L***K. Bianco, J. Kennedy, Program Chairs*

Park Central San Francisco	S	M	Tu	W	Th
Protecting & Capitalizing on Your Intellectual Property			P		
Recent Developments in TSCA Regulation: New Requirements for Chemicals in Commerce **			P		
Cannabis Law: Navigating Complex Regulatory & Legal Issues in States with Legal Cannabis Programs				A	
The Many Faces of CHAL: Where Chemistry Meets the Law				P	
A Decade of U.S. Supreme Court Patent Jurisprudence				P	
Chemical Forensics *(ANYL)		D	D		

**Division of Colloid & Surface Chemistry****C O L L***R. Nagarajan, Program Chair*

Moscone Center	S	M	Tu	W	Th
Basic Research in Colloids, Surfactants & Nanomaterials	AE			D	A
Applied Biosensing Based on Functional Colloids <i>AMTSP</i>	D	D	A	A	
Biomembrane Synthesis, Structure, Mechanics & Dynamics	D	D	A	D	A
Molecular Surface Science, Nanomaterials & Catalysis: Symposium in Honor of Gabor Somorjai at 80 **	D	D	A	D	
Coacervation: Physics, Chemistry & Biology <i>AMTSP</i>	D	D			
Chemistry & Physics of Tribology <i>AMTSP</i>	D		A	D	
Colloidal Nanoparticle Synthesis & Assembly	DE	D	A	D	A
Interfacial Phenomena & the Oil-Water Interface <i>AMTSP</i>	DE	D			
Nanoscale Chemical Patterning & Characterization	DE	D			
Deposition & Etching of Nanostructures ** <i>AMTSP</i>	DE		D		
Nanostructure Engineering & Surface Chemistry for Spectroscopy, Imaging & Alternative Energy Harvesting & Conversion <i>AMTSP</i>	P	D	A		

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

\*\*Primary organizer of a cosponsored symposium.

AMTSP: Advanced Materials, Technologies, Systems & Processes

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

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

**Division of Colloid & Surface Chemistry (continued)**

COLL

*R. Nagarajan, Program Chair*

Moscone Center	S	M	Tu	W	Th
Hierarchical Self-Assembly of Organic Monolayers, Bilayers & Films: Theory & Experiment	E	D	A	D	A
Fundamental Research in Colloids, Surfaces & Nanomaterials	E				
ACS Award in Colloid Chemistry: Symposium in Honor of Nicholas A. Kotov		D	A		
Sci-Mix		E			
ACS Award for Research at an Undergraduate Institution: Symposium in Honor of Maria Hepel			A		
ACS Award Lectures **			P		
Mineral-Water Interface Chemistry *(GEOC)	D	A	D	AE	
Elucidation of Mechanisms & Kinetics on Surfaces *(CATL)	D	D	D	D	D
Janus Particles: Synthesis, Characterization & Applications *(PMSE)	D	D			
ACS Award in Surface Chemistry: Symposium in Honor of Cynthia M. Friend *(CATL)	D	D			
LGBT Graduate & Postdoctoral Student Chemistry Research Symposium *(PROF)	D	D			
Separation of Macromolecules & Particulates *(POLY)	D				
Synthesis of Catalysts by Nontraditional Methods *(CATL)	D				
Holy Grails in Chemistry: Celebrating the 50th Anniversary of <i>Accounts of Chemical Research</i> Journal *(PRES)	PE				
Functional Lignocellulosics & Nanotechnology *(CELL)		D	D	D	D
Light-Driven Chemistry: Photoelectrochemistry & Photocatalysis *(CATL)		D	D	D	
Science for a Sustainable Energy Future *(PRES)		D			
ACS Award in Industrial Chemistry: Symposium in Honor of Jane Frommer *(I&EC)		P			
Chemical Principles of Environmental, Cellular & Organismal Nanotoxicology *(ENVR)				AE	
Biobased Gels & Porous Materials *(CELL)				D	D
Deposition & Etching of Nanostructures *(INOR)				D	
Evolving Nanoparticle Reactivity Throughout Nucleation, Growth & Dissolution *(GEOC)				D	

**Division of Computers in Chemistry**

COMP

*H. Woodcock, M. Feig, J. Shen, Program Chairs*

InterContinental San Francisco	S	M	Tu	W	Th
Allosteric Interactions & Regulation of Complex Biomolecular Systems: From Proteins to Cell Signaling **	A	D	A	D	D
Computational Studies of Water	D	A			
Catalytic Materials from Molecular Insight ** <small>AMTSP</small>	D	D	D		
Strong Electron Correlation & Nonadiabatic Dynamics **	D	D	D		
Should I Move My Computational Chemistry or Informatics Tools to the Cloud? **	D	D			
Computer-Aided Peptide Design **	D				
Undergraduate Research & National Meeting Roundtable	P				
Drug Design		D		D	D
Data Science Challenges in Computational Chemistry **		P			
Sci-Mix		E			
Molecular Mechanics			A	D	D
State-of-the-Art Methods for Modeling Materials Chemistry **			D	D	
ACS Award for Computers in Chemical & Pharmaceutical Research: Symposium in Honor of Yvonne C. Martin **			D		
Material Science			P	D	D
Quantum Mechanics			P	D	D
Chemical Computing Group Graduate Student Travel Awards			E		
COMP Poster Session			E		
NVIDIA GPU Award			E		
OpenEye Outstanding Junior Faculty Award			E		
Wiley Computers in Chemistry Outstanding Postdoc Award			E		
Quantum Dynamics in Large-Scale Systems *(PHYS)	D	D	D		
Computations for CO <sub>2</sub> Capture, Conversion & Sequestration *(ENFL)	D	D			
LGBT Graduate & Postdoctoral Student Chemistry Research Symposium *(PROF)	D	D			
Materials Informatics & Computational Modeling *(CINF)	D				
Advances in High-Throughput Screening *(CINF)		D			
Undergraduate Research Posters *(CHED)		P			
Designed Catalysis: Materials Genome Approach to Heterogeneous Processes *(CATL)			D	D	D
Public-Private Partnerships: Fostering Drug Discovery & Data Sharing *(CINF)				D	

## Division of Energy &amp; Fuels

E N F L

D. Heldebrant, Program Chair

Grand Hyatt San Francisco	S	M	Tu	W	Th
Subsurface Technologies for Recovery of Fossil & Geothermal Energy ** <i>AMTSP</i>	A				
Catalysis for Unconventional Energy Sources ** <i>AMTSP</i>	D	A			
Advanced Materials & Technologies for Solar Energy Conversion & Storage **	D	D	D		
C <sub>1</sub> Catalysis **	D	D			
Computations for CO <sub>2</sub> Capture, Conversion & Sequestration ** <i>AMTSP</i>	D	D			
Advanced Analytical Techniques for Determination of Minor & Trace Elements in Petroleum Value Chain <i>AMTSP</i>	D				
Innovative Chemistry & Materials for Electrochemical Energy Storage ** <i>AMTSP</i>	P	D	D	D	A
Advances in Chemistry of Energy & Fuels <i>AMTSP</i>		D	D	D	A
ENFL Distinguished Researcher Award: Symposium in Honor of Mieczyslaw M. Boduszynski		P			
Sci-Mix		E			
Functional Porous Materials for Sustainable Energy ** <i>AMTSP</i>			D	D	A
Applications of X-Ray & Neutron Scattering Techniques in Energy Technologies ** <i>AMTSP</i>			D	D	
Biomass & Biofuel Processing **			D	D	
13th International Symposium on Heavy Oil Upgrading, Production & Characterization **				D	A
Cellulose Structure & Biosynthesis *(CELL)	D	D	A		
Electrocatalysis for Energy Generation & Storage *(CATL)	D	D			
Hollyweird Chemistry *(CPRC)	P	D			
Chemistry & Physical Chemistry of Thermal Processes for the Circular Carbon Economy *(CELL)		A			
Light-Driven Chemistry: Photoelectrochemistry & Photocatalysis *(CATL)		D	D	D	
Science for a Sustainable Energy Future *(PRES)		D			
Catalytic Conversion of Lignocellulosic Biomass to Fuels, Chemicals & Materials *(CATL)		P	D		
Rising Star Award Symposium *(WCC)		P			

## Division of Environmental Chemistry

E N V R

S. Obare, S. Al-Abed, Program Chairs

San Francisco Marriott Marquis	S	M	Tu	W	Th
Have Great Lakes Restoration Programs Been Successful? The Case of Legacy & Emerging Pollutants	A			E	
Accurate Mass/High-Resolution Mass Spectrometry for Environmental Monitoring & Remediation ** <i>AMTSP</i>	D	A		E	
Oxidation Processes, Nanoparticles & Membranes in Water & Wastewater Treatment: A Symposium in Honor of Prof. Jun Ma <i>AMTSP</i>	D	D	D	A	
Chemistry & Application of Advanced Oxidation Processes for Water Detoxification, Treatment & Reuse <i>AMTSP</i>	D	D	D	DE	
Chemistry of Water Treatment from Sorption to Taste & Odor: Symposium Honoring the Contributions of Mel Suffet	D	D	D	E	
Understanding Dissolved Organic Matter Reactivity: Honoring George Aiken, the DOM Whisperer	D	D	D		
Contaminants of Emerging Concern in Natural & Engineered Systems ** <i>AMTSP</i>	D	D		E	
Tribute to Jerry Schnoor	D	D			
Green Chemistry & the Environment **	D			E	
Integrated & Sustainable Environmental Remediation **	P			E	
Advances & Applications in Water Sensing Technologies for Drinking Water, Re-Use, Agri-Tech & Research		A		E	
Sulfidation of Metal-Based Engineered & Natural Nanomaterials: Implications for Their Fate & Effects in the Environment <i>AMTSP</i>		D		E	
Environmental Chemistry: Undergraduate & Graduate Classroom, Laboratory & Local Community Learning Experiences **		P		E	
Nanomaterials in Consumer Products: Formulation, Characterization & Applications Across the Product Life Cycle		P		E	
Sci-Mix		E			
Processes, Technologies & Sensors for Food-Energy-Water Nexus Research ** <i>AMTSP</i>			A		

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AMTSP: Advanced Materials, Technologies, Systems & Processes

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**Division of Environmental Chemistry (continued)****ENVR***S. Obare, S. Al-Abed, Program Chairs*

San Francisco Marriott Marquis	S	M	Tu	W	Th
Innovative Materials & Technologies for Sustainable Water Purification ** <i>AMTSP</i>			D	DE	D
From the Bench to the Field: Evaluating Innovative Remediation & Detection Technologies			D	E	
ACS Award for Creative Advances in Environmental Science & Technology: Symposium in Honor of Dr. Douglas R. Worsnop <i>AMTSP</i>			D		
Green Chemistry Adoption: Progressive Changes by Different Industry Sectors **			D		
Science & Perception of Climate Change **			P	E	
Great Achievements in Environmental Science & Technology: James J. Morgan Award Symposium				A	
Chemical Principles of Environmental, Cellular & Organismal Nanotoxicology **				AE	
Whole Organism Metrology to Support Nanotoxicology Research in the Environment				D	
Poly- & Per-Fluoroalkyl Substances: Where, What, When, Why, Who & How <i>AMTSP</i>				DE	A
Aquatic Photochemistry **				DE	D
Novel Membrane Materials & Processes for Water Purification <i>AMTSP</i>				DE	D
Advances in Resource Recovery & Conservation in Water Systems ** <i>AMTSP</i>				PE	D
Contaminants in Urban & Coastal Estuarine Ecosystems ** <i>AMTSP</i>				PE	D
Pesticides in Surface Water: Monitoring, Modeling, Mitigation, Risk Assessment & Regulation				PE	D
Applications of Cheminformatics & Computational Chemistry in Environmental Health				E	D
Bioprocesses for Engineered Nanomaterials in Soil-Plant Systems <i>AMTSP</i>				E	D
Clay Minerals Selectivity & Its Environmental Applications				E	
New Challenges in Environmental Chemistry: Marine Ecosystems & Microplastics				E	
General Posters				E	
Mineral-Water Interface Chemistry *(GEOC)	D	A	D	AE	
Elucidation of Mechanisms & Kinetics on Surfaces *(CATL)	D	D	D	D	D
LGBT Graduate & Postdoctoral Student Chemistry Research Symposium *(PROF)	D	D			
Holy Grails in Chemistry: Celebrating the 50th Anniversary of <i>Accounts of Chemical Research</i> Journal *(PRES)	PE				

**Division of Environmental Chemistry (continued)****ENVR***S. Obare, S. Al-Abed, Program Chairs*

San Francisco Marriott Marquis	S	M	Tu	W	Th
Advances in Treatment Processes for Metals & Metalloids *(GEOC)	A		E		
Chemistry & Physical Chemistry of Thermal Processes for the Circular Carbon Economy *(CELL)	A				
Teaching, Researching & Community Building in the Global Chemical Enterprise *(IAC)	D				
Science for a Sustainable Energy Future *(PRES)	D				
Undergraduate Research Posters *(CHED)	P				
Operando Methodology at the Junction Between Fundamental Chemistry & Chemical Engineering *(CATL)			D	D	D
Recent Developments in TSCA Regulation: New Requirements for Chemicals in Commerce *(CHAL)			P		
Evolving Nanoparticle Reactivity Throughout Nucleation, Growth & Dissolution *(GEOC)				D	
Environmental Challenges & Solutions in Unconventional Oil & Gas Development *(GEOC)				E	D
Contaminants Transport, Uptake & Remediation at Contaminated Sites *(GEOC)				E	D

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

Grand Hyatt San Francisco	S	M	Tu	W	Th
ACS Award for Creative Work in Fluorine Chemistry: Symposium in Honor of Antonio Togni	DE	D	D		
Sci-Mix		E			
General Papers			P		
General Posters			E		

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

San Francisco Marriott Union Square	S	M	Tu	W	Th
Mineral-Water Interface Chemistry **	D	A	D	AE	
Redox-Driven Environmental Geochemical Reactions for Metals, Major Elements & Organic Pollutants	D	A	D	E	
Pore-Scale Geochemical Processes & the Implications for CO <sub>2</sub> Geologic Storage	D				



**Division of Geochemistry  
(continued)****G E O C***A. Ilgen, Program Chair*

<b>San Francisco Marriott Union Square</b>	<b>S</b>	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>
Structure, Properties & Applications of Minerals with Layered Structure	D				
Advances in Treatment Processes for Metals & Metalloids **		A		E	
Formation, Structure & Reactivity of Biogenic Minerals		A		E	
2017 Geochemistry Division Medal Symposium		P			
Sci-Mix		E			
2017 Geochemistry Division Medal: Symposium in Honor of Dr. Susan Brantley			D	AE	
Microbially Driven Geochemical Reactions: Kinetics & Communities			D	DE	
Evolving Nanoparticle Reactivity Throughout Nucleation, Growth & Dissolution **				D	
Structure & Reactivity of Cementitious Materials from Advanced Characterization Techniques				PE	A
General Geochemistry				PE	
Environmental Challenges & Solutions in Unconventional Oil & Gas Development **				E	D
Contaminants Transport, Uptake & Remediation at Contaminated Sites **				E	D
Mineral Nucleation: Transient Intermediates & Phase Transitions				E	D
Subsurface Technologies for Recovery of Fossil & Geothermal Energy *(ENFL)	A				
Computations for CO <sub>2</sub> Capture, Conversion & Sequestration *(ENFL)	D	D			
Science for a Sustainable Energy Future *(PRES)		D			
Undergraduate Research Posters *(CHED)		P			
Aquatic Photochemistry *(ENVR)				DE	D
Advances in Resource Recovery & Conservation in Water Systems *(ENVR)				PE	D

**Division of the History of  
Chemistry****H I S T***S. Rasmussen, Program Chair*

<b>Grand Hyatt San Francisco</b>	<b>S</b>	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>
General Papers	A			A	
Golden Age of Industrial Chemistry **	P				
Chemistry Through the Eyes of Non-Chemists: Evolution of the Public Perception of Chemistry		D	A		
Sci-Mix		E			
Chemistry & the Design of Physical Objects: Innovation from 1950 to the Present <b>AMTSP</b>			P		

**Division of the History of  
Chemistry (continued)****H I S T***S. Rasmussen, Program Chair*

<b>Grand Hyatt San Francisco</b>	<b>S</b>	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>
Textbooks & the Practice of Science: Before, During & After Gutenberg *(CINF)	P	D			
Hollyweird Chemistry *(CPRC)	P	D			
Holy Grails in Chemistry: Celebrating the 50th Anniversary of <i>Accounts of Chemical Research Journal</i> *(PRES)	PE				

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

<b>Grand Hyatt San Francisco</b>	<b>S</b>	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>
I&EC International Fellow Symposium: Honoring Prof. Kew-Ho Lee	A				
Ionic Liquids in Separations & Analysis	P				
I&EC Division Fellow Award Symposium: Honoring Prof. Klavs Jensen	P				
2017 ACS Sustainable Chemistry & Engineering Lectureship Awards: Symposium in Honor of Gregg Beckham		A			
Symposium in Honor of Michelle Cummings, ACT Fellow <b>AMTSP</b>		A			
ACS Award in Industrial Chemistry: Symposium in Honor of Jane Frommer **		P			
<b>AMTSP</b>					
2017 ACS Sustainable Chemistry & Engineering Lectureship Awards: Symposium in Honor of Jinlong Gong		P			
Sci-Mix		E			
2017 ACS Sustainable Chemistry & Engineering Lectureship Awards: Symposium in Honor of Helen Sneddon			A		
2016 E.V. Murphree Award in Industrial & Engineering Chemistry: Symposium in Honor of Michael M. Thackeray			D		
I&EC Division Early Career Fellow Symposium: Honoring Dr. Leigh Martin				D	
General Posters				E	
General Papers					D
Nanocellulose Processing & Analysis *(CELL)	D	D			

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

**Division of Industrial & Engineering Chemistry (continued)****I & E C***E. Rosenberg, Program Chair*

<b>Grand Hyatt San Francisco</b>	<b>S</b>	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>
Holy Grails in Chemistry: Celebrating the 50th Anniversary of <i>Accounts of Chemical Research Journal</i> *(PRES)	PE				
Light-Driven Chemistry: Photoelectrochemistry & Photocatalysis *(CATL)		D	D	D	
Teaching, Researching & Community Building in the Global Chemical Enterprise *(IAC)		D			
Science for a Sustainable Energy Future *(PRES)		D			
Operando Methodology at the Junction Between Fundamental Chemistry & Chemical Engineering *(CATL)			D	D	D
Recent Developments in TSCA Regulation: New Requirements for Chemicals in Commerce *(CHAL)			P		
2017 E.V. Murphree Award in Industrial & Engineering Chemistry: Symposium in Honor of Eleftherios T. Papoutsakis *(BIOT)				A	

**Division of Inorganic Chemistry****I N O R***S. Koch, N. Radu, Program Chairs*

<b>Moscone Center</b>	<b>S</b>	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>
Lanthanide & Actinide Chemistry **	A		E	A	D
Bioinorganic Chemistry	A		PE	A	A
Organometallic Chemistry	AE	P	PE	D	D
Coordination Chemistry	AE		E	P	D
Inorganic Nanomaterials: Structure & Function in 0, 1 & 2 Dimensions	D	P	AE		
Chemistry of Materials	D		DE	D	D
Harry Gray Award for Creative Work in Inorganic Chemistry by a Young Investigator: Symposium in Honor of Nilay Hazari	D				
Undergraduate Research at the Frontiers of Inorganic Chemistry	DE	P	A		
Celebrating 60 Years of the Division of Inorganic Chemistry	DE	P	D	D	
Sustainability in Electrocatalytic Fuel & Chemical Production **	DE	P			
F. Albert Cotton Award in Synthetic Inorganic Chemistry: Symposium in Honor of Pingyun Feng	DE	P			
ACS Award in Inorganic Chemistry: Symposium in Honor of Lawrence Que Jr.	DE				

**Division of Inorganic Chemistry (continued)****I N O R***S. Koch, N. Radu, Program Chairs*

<b>Moscone Center</b>	<b>S</b>	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>
2017 Priestley Medalist: Symposium in Honor of Tobin J. Marks **	P	P	D	D	
ACS Award in Organometallic Chemistry: Symposium in Honor of Marcetta Y. Darensbourg	P	P			
Spectroscopic Elucidation of Metalloenzyme Mechanism: Current Successes & Future Challenges **	P		D		
Inorganic Catalysts	P		E		D
Gabor A. Somorjai Award for Creative Research in Catalysis: Symposium in Honor of John E. Bercaw	E	P	A		
Switchable Catalysts	E	P	D	A	
ACS Award for Distinguished Service in the Advancement of Inorganic Chemistry: Symposium in Honor of William B. Tolman	E		D		
ACS Award in the Chemistry of Materials: Symposium in Honor of Douglas A. Keszler ** <i>AMTSP</i>	E		D		
Nanoscience	E			A	P
ACS Awards in Inorganic Chemistry: Plenary Session		A			
ACS Awards: Symposium in Honor of Lawrence Que Jr. & William B. Tolman		P			
Sci-Mix		E			
Chemistry Is Central to Applied Materials **			AE	A	
Emergent Phenomena in the Solid State			DE		
Solid-State Inorganic Chemistry			E	A	A
Main Group Chemistry			E	P	P
Environmental & Energy-Related Inorganic Chemistry			E	P	
Inorganic Spectroscopy			E	P	
Electrochemistry			E		A
Deposition & Etching of Nanostructures **				D	
Frontiers in Heavy Element Electronic Structure **				D	
Multicenter Molecules & Coupled Molecular Assemblies: Synthesis, Characterization & Theory *(PHYS)	D	D	D	D	
LGBT Graduate & Postdoctoral Student Chemistry Research Symposium *(PROF)	D	D			
Synthesis of Catalysts by Nontraditional Methods *(CATL)	D				
Deposition & Etching of Nanostructures *(COLL)	DE		D		
Glenn T. Seaborg Award for Nuclear Chemistry: Symposium in Honor of David L. Clark *(NUCL)	P	D	D		
Light-Driven Chemistry: Photoelectrochemistry & Photocatalysis *(CATL)		D	D	D	

**Division of Inorganic Chemistry  
(continued)****I N O R***S. Koch, N. Radu, Program Chairs*

Moscone Center	S	M	Tu	W	Th
Support & Activator Effects on Metal-Mediated Polymerization *(PMSE)		D	D		
Undergraduate Research Posters *(CHED)		P			
ACS Award in Industrial Chemistry: Symposium in Honor of Jane Frommer *(I&EC)		P			
Metalloprotein-Initiated Signaling Transduction Response to Redox Stress *(BIOL)			A		
Frontiers in Heavy Element Electronic Structure: A Tribute to Bruce Bursten *(NUCL)			D		

**Division of Medicinal Chemistry  
(continued)****M E D I***A. Stamford, Program Chair*

Moscone Center	S	M	Tu	W	Th
Undergraduate Research Posters *(CHED)		P			
Eminent Scientist Lecture with Dr. Carolyn Bertozzi *(SOCED)		P			
ACS Award for Computers in Chemical & Pharmaceutical Research: Symposium in Honor of Yvonne C. Martin *(COMP)			D		
Green Chemistry Adoption: Progressive Changes by Different Industry Sectors *(ENVR)			D		
Entrepreneurship in Biotechnology, Advanced Materials, Drug Discovery & Information Systems *(SCHB)			P		

**Division of Medicinal Chemistry****M E D I***A. Stamford, Program Chair*

Moscone Center	S	M	Tu	W	Th
Macrocycles & Cyclopeptides in Medicinal Chemistry	A				
General Orals	D		P	P	
Medicinal Chemists' Toolbox: Factors Influencing Oral Bioavailability & Case Studies	P				
General Posters	E			E	
Actually, It Does Work: Success with Allosteric Kinase Ligands & Phosphatase Modulators		A			
Residence Time: Not Just Affinity for Drug Design		A			
Kinase Inhibitors for Immuno-Inflammatory Diseases		P			
Misfolded Proteins in Neurodegenerative Diseases		P			
Sci-Mix	E				
Antibiotic Drug Discovery: The Next Frontier			A		
MEDI Awards Symposium			A		
Drug Discovery for ALS: Putting the Ice Bucket to Work			P		
Targeting Epigenetic Writers & Erasers				A	
First-Time Disclosures				D	
LGBT Graduate & Postdoctoral Student Chemistry Research Symposium *(PROF)	D	D			
Holy Grails in Chemistry: Celebrating the 50th Anniversary of <i>Accounts of Chemical Research</i> Journal *(PRES)	PE				
Advances in High-Throughput Screening *(CINF)		D			
Science for a Sustainable Energy Future: Energy Storage *(PRES)		D			

**Division of Nuclear Chemistry & Technology****N U C L***A. Hixon, Program Chair*

Moscone Center	S	M	Tu	W	Th
Nuclear Fission	D				
Glenn T. Seaborg Award for Nuclear Chemistry: Symposium in Honor of David L. Clark **	P	D	D		
Nuclear & Radiochemistry Summer School: Past, Present & Future		D			
Frontiers in Heavy Element Electronic Structure: A Tribute to Bruce Bursten **			D		
Advanced Actinide Materials: Nanostructure, Complexity & Extreme Environments <b>AMTSP</b>				D	
General Topics in Nuclear Chemistry & Technology				DE	A
Young Investigators in Nuclear & Radiochemistry **					D
Hollyweird Chemistry *(GPRC)	P	D			
Evolving Nanoparticle Reactivity Throughout Nucleation, Growth & Dissolution *(GEOC)				D	
Frontiers in Heavy Element Electronic Structure *(INOR)				D	

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

\*\*Primary organizer of a cosponsored symposium.

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## Division of Organic Chemistry

O R G N

R. Broene, S. Silverman, Program Chairs

Moscone Center	S	M	Tu	W	Th
National Fresenius Award: Symposium in Honor of Neal K. Devaraj **	A				
George A. Olah Award in Hydrocarbon or Petroleum Chemistry: Symposium in Honor of Robert H. Grubbs	A				
Biologically Related Molecules & Processes	D	D	E		
Metal-Mediated Reactions & Syntheses	DE	D	A		
New Reactions & Methodology	DE	D	D	D	A
Asymmetric Reactions & Syntheses	DE	D			
Herbert C. Brown Award for Creative Research in Synthetic Methods: Symposium in Honor of Bruce H. Lipshutz	P				
Elias J. Corey Award for Outstanding Original Contribution in Organic Synthesis by a Young Investigator: Symposium in Honor of Neil K. Garg		A			
Computer-Guided Organic Synthesis		A			
Ernest Guenther Award in the Chemistry of Natural Products: Symposium in Honor of Stephen F. Martin		P			
Application of Physical Organic Chemistry to Challenges in Industry		P			
Sci-Mix		E			
ACS Award for Creative Work in Synthetic Organic Chemistry: Symposium in Honor of Matthew S. Sigman			A		
Heterocycles & Aromatics			D	DE	
Advances in Organic Synthesis: Successes from Academia-Industry Partnerships			D		
Molecular Recognition & Self-Assembly			DE	A	
Total Synthesis of Complex Molecules			P	DE	A
James Flack Norris Award in Physical Organic Chemistry: Symposium in Honor of Robert A. Moss			P		
Materials, Devices & Switches <i>AMTSP</i>			E	P	A
Peptides, Proteins & Amino Acids			E	P	
Advanced Materials Technologies, Systems & Processes <i>AMTSP</i>			E		P
Chemistry of Fullerenes, Carbon Nanotubes & Graphene			E		
Nanomaterials			E		
Chemical Biology: Enabling Drug Discovery **				A	
Nobel Laureate Signature Award for Graduate Education in Chemistry: Symposium in Honor of Junqi Li & Martin D. Burke **				A	
Physical Organic Chemistry: Calculations, Mechanisms, Photochemistry & High-Energy Species				PE	D

## Division of Organic Chemistry (continued)

O R G N

R. Broene, S. Silverman, Program Chairs

Moscone Center	S	M	Tu	W	Th
Flow Chemistry & Continuous Processes				E	A
Chemistry of Nanomaterials, Fullerenes, Carbon Nanotubes & Graphene					A
LGBT Graduate & Postdoctoral Student Chemistry Research Symposium *(PROF)	D	D			
Holy Grails in Chemistry: Celebrating the 50th Anniversary of <i>Accounts of Chemical Research</i> Journal *(PRES)	PE				
Science for a Sustainable Energy Future *(PRES)		D			
ACS Award in Industrial Chemistry: Symposium in Honor of Jane Frommer *(I&EC)		P			
Green Chemistry Adoption: Progressive Changes by Different Industry Sectors *(ENVR)			D		

## Division of Physical Chemistry

P H Y S

J. Shea, Program Chair

Parc 55 San Francisco	S	M	Tu	W	Th
Sunlight-Driven Processes: Exposing the Mechanisms Underlying Productive Photoactivities	D	A	P	D	A
Long-Range Correlated Motions in Proteins	D	D	A		
PHYS Division Awards Symposium	D	D	D	A	
Dynamics & Structure of Molecular Fluids: Honoring the Work & Life of Branka Ladanyi	D	D	D	D	
Multicenter Molecules & Coupled Molecular Assemblies: Synthesis, Characterization & Theory ** <i>AMTSP</i>	D	D	D	D	
Quantum Dynamics in Large-Scale Systems ** <i>AMTSP</i>	D	D	D		
Expanding the Frontiers in Condensed Phase Astrochemistry: Electron Transfer Processes in Ices & Catalysis on Interstellar Grains		D	D	D	A
Spectroscopy of Complex Systems <i>AMTSP</i>		P	D	D	A
Sci-Mix		E			
Plasmonic Nanomaterials: From Physical Chemistry Fundamentals to Societal Impacts <i>AMTSP</i>				D	D
PHYS Poster Session				E	
Allosteric Interactions & Regulation of Complex Biomolecular Systems: From Proteins to Cell Signaling *(COMP)	A	D	A	D	D
Advanced X-Ray Techniques for Catalyst Characterization *(CATL)	D	D	A		



**Division of Physical Chemistry  
(continued)****P H Y S***J. Shea, Program Chair*

<b>Parc 55 San Francisco</b>	<b>S</b>	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>
Synthesis & Characterization of Materials for Energy Applications <sup>*(ANYL)</sup>	D	D	D	D	
Catalytic Materials from Molecular Insight <sup>*(COMP)</sup>	D	D	D		
Strong Electron Correlation & Nonadiabatic Dynamics <sup>*(COMP)</sup>	D	D	D		
Coherent Multidimensional Spectroscopy in Materials Science <sup>*(ANYL)</sup>	D	D			
LGBT Graduate & Postdoctoral Student Chemistry Research Symposium <sup>*(PROF)</sup>	D	D			
Engaging Students in Physical Chemistry <sup>*(CHED)</sup>					A

**Division of Polymer Chemistry****P O L Y***C. Lipscomb, T. White, T. Epps, Program Chairs*

<b>Moscone Center</b>	<b>S</b>	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>
Next Generation Smart Materials <sup>** AMTSP</sup>	A	D	D	D	A
General Topics: New Synthesis & Characterization of Polymers	D	A	DE	D	A
Contributions of IBM Almaden to Polymer Science <sup>** AMTSP</sup>	D	A			
Polymeric Materials for Performance & Sustainability <sup>**</sup>	D	D	AE	D	A
Polymer Applications & Characterization in the Biomedical Industry <sup>AMTSP</sup>	D		E		
Incorporating Polymer Science into the Classroom <sup>**</sup>	D				
Separation of Macromolecules & Particulates <sup>** AMTSP</sup>	D				
Carl S. Marvel Creative Polymer Chemistry Award in Honor of Theresa M. Reineke	P				
Excellence in Graduate Polymer Research <sup>** AMTSP</sup>		D	DE		
Undergraduate Research in Polymer Science		D	E		
50th Anniversary Celebration of Macromolecules <sup>** AMTSP</sup>		D			
Industrial Innovations in Polymer Chemistry <sup>**</sup>		P			
Sci-Mix		E			
Polymer Chemistry (RSC) Lectureship <sup>**</sup>			D		
Structure to Function in Supramolecular Polymers & Materials <sup>AMTSP</sup>			DE	D	A
Polymers & Biomimicry <sup>AMTSP</sup>			P	D	A
Smart Polymeric Materials from Cyclodextrins: Novel Designs & Applications <sup>** AMTSP</sup>			E	D	A

**Division of Polymer Chemistry  
(continued)****P O L Y***C. Lipscomb, T. White, T. Epps, Program Chairs*

<b>Moscone Center</b>	<b>S</b>	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>
ACS Award in Polymer Chemistry: Symposium in Honor of Murugappan Muthukumar <sup>**</sup>				P	
POLY/PMSE Plenary Lecture & Awards <sup>**</sup>				E	
Frontiers in Nanoscience <sup>*(SOCED)</sup>	A				
LGBT Graduate & Postdoctoral Student Chemistry Research Symposium <sup>*(PROF)</sup>	D	D			
Materials Informatics & Computational Modeling <sup>*(CINF)</sup>	D				
New Horizons in Sustainable Materials <sup>*(CELL)</sup>	D				
Hollyweird Chemistry <sup>*(CPRC)</sup>	P	D			
Undergraduate Research Posters <sup>*(CHED)</sup>		P			
ACS Award in Industrial Chemistry: Symposium in Honor of Jane Frommer <sup>*(I&amp;EC)</sup>		P			
Innovating Materials for the Next Generation: Bringing Practical Applications into the Chemistry Classroom <sup>*(CHED)</sup>		E			
Developments in the Fields of Celluloses & Lignocelluloses: In Honor of Dr. Rajai Atalla <sup>*(CELL)</sup>			D	D	D
Polymers Under Deformation <sup>*(PMSE)</sup>			D	D	
Recent Advances in Multiblock Copolymers <sup>*(PMSE)</sup>			P	D	A
Advances in Polysaccharides: Practice & Applications <sup>*(CELL)</sup>			P	D	D
Biobased Gels & Porous Materials <sup>*(CELL)</sup>				D	D
Reactive Extrusion: Advances at the Nexus of Polymer Processing, Materials Technology & Green Chemistry <sup>*(CELL)</sup>				P	D

**Division of Polymeric Materials  
Science & Engineering****P M S E***A. Tsou, M. Grunlan, B. Olsen, X. Jia, C. Snyder, Program Chairs*

<b>Moscone Center</b>	<b>S</b>	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>
Nanoscale Spectroscopic Characterization of Catalysts & Polymers <sup>AMTSP</sup>	D	D			

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## Division of Polymeric Materials Science & Engineering (continued)

P M S E

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

Moscone Center	S	M	Tu	W	Th
Young Investigators Symposium ** <i>AMTSP</i>	D	D			
Janus Particles: Synthesis, Characterization & Applications ** <i>AMTSP</i>	D	D			
ACS Award in Applied Polymer Science: Symposium in Honor of Zhenan Bao ** <i>AMTSP</i>	D	D			
General Papers/New Concepts in Polymeric Materials <i>AMTSP</i>	D		D	D	D
1D Nanomaterials: Synthesis, Assembly, Properties & Applications <i>AMTSP</i>	D				
Molecular Engineering of Peptide Assembly <i>AMTSP</i>		D	D	D	
Synthesis, Processing & Device Engineering of Polymeric Electronic Materials <i>AMTSP</i>		D	D	D	
Support & Activator Effects on Metal-Mediated Polymerization ** <i>AMTSP</i>		D	D		
Sci-Mix <i>AMTSP</i>		E			
Cooperative Research Award: Symposium in Honor of Paul A. Kohl & Edmund Elce <i>AMTSP</i>			A		
Biomaterials for Immunotherapy <i>AMTSP</i>			D	D	A
Innovations in Drug Delivery Systems & Combination Products <i>AMTSP</i>			D	D	
Polymers Under Deformation ** <i>AMTSP</i>			D	D	
Recent Advances in Multiblock Copolymers ** <i>AMTSP</i>			P	D	A
Joint PMSE/POLY Poster Session <i>AMTSP</i>			E		
Contributions of IBM Almaden to Polymer Science *(POLY) <i>AMTSP</i>	D	A			
Advanced Materials & Technologies for Solar Energy Conversion & Storage *(ENFL)	D	D	D		
LGBT Graduate & Postdoctoral Student Chemistry Research Symposium *(PROF)	D	D			
Incorporating Polymer Science into the Classroom *(POLY)	D				
Separation of Macromolecules & Particulates *(POLY)	D				
Innovative Chemistry & Materials for Electrochemical Energy Storage *(ENFL)	P	D	D	D	A
2017 Priestley Medalist: Symposium in Honor of Tobin J. Marks *(INOR)	P	P	D	D	
50th Anniversary Celebration of Macromolecules *(POLY)		D			
Industrial Innovations in Polymer Chemistry *(POLY)		P			
Undergraduate Research Posters *(CHED)		P			

## Division of Polymeric Materials Science & Engineering (continued)

P M S E

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

Moscone Center	S	M	Tu	W	Th
ACS Award in Industrial Chemistry: Symposium in Honor of Jane Frommer *(I&EC)		P			
Innovating Materials for the Next Generation: Bringing Practical Applications into the Chemistry Classroom *(CHED)		E			
Advances in Polysaccharides: Practice & Applications *(CELL)			P	D	D
Smart Polymeric Materials from Cyclodextrins: Novel Designs & Applications *(POLY)			E	D	A
Biobased Gels & Porous Materials *(CELL)				D	D
ACS Award in Polymer Chemistry: Symposium in Honor of Murugappan Muthukumar *(POLY)				P	
POLY/PMSE Plenary Lecture & Awards *(POLY)				E	

## Division of Professional Relations

P R O F

R. D. Libby, Program Chair

Hotel Nikko San Francisco	S	M	Tu	W	Th
LGBT Graduate & Postdoctoral Student Chemistry Research Symposium **	D	D			
General Posters	E				
Sci-Mix		E			
Producing Knowledgeable, Well-Rounded, T-Shaped Chemists for the 21st Century: Current Perspectives from High School, Undergraduate & Graduate Educators **			A		
REU Chemistry in Action: Student Perspectives			P		
Looking Beyond Your Current Boundaries: What's the Next Step? **				D	
The Importance of Role Models & Mentors in Reaching Gender Equity in Chemical Sciences: A Symposium in Honor of Judith Iriarte-Gross *(WCC)	P		A		
Starting a Successful Research Program at a PUI *(YCC)	P				
Chemical Angel Network: Chemists Investing in Chemical Companies *(BMGT)	P				
Holy Grails in Chemistry: Celebrating the 50th Anniversary of <i>Accounts of Chemical Research</i> *(PRES)	PE				

**Division of Professional Relations (continued)****P R O F***R. D. Libby, Program Chair*

Hotel Nikko San Francisco	S	M	Tu	W	Th
ACS Award in the Chemistry of Materials: Symposium in Honor of Douglas A. Keszler *(INOR)	E		D		
Entrepreneurial Opportunities in Chemistry *(YCC)	E				
Celebrating 90 years of the WCC: Reflections of Past Chairs *(WCC)		A			
Excellence in Graduate Polymer Research *(POLY)		D	DE		
Teaching, Researching & Community Building in the Global Chemical Enterprise *(IAC)		D			
Science for a Sustainable Energy Future *(PRES)		D			
Space Chemistry: How It Helps Space Exploration *(YCC)		D			
Rising Star Award Symposium *(WCC)		P			
Chemists & Writing for Fun & Profit: Write Your Own Career *(SCHB)			A		
Advancing Undergraduate Research *(CHED)			D	A	
Entrepreneurship in Biotechnology, Advanced Materials, Drug Discovery & Information Systems *(SCHB)			P		

**Division of Small Chemical Businesses****S C H B***J. Sabol, Program Chair*

Hotel Nikko San Francisco	S	M	Tu	W	Th
Entrepreneurs' Poster Session	A				
Sci-Mix		E			
Chemists & Writing for Fun & Profit: Write Your Own Career **			A		
Entrepreneurship in Biotechnology, Advanced Materials, Drug Discovery & Information Systems ** <small>AMTSP</small>			P		
Cannabis: A Growing Sector for Business & Employment **				A	
Hollyweird Chemistry *(CPRC)	P	D			
Chemical Angel Network: Chemists Investing in Chemical Companies *(BMGT)	P				
Entrepreneurial Opportunities in Chemistry *(YCC)	E				
Cannabis: Emerging Challenges in Regulations, Product Analysis & Processing *(CHAS)		D			
Green Chemistry Adoption: Progressive Changes by Different Industry Sectors *(ENVR)			D		

**Committee on Chemical Safety****C C S***E. Howson, Program Chair*

Located with Primary Sponsor	S	M	Tu	W	Th
Ask Dr. Safety: Chemical & Occupational Safety in the Cannabis Industry *(CHAS)	P				
Best Practices in Selecting & Presenting Safety Training Content *(CHAS)	P				
Cannabis: Emerging Challenges in Regulations, Product Analysis & Processing *(CHAS)		D			
Information Flow in Environmental Health & Safety *(CHAS)			D		
What Have We Learned & Where Are We Going: Post-Settlement in the University of California *(CHAS)				D	

**Committee on Chemistry and Public Affairs****C C P A***S. Butts, Program Chair*

Located with Primary Sponsor	S	M	Tu	W	Th
Hollyweird Chemistry *(CPRC)	P	D			

**Committee on Chemists with Disabilities****C W D***J. Johnston, Program Chair*

Located with Primary Sponsor	S	M	Tu	W	Th
Communicating Science in the Twenty-First Century to Diversified Audiences *(CHED)				D	

**Committee on Community Activities****C C A***M. McGinnis, Program Chair*

Located with Primary Sponsor	S	M	Tu	W	Th
Fundamentals of Chemistry Outreach Education: From Program Design to Assessment *(CHED)		D			

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## Committee on Divisional Activities

D A C

R. Bennett, Program Chair

Located with Primary Sponsor	S	M	Tu	W	Th
Young Investigators Symposium *(PMSE)	D	D			

## Committee on Environmental Improvement

C E I

C. Middlecamp, Program Chair

Located with Primary Sponsor	S	M	Tu	W	Th
Contaminants of Emerging Concern in Natural & Engineered Systems *(ENVR)	D	D		E	
Green Chemistry & the Environment *(ENVR)	D			E	
Citizens First! *(CHED)	D				
Green Chemistry: Theory & Practice *(CHED)	D				
Hollyweird Chemistry *(CPRC)	P	D			
Integrated & Sustainable Environmental Remediation *(ENVR)	P			E	
Science for a Sustainable Energy Future *(PRES)		D			
Undergraduate Research Posters *(CHED)		P			
Processes, Technologies & Sensors for Food-Energy-Water Nexus Research *(ENVR)			A		
Perspectives on Climate Change Literacy & Education: Local to International *(CHED)			A		
Innovative Materials & Technologies for Sustainable Water Purification *(ENVR)			D	DE	D
Green Chemistry Adoption: Progressive Changes by Different Industry Sectors *(ENVR)			D		
GSSPC: Water Sustainability *(CHED)			D		
Science & Perception of Climate Change *(ENVR)			P	E	
Advances in Resource Recovery & Conservation in Water Systems *(ENVR)				PE	D

## Committee on Ethics

E T H X

K. Vitense, Program Chair

Located with Primary Sponsor	S	M	Tu	W	Th
The Write Thing to Do: Ethical Considerations in Authorship & the Assignment of Credit *(CINF)		P			

## International Activities Committee

I A C

E. Contis, Program Chair

Hotel Nikko San Francisco	S	M	Tu	W	Th
Blending Chemistry & Culture: Undergraduate Research Abroad Through ACS IREU Program **	D				
Teaching, Researching & Community Building in the Global Chemical Enterprise **		D			
Chemistry of Korean Foods & Beverages *(AGFD)	D				
International & Multicultural Perspective *(CHED)		P			
Perspectives on Climate Change Literacy & Education: Local to International *(CHED)			A		
Research on Learning in the Lab *(CHED)				A	

## Committee on Local Section Activities

L S A C

M. Rudd, Program Chair

Located with Primary Sponsor	S	M	Tu	W	Th
Hollyweird Chemistry *(CPRC)	P	D			
Fundamentals of Chemistry Outreach Education: From Program Design to Assessment *(CHED)		D			

## Committee on Minority Affairs

C M A

J. Sarquis, Program Chair

Located with Primary Sponsor	S	M	Tu	W	Th
The Importance of Role Models & Mentors in Reaching Gender Equity in Chemical Sciences: A Symposium in Honor of Judith Iriarte-Gross *(WCC)	P		A		
ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences: Symposium in Honor of Saundra Y. McGuire *(CHED)			A		
Advancing Undergraduate Research *(CHED)			D	A	

## Committee on Patents & Related Matters

C P R M

S. Shah, Program Chair

Located with Primary Sponsor	S	M	Tu	W	Th
The Write Thing to Do: Ethical Considerations in Authorship & the Assignment of Credit *(CINF)		P			



**Committee on Public Relations and Communications**

C P R C

*D. Nelson, Program Chair*

Moscone Center	S	M	Tu	W	Th
Hollyweird Chemistry**	P	D			
Space Chemistry: How It Helps Space Exploration *(YCC)		D			
Chemists & Writing for Fun & Profit: Write Your Own Career *(SCHB)			A		
Communicating Science in the 21st Century to Diversified Audiences *(CHED)				D	

**Committee on Science**

COMSCI

*M. Kocielek, Program Chair*

Moscone Center	S	M	Tu	W	Th
Chemical Innovation Partnerships: Industry-University Success Stories		P			

**Senior Chemists Committee**

S C C

*T. Beattie, Program Chair*

Located with Primary Sponsor	S	M	Tu	W	Th
Golden Age of Industrial Chemistry *(HIST)	P				

**Society Committee on Education**

SOCED

*M. Roslonowski, Program Chair*

San Francisco Marriott Marquis	S	M	Tu	W	Th
Frontiers in Nanoscience **	A				
Chemistry of Fermented Beverages		A			
Eminent Scientist Lecture with Dr. Carolyn Bertozzi **		P			
Undergraduate Research Papers *(CHED)	D	D			
Hollyweird Chemistry *(CPRC)	P	D			
Excellence in Graduate Polymer Research *(POLY)		D	DE		
Fundamentals of Chemistry Outreach Education: From Program Design to Assessment *(CHED)		D			
Undergraduate Research Posters *(CHED)		P			
Successful Student Chapters *(CHED)		E			

**Women Chemists Committee**

W C C

*K. Woznick, R. Cole, Program Chairs*

Hotel Nikko San Francisco	S	M	Tu	W	Th
The Importance of Role Models & Mentors in Reaching Gender Equity in Chemical Sciences: A Symposium in Honor of Judith Iriarte-Gross **	P		A		
Celebrating 90 years of the WCC: Reflections of Past Chairs **		A			
Rising Star Award Symposium **		P			
Lanthanide & Actinide Chemistry *(INOR)	A		E	A	D
ACS Award in Surface Chemistry: Symposium in Honor of Cynthia M. Friend *(CATL)	D	D			
ACS Award in Applied Polymer Science: Symposium in Honor of Zhenan Bao *(PMSE)	D	D			
High School Program *(CHED)	D				
F. Albert Cotton Award in Synthetic Inorganic Chemistry: Symposium in Honor of Pingyun Feng *(INOR)	DE	P			
ACS Award for Achievement in Research for the Teaching & Learning of Chemistry: Symposium in Honor of Marcy H. Towns *(CHED)		D			
ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences: Symposium in Honor of Sandra Y. McGuire *(CHED)			A		
Advancing Undergraduate Research *(CHED)			D	A	
Biomass & Biofuel Processing *(ENFL)			D	D	
ACS Award for Computers in Chemical & Pharmaceutical Research: Symposium in Honor of Yvonne C. Martin *(COMP)			D		
ACS Award Lectures *(COLL)			P		
ACS Chemical Biology Award Symposium *(BIOL)			P		
Frank H. Field & Joe L. Franklin Award for Outstanding Achievement: Symposium in Honor of Vicki H. Wysocki *(ANYL)			P		
Nobel Laureate Signature Award for Graduate Education in Chemistry: Symposium in Honor of Junqi Li & Martin D. Burke *(ORGN)				A	
Chemical Probes for Bacterial Imaging *(BIOL)				P	

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## Younger Chemists Committee

Y C C

D. Williams, Program Chair

Moscone Center	S	M	Tu	W	Th
Starting a Successful Research Program at a PUI **	P				
Entrepreneurial Opportunities in Chemistry **	E				
Space Chemistry: How It Helps Space Exploration ** <i>AMTSP</i>		D			
Hollyweird Chemistry*(CPRC)	P	D			
Golden Age of Industrial Chemistry *(HIST)	P				
Excellence in Graduate Polymer Research *(POLY)		D	DE		
Fundamentals of Chemistry Outreach Education: From Program Design to Assessment *(CHED)		D			
Looking Beyond Your Current Boundaries: What's the Next Step? *(PROF)				D	
Young Investigators in Nuclear & Radiochemistry *(NUCL)					D

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## ACS NATIONAL MEETING

# General meeting information

**Y**our 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:**  
Through Feb. 20

**STANDARD REGISTRATION:**  
Feb. 21–April 6

**ON-SITE ATTENDEE  
REGISTRATION:**  
Moscone Center, North Hall

**SATELLITE REGISTRATION AND  
PROGRAM PICKUP LOCATIONS:**  
Moscone Center, North Lobby  
Hilton San Francisco Union Square  
Grand Hyatt San Francisco

**Early registration.** U.S. residents who register by Feb. 20 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 Feb. 20 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/](http://www.acs.org/)

REGISTRATION CATEGORY	FEE	
	EARLY BY FEB. 20	STANDARD FEB. 21
<b>MEMBERS</b>		
ACS affiliate	\$445	\$535
Postdoctoral member	445	535
Emeritus or retired member	225	270
50-year member	No fee	No fee
Unemployed member (Dues waiver required)	No fee	No fee
Precollege teacher	110	110
Graduate student	225	225
Undergraduate	110	110
One-day registrant	225	270
<b>NONMEMBERS</b>		
Chemical scientist	\$780	\$935
Postdoctoral scientist	780	935
Visitor: Nonchemical scientist or chemical technician	445	535
Precollege teacher	110	110
Graduate student	445	445
Undergraduate	225	225
One-day registrant	445	535
Guest of registrant <sup>a</sup>	45	45
<b>EXPOSITION-ONLY VISITORS</b>		
Adult, exposition only	\$60	\$60
Student, exposition only	30	30

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

sanfran2017 until April 6. 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 ET.

**Fax/mail.** Submit the registration form (page 76) via fax by April 6 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 Moscone Center, North 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](mailto:bankwires@acs.org). **Registration forms received without payment will not be processed.**

**REGISTRATION ASSISTANCE.** The ACS National Meeting Registration Center will be available from 9 AM to 5 PM ET by telephone, fax, mail, or e-mail. Service representatives can be reached by phone 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](mailto: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 March 6 to guarantee the registrant a full refund less a \$50 administrative fee. Refund requests made after March 6 will not be honored. Your registration badge credentials and a copy of your registration confirmation must be

attached to your request. All refunds will be issued via the original payment method, and refunds will be processed within 30 days after the meeting. Send your request to ACS Registration Cancellation, c/o CDS, 107 Waterhouse Rd., Bourne, MA 02532, or fax it to (508) 743-9604 (save your fax confirmation sheet).

**Social event ticket cancellations/refunds.** Social event cancellations received by March 6 entitle the registrant to a full refund. Refund requests made after March 6 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](mailto:service@acs.org).

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

## FOR UP-TO-DATE EVENT LISTINGS, VISIT

[www.acs.org/sanfran2017](http://www.acs.org/sanfran2017)

**EXPO-ONLY ADMISSION.** All meeting attendees with a valid badge receive complimentary admittance into the exposition as part of their registration. Individuals who want to visit the exposition without registering for the meeting's technical sessions can register for an expo-only adult badge for \$60 or \$30 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](http://www.acs.org/expositions).

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

## Ticketed events

A variety of social and special events will be held by event organizers during the meeting. Event participation is open to all interested registrants. View an updated listing of social and special events, including event locations, at [www.acs.org/sanfran2017](http://www.acs.org/sanfran2017).

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 March 6. No tickets will be refunded after that date.

### ► Sunday, April 2

#### **CHED (Division of Chemical Education) High School-College Interface Luncheon/SE-01/\$45**

(Ticket included at no charge with high school teacher registration.)  
Noon to 1 PM, SF Marriott Marquis

#### **CTA (Committee on Technician Affairs) Awards Luncheon/SE-02/\$45**

1 to 3 PM, Hilton SF Union Square

#### **IAC (Committee on International Activities) Networking Globally: Helping Chemistry Students Find Success in**

#### **Careers and Study Abroad/SE-03/no charge**

4 to 5:30 PM, Hilton SF Union Square

#### **IAC International Welcome Reception/SE-04/no charge**

(International registrants only)

5:30 to 7:30 PM, Hilton SF Union Square

#### **University of Washington Alumni & Friends/SE-27/\$5.00**

6 to 8 PM, W San Francisco

### ► Monday, April 3

#### **WCC Women Chemists Entertaining Breakfast/SE-05/\$40 (regular)/SE-06/\$20 (student)**

7:30 to 9 AM, Hilton SF Union Square

#### **YCC Fun Run/SE-07/\$30 (regular)/SE-08/\$15 (undergraduate)**

8 to 10 AM, Moscone Center

#### **ACS Women Chemists of Color Networking Event/SE-09/no charge**

10:30 AM to noon, Hilton SF Union Square

#### **Committee on Minority Affairs Luncheon/SE-10/\$50 (regular)/SE-11/\$25 (student)**

11:30 AM to 1:30 PM, Hilton SF Union Square

#### **CHAL (Chemistry & the Law Division) Drug & Power Luncheon/SE-12/\$40**

Noon to 1:30 PM, Mourad, 140 New Montgomery St.

#### **CACS (Chinese-American Chemical Society) Dinner Banquet/SE-13/\$37**

6:30 to 9:30 PM, Far East Café, 631 Grant Ave.

#### **ACS Graduate & Postdoctoral Scholars Reception/SE-14/no charge**

(All graduate students should receive a ticket with registration. Postdocs are invited to attend.)

7 to 8:30 PM, Moscone Center

### ► Tuesday, April 4

#### **Senior Chemists Committee Breakfast/SE-15/\$20**

7:30 to 9:30 AM, Hilton SF Union Square

#### **University of Minnesota Alumni Breakfast/SE-16/\$5.00**

7:30 to 9:30 AM, Moscone Center

#### **WCC (Women Chemists Committee) Luncheon/SE-17/\$50 (regular)/SE-18/\$25 (student)**



Noon to 1:30 PM, Hilton SF Union Square

**COLL (Division of Colloid & Surface Chemistry) Luncheon/SE-19/\$45**  
Noon to 1:30 PM, W SF

**CINF (Chemical Information Division) Luncheon/SE-20/\$30**  
Noon to 1:30 PM, Park Central SF

**ANYL (Division of Analytical Chemistry) Dinner/SE-21/\$25 (regular)/SE-22/\$15 (student)**  
5 to 7:30 PM, Hilton SF Union Square

**ENVR (Division of Environmental Chemistry) Reception/SE-23/\$20**  
6 to 8 PM, ThirstyBear Brewing Co., 661 Howard St.

**ENFL (Division of Energy & Fuels) Awards Dinner/SE-24/\$60**  
6:30 to 9 PM, Le Colonial, 20 Cosmo Pl.

**CELL (Division of Cellulose and Renewable Materials) Awards Banquet/SE-25/\$65**  
6:30 to 10 PM, The Chart House, Pier 39

**ACS National Awards Banquet Ceremony & General Meeting/SE-26/\$130**  
6:30 to 10 PM, SF Marriott Marquis

## Accommodations

ACS has negotiated special rates with a wide selection of hotels located close to the Moscone Center. 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 March 6. A listing of official hotels with their guaranteed ACS rates and amenities is on page 60. All attendees who make reservations through ConferenceDirect will receive complimentary internet access in their rooms and be automatically entered into a drawing for a free iPad or Kindle. Support of the official meeting hotels helps ACS keep registration fees to a minimum.

**Late housing.** Some hotels may have rooms available after March 6. A listing of these hotels will be posted on the ACS meeting website at [www.acs.org/sanfran2017](http://www.acs.org/sanfran2017).

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

**ECONOMICAL ALTERNATIVE.** The hotel listed below is not part of the official ACS housing block but may be of interest to attendees on a restricted budget. Make your reservation directly with this property, and ask for the listed ACS rate. This hotel is not included on the ACS shuttle route; therefore, daily transportation costs are the responsibility of the attendee.

**Holiday Inn Civic Center**, 50 Eighth St.  
\$169 per night, single/double occupancy  
Direct—(415) 626-6103

**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 March 28 and April 8. To extend your stay beyond these dates, you must reserve additional nights directly through the hotel.

**Internet.** Reserve online at [aws.passkey.com/go/acssanfran2017](http://aws.passkey.com/go/acssanfran2017).

**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 ET.

**Fax/mail.** Download the ACS housing form and fax it to (704) 927-1439, or mail it to ConferenceDirect, 5600 Seventy-Seven Center Dr., Ste. 240, Charlotte, NC 28217.

Faxed and mailed reservations will be processed on a first-come, first-served basis and require 10 to 14 days to be confirmed. If your requested hotel is no longer available, we will attempt to honor your indicated preference according to cost and location.

**RESERVATIONS, CHANGES & CANCELLATION POLICY.** Hotel reservations can be guaranteed by credit card (American Express, MasterCard, or VISA), check, or money order. Make checks and money orders payable in U.S. dollars to ConferenceDirect, and be sure to include a completed ACS housing form with each mailed payment. Hotel fees shouldn't 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. The credit card information or check deposit will be forwarded with your reservation to your hotel on March 7. Hotels may elect to charge a deposit of one night's room and tax to your credit card prior to your arrival. Any additional payment arrangements must be handled directly with your assigned hotel. All hotel rooms are subject to a room and occupancy tax of 16.53% (may vary by hotel and subject to change).

Reservation modifications and cancellations can be made with the housing bureau through March 6, 2017. After this date, you will need to contact your hotel directly to make any new reservations, modifications, 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 March 7. Penalties for early departures may be enforced and vary by hotel, so call your hotel for details.

## ACCOMMODATIONS FOR GUESTS

**WITH DISABILITIES.** Guests requiring special hotel accommodations because of a disability should indicate special requirements when making their reservation. Be sure to reconfirm any special room arrangements directly with the hotel after March 6.

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

## ACS greener meetings

The ACS 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 we're leading the way? Go to [www.acs.org/greenermeetings](http://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 cowinner 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 (over 16,000 trees planted since 2014) and shuttle emissions in partnership with Transportation Management Services (TMS) and carbonfund.org. In 2016, ACS and its partners indirectly offset 3,270 metric tons of CO<sub>2</sub>.
- ▶ 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 2016, 13,842 meeting attendees took the Greener Meetings Pledge, representing 47% of total attendees. As a result of attendee donations through American Forests, 3,714 trees were planted. Do your part and take the Greener Meetings Pledge during registration!

#### 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 Moscone Center and hotels.
- ▶ Use the meeting mobile app and digital program instead of the printed on-site program.

#### MEETING INFO ON THE WEB

Registration, housing, technical programming, special events, participating exhibitors, and other meeting details are available at [www.acs.org/sanfran2017](http://www.acs.org/sanfran2017).

## On-site program book no longer free

Copies of the on-site program book will be available for \$10 until Feb. 20 through the online registration process. The standard fee of \$20 will apply after Feb. 20. 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 Moscone Center, North Lobby; Hilton San Francisco Union Square; and Grand Hyatt San Francisco. Credit cards, debit cards, and checks will be accepted at these locations.

We encourage meeting attendees to download the ACS San Francisco mobile app or access the ACS San Francisco digital meeting program with author index in early April. These digital options will provide quick access to the full technical program, along with special features so you can easily build your schedule.

- ▶ Enjoy the city, burn calories, and reduce my carbon footprint by walking to and from my hotel.
- ▶ Use the ACS carbon-offset shuttle service provided 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](mailto: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, we recommend making reservations online (except for Amtrak).

#### AIRLINES:

##### Delta

[delta.com/meeting](http://delta.com/meeting); (800) 328-1111

Discount code: NMPBR

##### United Airlines

[united.com](http://united.com); (800) 426-1122

Discount code: ZXMC508834

#### TRAIN:

##### Amtrak

(800) 872-7245

Discount code: X90C-958 (phone reservations only)

#### CAR RENTAL:

##### Avis

[avis.com](http://avis.com); (800) 331-1600

Discount code: B923099

##### Hertz

[hertz.com](http://hertz.com); (800) 654-2240

Discount code: 02UZ0016

#### AIRPORT GROUND TRANSPORTATION.

San Francisco International Airport is located 13 miles south of downtown San Francisco.

**Public transportation.** San Francisco has a comprehensive public transportation system that includes the Bay Area Rapid Transit (BART) system, Caltrain commuter rail, and SamTrans public bus service. For more information please visit [bit.ly/2jueoYy](http://bit.ly/2jueoYy).

**Taxi services.** Taxis depart from the designated taxi zones located at the roadway center islands on the arrivals and baggage claim level. Fares range from \$46.16–\$66.16. A \$2.00 exit surcharge is included in all San Francisco taxicab meter fares for rides originating from San Francisco International Airport.

**TRAVELING TO MEETING VENUES.** The Moscone Center is located at 747 Howard St., San Francisco, CA 94103.

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

**Parking.** There is no parking provided at the Moscone Center for attendees or exhibitors. Nearby parking garages are listed on the Moscone Center website.

## 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 North Lobby near attendee registration in the Moscone Center and is open Saturday, April 1, 3 to 6 PM; Sunday, April 2, 7:30 AM to 7:30 PM; Monday, April 3,



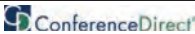
PARTICIPATING HOTEL LIST

American Chemical Society  
253rd National Meeting and Exposition - April 2-6, 2017 - San Francisco, CA  
For best rates and availability, make your reservation at [www.acs.org/sanfran2017](http://www.acs.org/sanfran2017)  
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 of 16.53% (Subject to change)

\*Additional fees may apply if: a rollaway bed is required, if there are pets in guest rooms, parking for oversized vehicles and if smoking occurs in guest rooms (all rooms are nonsmoking rooms).

Hotels*	Single	Double	Triple	Quad	Maximum Occupants Per Room*	No Charge for Children Under This Age	Childcare Information Available	On ACS Shuttle Route	Per Day Hotel Parking Rates*	Room Service Available	Pets Allowed*	Fitness Center	Swimming Pool
	(1 person)	(2 persons)	(3 persons)	(4 persons)									
1 Courtyard by Marriott Downtown San Francisco	\$254	\$276	\$296	\$316	4	18	No	Walkable	\$60	No	Service	Yes	Yes
2 Grand Hyatt San Francisco	\$217-\$326	\$217-\$326	\$242-\$351	\$267-\$376	4	18	Yes	Yes	\$45/\$67.26	Yes	Yes	Yes	No
3 Hilton San Francisco Union Square	\$217-\$294	\$217-\$294	\$237-\$314	\$257-\$334	4	18	Yes	Yes	\$50/\$62	Yes, no lunch service	Yes	Yes	Yes
4 Hotel Abri	\$239	\$239	\$259	\$279	4	14	No	Yes	\$60	Yes, no lunch service	Yes	No	No
5 Hotel Nikko San Francisco	\$269	\$269	\$299	\$329	4	12	Yes	Yes	\$50	Yes	Yes, up to 40 lb	Yes, \$20 per person per stay	
6 InterContinental San Francisco	\$305	\$305	\$335	-	3	18	Yes	Walkable	\$53	Yes	Yes	Yes	Yes
7 King George Hotel	\$185	\$185	\$200	\$215	4	12	No	Yes	\$43	Yes	Service Only	No	No
8 Palace Hotel, A Starwood Luxury Collection	\$309	\$309	\$349	-	3	18	Yes	Yes	\$59	Yes	Yes, under 15 lb	Yes	Yes
9 Parc 55 San Francisco - A Hilton Hotel	\$218-\$261	\$218-\$261	\$243-\$286	\$268-\$311	4	9	Yes	Yes	\$56	No	Yes	Yes	No
10 Park Central San Francisco	\$259	\$282	\$302	-	3	16	No	Walkable	\$67	No	Yes, under 50 lb	Yes	No
11 San Francisco Marriott Marquis	\$279-299	279-299	\$299-319	\$319-339	4	18	Yes	Walkable	\$85	No	Service Only	Yes	No
12 San Francisco Marriott Union Square	\$270	\$292	\$312	\$332	4	18	Yes	Yes	\$64.98 w/ tax	Yes	Yes	Yes	No
13 Sir Francis Drake Hotel	\$265	\$265	\$285	\$305	4	18	Yes	Yes	\$59	Yes	Yes	Yes	No
14 The Mosser	\$189	\$189	-	-	2	12	No	Walkable	\$49	No	Service	No	No
15 W San Francisco	\$284	\$284	\$324	\$364	4	18	No	Walkable	\$64	Yes	Yes	Yes	No
16 Westin St. Francis	\$305	\$305	\$335	\$365	4	18	Yes	Yes	\$58	Yes	Yes	Yes	No



7:30 AM to 9 PM; Tuesday, April 4, 7:30 AM to 5 PM; Wednesday, April 5, 7:30 AM to 4 PM; and Thursday, April 6, 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.

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. E-mail [meetingnews@acs.org](mailto:meetingnews@acs.org) to subscribe.

BUSINESS CENTER. The Moscone Business Center provides full service business needs for your convenience, including photocopying, faxing, computer workstations, and printing services. Shipping is provided through UPS. Office supplies and souvenirs are also available for purchase.

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 725 and learn how we can help you protect the elements

you've built your life around with plans ranging from Life & Health Insurance, International Term Life, Auto & Homeowners Plus, Disability Income, Long-Term Care, Professional Liability, and more. Also learn about our latest addition: 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. Visit [haysconsult.setmore.com](http://haysconsult.setmore.com) to schedule your complimentary consultation.

To learn more about the insurance plans available to you, visit [www.acs.org/insurance](http://www.acs.org/insurance).

On-site meeting arrangements

ADA-COMPLIANT MEETING. The Moscone Center 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 [moscone.com](http://moscone.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 partic-

ipate in the meeting, communicate your needs to ACS Meeting Services by e-mail at [nationalmeetings@acs.org](mailto:nationalmeetings@acs.org), by fax at (202) 872-6128, or by phone at (202) 872-6111 by Feb. 20 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 in the South Lobby. 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/sanfran2017](http://www.acs.org/sanfran2017). Use the Meeting Mail



# 253rd ACS National Meeting & Exposition

April 2–6, 2017 | San Francisco, CA

[www.acs.org/sanfran2017](http://www.acs.org/sanfran2017) | [#acsSanFran](https://twitter.com/acsSanFran)

## SHUTTLE SERVICE SCHEDULE

Updated as of January 11, 2017

### HOURS OF OPERATION

#### SUNDAY, April 2

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, April 3

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, April 4

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, April 5

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

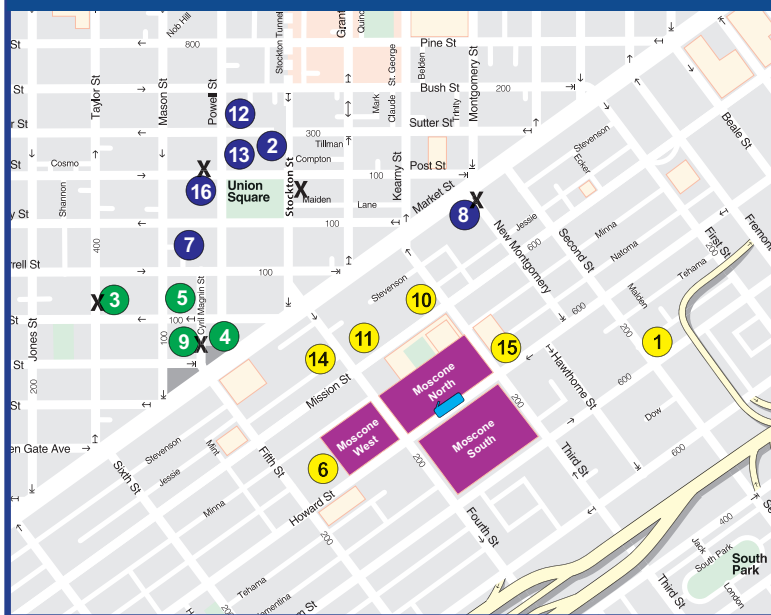
#### THURSDAY, April 6

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



Scan here to download a copy of this schedule onto your smart phone or device.

### SAN FRANCISCO MAP



#### LEGEND

- Route 1
- Route 2
- Walk to Convention Center
- X** Boarding Location
- Pick Up/Drop Location at Convention Center

KEY	HOTEL	ROUTE	SHUTTLE BOARDING LOCATION
1	Courtyard by Marriott Downtown San Francisco	W	Walk to Moscone Center
2	Grand Hyatt San Francisco	1	Curbside on Post Street at Stockton Street
3	Hilton San Francisco Union Square	2	Taylor Street
4	Hotel Abri	2	Walk to Parc 55
5	Hotel Nikko San Francisco	2	Walk to Parc 55
6	InterContinental San Francisco	W	Walk to Moscone Center
7	King George Hotel	1	Walk to Westin St. Francis on Post Street
8	Palace Hotel, A Starwood Luxury Collection	1	New Montgomery Street
9	Parc 55 San Francisco - A Hilton Hotel	2	Curbside on Cyril Magnin Street
10	Park Central San Francisco	W	Walk to Moscone Center
11	San Francisco Marriott Marquis	W	Walk to Moscone Center
12	San Francisco Marriott Union Square	1	Walk to Grand Hyatt on Post Street
13	Sir Francis Drake Hotel	1	Walk to Westin St. Francis on Post Street
14	The Mosser	W	Walk to Moscone Center
15	W San Francisco	W	Walk to Moscone Center
16	Westin St. Francis	1	Curbside on Post Street



For all shuttle and wheelchair assistance inquiries, please call:

**1-866-439-8564**



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**253rd American Chemical Society National Meeting & Exposition**  
**April 2 - 6, 2017**  
**San Francisco, CA**

**OFFICIAL HOTEL RESERVATION FORM • RESERVATION DEADLINE: FEBRUARY 27, 2017**

**CONTACT INFORMATION**

FIRST NAME _____	LAST NAME _____		
COMPANY _____			
MAILING ADDRESS _____	CITY _____	STATE/PROVINCE _____	ZIP CODE/COUNTRY _____
EMAIL ADDRESS _____	PHONE NUMBER _____	FAX NUMBER _____	

**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)

List 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 March 7, 2017 (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 March 7, 2017. 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 February 10th:** 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 February 10th, 2017.**
- **February 11th Through March 7th:** 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 March 7th TO ALLOW TIME FOR PROCESSING.**

**CREDIT CARD AUTHORIZATION**

**Credit card Information (for Deposit):** ☐ American Express ☐ MasterCard ☐ VISA ☐ Discover

**Card #** \_\_\_\_\_ **Exp. Date** \_\_\_\_\_

**Cardholder Name (Please Print)** \_\_\_\_\_

**Cardholder Signature** \_\_\_\_\_

\*Your hotel reserves the right to charge this card a deposit equal to one night's room and tax for each reservation on or after March 7, 2017.

**PLEASE RETURN COMPLETED FORM TO CONFERENCEDIRECT BY FAX AT +1 (704) 927-1439 OR CALL ACS HOUSING DIRECTLY TO MAKE YOUR RESERVATION.**

**HOUSING BUREAU CONTACT INFORMATION:**

**SUPPORT EMAIL:** [acshousing@conferencedirect.com](mailto:acshousing@conferencedirect.com)

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

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

**FAX:** (704) 927-1439

Housing Provided by **ConferenceDirect**

terminals located in the Moscone Center. 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 & VIDEOTAPING.** The use of any device to capture images (e.g., cameras and camera phones) or sound (e.g., tape and digital re-broadcast) 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, April 2, through Thursday, April 6. 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 March 24 at [www.acs.org/sanfran2017](http://www.acs.org/sanfran2017). 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 or vibrate mode in technical or educational sessions. Cell phone conversations are not permitted in meeting rooms.

**EMERGENCIES DURING ACS MEETING EVENTS.** ACS will place detailed instructions in each meeting room to be used if an emergency occurs during an ACS meeting event. These instructions will revolve around following the established emergency guidelines of the facility where the emergency occurs. Report emergencies to the nearest security guard or to any ACS Operations Office during the meeting. Should a catastrophic event occur, attendees should follow safety and security instructions issued by the facility where they are located at the time of the event.

**HOST LOCAL SECTION.** ACS gratefully acknowledges the cooperation and assistance of the ACS California and Santa Clara Valley Local Sections and their members in handling local arrangements. Volunteers have planned many interesting activities; the Host Local Sections booth will be located in the Lower North Lobby.

**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/sanfran2017](http://www.acs.org/sanfran2017).

**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 Moscone Center.

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

**LUGGAGE & COAT CHECK.** A luggage and coat check station will be available during registration hours from Sunday through Thursday in the North Lobby. 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 Moscone Center:

**Attendee Registration:** North Lobby  
**Career Fair:** Halls B & C  
**Exhibitor Registration:** South Lobby  
**Exposition:** Halls B & C  
**Finance Office:** Room 110  
**Host Local Section Center:** Lower North Lobby  
**Member Services:** North Lobby  
**Press Center:** South Lobby  
**Shuttle Desk:** Outside West Lobby

The following offices are located at the identified properties:

**Operations Offices:** Grand Hyatt San Francisco, Hilton San Francisco Union Square, Hotel Nikko San Francisco, Inter-Continental San Francisco, Palace Hotel, Parc 55 San Francisco, Park Central San Francisco, San Francisco Marriott Marquis, San Francisco Marriott Union Square, Sir Francis Drake Hotel, W San Francisco  
**Governance Office:** Hilton San Francisco Union Square  
**Society Programs:** Hilton San Francisco Union Square

**MOTHERS ROOM.** For your convenience and privacy, ACS will provide a room for nursing mothers at the Moscone Center. Please see the ACS Operations Office, South Lobby, 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.

As a speaker, you should prepare for your presentation by verifying the following details: the status of your abstract at [abstracts.acs.org](http://abstracts.acs.org) (using your ACS ID to log in to the system); mode of presentation (oral or poster); and the time, length, and location of your presentation. You should arrive in your presentation room at least 30 minutes before your scheduled speaking time. Poster presenters should set up posters at least one hour before the start of the poster session. If you need to withdraw your presentation, please send

## THANK YOU

The society thanks the many volunteers of the ACS California and Santa Clara Valley Sections who are contributing to the 253rd ACS National Meeting & Exposition 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.

a withdrawal notice to [maps@acs.org](mailto:maps@acs.org) and contact your symposium organizer immediately.

#### TECHNICAL SESSION EQUIPMENT.

Each technical session meeting room will be equipped with the following: LCD projector, screen, podium, podium microphone or lapel microphone, and laser pointer. As a speaker, you will need to provide your own laptop or arrange for specialty equipment directly with your 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.** As a presenter, you may use the speaker ready rooms to preview your 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 are business centers located in each building of the Moscone Center that provide a range of services including copying, incoming and outgoing faxes, computer access, laser printing, and shipping; in the North Hall on the lower level under the escalators, adjacent to



Room 130; in the South Hall, on the lower level, adjacent to Hall C; and in the West Hall, on the lobby level near the Howard St. entrance.

**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 253rd ACS National Meeting is now available at [www.acs.org/sanfran2017](http://www.acs.org/sanfran2017). You can search by divisions or committees, symposia, speakers, or keywords from abstracts as well as presidential events and the multidisciplinary theme of "Advanced Materials, Technologies, Systems & Processes."

#### 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 Feb. 20 or on-site in San Francisco from April 2–6. 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 Moscone Center. You can have a USB flash drive shipped to you if you place your order before Feb. 20, 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.

**GRAPHICAL ABSTRACTS.** Graphical abstracts from the polymer chemistry division may be ordered directly from the division. You can purchase them by e-mailing Kathy Mitchem ([kathyl@vt.edu](mailto:kathyl@vt.edu)) or inquiring about these products at the hospitality table for the division near their meeting rooms.

## Tips for a safe stay in San Francisco

- ▶ Be aware of your 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.

# Special & educational events

## Presidential events

**ACS President Allison Campbell** welcomes attendees to the 253rd ACS National Meeting. The presidential and cosponsored event symposia will focus on areas of significant importance: the health of our planet, the safe practice of science, and strong technical programming.

The first symposium, "LGBT Graduate & Postdoctoral Student Chemistry Research," is organized by the Division of Professional Relations. This all-day symposium on Sunday, April 2, from 9 AM to 5:40 PM will consist of scientific talks by LGBT graduate and postdoctoral students and will conclude with a panel discussion on issues that affect LGBT students and postdocs. Later Sunday afternoon at 1:20 PM, the symposium "Holy Grails in Chemistry: Celebrating the 50th Anniversary of *Accounts of Chemical Research* Journal" will focus on a 1995 issue in the journal that sought to spotlight critical areas of chemistry and will assess the progress in these areas since then.

On Monday, April 3, from 8:30 AM to 4:30 PM, the symposium "Science for a Sustainable Energy Future" will highlight scientific advances for creating and storing sustainable, low-carbon energy. The symposium will focus on advances in energy storage in the morning session and chemical and biological approaches to energy conversion in the afternoon.

Thirteen president-recommended symposia focus on issues of safety, communicating science, highlighting up-and-coming graduate researchers, and celebrating diverse practitioners of chemistry. Details of these presidential events and other recommended symposia can be found at [www.acs.org/sanfran2017](http://www.acs.org/sanfran2017).

## ACS 2017 national award winners

The ACS national awards recognize individual or team accomplishments in diverse fields of chemical sciences. Award recipients traditionally receive their national award in person during the ACS awards dinner and general meeting and deliver an award address on the scientific work that is being recognized to an appropriate division.

This year's event will be held on the evening of Tuesday, April 4, at the San Fran-

cisco Marriott Marquis. Dinner begins at 7:30 PM, and the general meeting begins at 8:30 PM. Tobin J. Marks will deliver the Priestley Medal Address at the general meeting. See ticketed events on page 57 for ticket information.

Several awards, such as the Arthur C. Cope Scholar Awards and the Arthur C. Cope Award, will be presented at the Arthur C. Cope and Cope Scholars Symposium in conjunction with the 254th ACS National Meeting in Washington, D.C., in August.

*ACS Award for Achievement in Research for the Teaching & Learning of Chemistry*, sponsored by ACS Exams Institute, **Marcy H. Towns**, Purdue University. Address to be presented before the Division of Chemical Education.

*ACS Award for Affordable Green Chemistry*, sponsored by Dow Chemical and endowed by Rohm and Haas, **Peter J. Dunn**, Pfizer (retired). Address to be presented before the Division of Industrial & Engineering Chemistry at the fall ACS national meeting in Washington, D.C.

*ACS Award for Computers in Chemical & Pharmaceutical Research*, sponsored by the ACS Division of Computers in Chemistry, **Yvonne Connolly Martin**, Abbott Laboratories, AbbVie. Address to be presented before the Division of Computers in Chemistry.

*ACS Award for Creative Advances in Environmental Science & Technology*, sponsored by the ACS Division of Environmental Chemistry and the ACS Publications journals *Environmental Science & Technology* and *Environmental Science & Technology Letters*, **Douglas R. Worsnop**, Aerodyne Research and University of Helsinki, Finland. Address to be presented before the Division of Environmental Chemistry.

*ACS Award for Creative Invention*, sponsored by ACS Corporation Associates, **Richard B. Silverman**, Northwestern University. Address to be presented before the Division of Medicinal Chemistry.

*ACS Award for Creative Work in Fluorine Chemistry*, sponsored by the ACS Division of Fluorine Chemistry, **Antonio Togni**, Swiss Federal Institute of Technology (ETH), Zurich. Address to be presented before the Division of Fluorine Chemistry.

*ACS Award for Creative Work in Synthetic Organic Chemistry*, sponsored by MilliporeSigma, **Matthew S. Sigman**, University of Utah. Address to be presented before the Division of Organic Chemistry.

*ACS Award for Distinguished Service in the Advancement of Inorganic Chemistry*, sponsored by Strem Chemicals, **William B. Tolman**, University of Minnesota, Twin Cities. Address to be presented before the Division of Inorganic Chemistry.

*ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences*, sponsored by the Camille and Henry Dreyfus Foundation, **Saundra Yancy McGuire**, Louisiana State University. Address to be presented before the Division of Chemical Education.

*ACS Award for Encouraging Women into Careers in the Chemical Sciences*, sponsored by the Camille and Henry Dreyfus Foundation, **Judith M. Iriarte-Gross**, Middle Tennessee State University. Address to be presented before the ACS Women Chemists Committee and the ACS Division of Chemical Education.

*ACS Award for Research at an Undergraduate Institution*, sponsored by Research Corporation for Science Advancement, **Maria R. Hepel**, SUNY at Potsdam. Address to be presented before the Division of Colloid & Surface Chemistry.

*ACS Award for Team Innovation*, sponsored by ACS Corporation Associates, **Robert A. DeVries**, R DeVries Consulting, LLC; **Philip E. Garrou**, Microelectronic Consultants of North Carolina; **Carol E. Mohler** and **Theodore M. Stokich**, Dow Chemical; and **Eric Scott Moyer**, LORD Corporation. Address to be presented before the Division of Polymeric Materials: Science & Engineering.

*ACS Award in Analytical Chemistry*, sponsored by the Battelle Memorial Institute, **Donald Frederick Hunt**, University of Virginia. Address to be presented before the Division of Analytical Chemistry.

*ACS Award in Applied Polymer Science*, sponsored by Eastman Chemical, **Zhenan Bao**, Stanford University. Address to be presented before the Division of Polymeric Materials: Science & Engineering.



*ACS Award in Chromatography*, sponsored by MilliporeSigma, **Robert T. Kennedy**, University of Michigan. Address to be presented before the Division of Analytical Chemistry.

*ACS Award in Colloid Chemistry*, sponsored by Colgate-Palmolive Co., **Nicholas Alexander Kotov**, University of Michigan. Address to be presented before the Division of Colloid & Surface Chemistry.

*ACS Award in Industrial Chemistry*, sponsored by the ACS Division of Industrial & Engineering Chemistry, **Jane Frommer**, IBM Research. Address to be presented before the Division of Industrial & Engineering Chemistry and the Division of Organic Chemistry.

*ACS Award in Inorganic Chemistry*, sponsored by Aldrich Chemical Co., LLC, **Lawrence Que, Jr.**, University of Minnesota, Twin Cities. Address to be presented before the Division of Inorganic Chemistry.

*ACS Award in Organometallic Chemistry*, sponsored by the Dow Chemical Co. Foundation, **Marcetta Y. Darensbourg**, Texas A&M University. Address to be presented before the Division of Inorganic Chemistry.

*ACS Award in Polymer Chemistry*, sponsored by ExxonMobil Chemical, **Murugappan Muthukumar**, University of Massachusetts, Amherst. Address to be presented before the Division of Polymer Chemistry.

*ACS Award in Pure Chemistry*, sponsored by the Alpha Chi Sigma Fraternity and the Alpha Chi Sigma Educational Foundation, **Neal K. Devaraj**, University of California, San Diego. Address to be presented before the Division of Biological Chemistry.

*ACS Award in Separations Science & Technology*, sponsored by Waters Corp., **Rakesh Agrawal**, Purdue University. Address to be presented before the Division of Industrial & Engineering Chemistry Separations Science & Technology Symposium at the fall ACS national meeting in Washington, D.C.

*ACS Award in Surface Chemistry*, sponsored by the ACS Division of Colloid & Surface Chemistry, **Cynthia M. Friend**, Harvard University. Address to be presented before the Division of Colloid & Surface Chemistry.

*ACS Award in the Chemistry of Materials*, sponsored by DuPont, **Douglas A. Keszler**, Oregon State University. Address to be

presented before the Division of Inorganic Chemistry.

*ACS Award in Theoretical Chemistry*, sponsored by the ACS Division of Physical Chemistry, **Peter Pulay**, University of Arkansas. Address to be presented before the Division of Physical Chemistry.

*Award for Volunteer Service to the American Chemical Society*, sponsored by ACS, **D. Richard Cobb**, Eastman Kodak Company (retired). Address to be presented before the ACS ChemLuminary Awards at the fall ACS national meeting in Washington, D.C.

*Roger Adams Award in Organic Chemistry*, sponsored by Organic Reactions Inc. and Organic Syntheses Inc., **Hisashi Yamamoto**, Chubu University, Japan. Address to be presented before the 45<sup>th</sup> National Organic Chemistry Symposium in Davis, Calif.

*Alfred Bader Award in Bioinorganic or Bioorganic Chemistry*, sponsored by the Alfred R. Bader Fund, **Kim D. Janda**, Scripps Research Institute. Address to be presented before the Division of Medicinal Chemistry.

*Earle B. Barnes Award for Leadership in Chemical Research Management*, sponsored by the Dow Chemical Co. Foundation, **Laurie E. Locascio**, National Institute of Standards & Technology. Address to be presented before the Division of Analytical Chemistry at the fall ACS national meeting in Washington, D.C.

*Ronald Breslow Award for Achievement in Biomimetic Chemistry*, sponsored by the Ronald Breslow Award Endowment, **Benjamin G. Davis**, University of Oxford, England. Address to be presented before the Division of Biological Chemistry.

*Herbert C. Brown Award for Creative Research in Synthetic Methods*, sponsored by the Purdue Borane Research Fund and the Herbert C. Brown Award Endowment, **Bruce H. Lipshutz**, University of California, Santa Barbara. Address to be presented before the Division of Organic Chemistry.

*James Bryant Conant Award in High School Chemistry Teaching*, sponsored by the *Journal of Chemical Education* and ChemEd X, **Laura Elizabeth Slocum**, Heathwood Hall Episcopal School, South Carolina. Address to be presented before the Division of Chemical Education.

*Arthur C. Cope Award*, sponsored by the Arthur C. Cope Fund, **Carolyn R. Bertozzi**,

Stanford University and Howard Hughes Medical Institute. Address to be presented before the Division of Organic Chemistry at the fall ACS national meeting in Washington, D.C.

*Arthur C. Cope Scholar Awards*, sponsored by the Arthur C. Cope Fund, **Alejandro L. Briseno**, University of Massachusetts, Amherst; **Sherry R. Chemler**, University at Buffalo, SUNY; **Guangbin Dong**, University of Texas at Austin and University of Chicago; **P. Andrew Evans**, Queen's University; **M. G. Finn**, Georgia Institute of Technology; **Paul J. Hergenrother**, University of Illinois, Urbana-Champaign; **Thomas R. Hoye**, University of Minnesota, Twin Cities; **Kathlyn A. Parker**, Stony Brook University, SUNY; **Mikiko Sodeoka**, RIKEN, Japan; and **Christopher D. Vanderwal**, University of California, Irvine. Address to be presented before the Division of Organic Chemistry at the fall ACS national meeting in Washington, D.C.

*Elias J. Corey Award for Outstanding Original Contribution in Organic Synthesis by a Young Investigator* sponsored by the Pfizer Endowment Fund, **Neil K. Garg**, University of California, Los Angeles. Address to be presented before the Division of Organic Chemistry.

*F. Albert Cotton Award in Synthetic Inorganic Chemistry*, sponsored by the F. Albert Cotton Endowment Fund, **Pingyun Feng**, University of California, Riverside. Address to be presented before the Division of Inorganic Chemistry.

*Peter Debye Award in Physical Chemistry*, sponsored by DuPont, **Bruce J. Berne**, Columbia University. Address to be presented before the Division of Physical Chemistry.

*Frank H. Field & Joe L. Franklin Award for Outstanding Achievement in Mass Spectrometry*, sponsored by Waters Corp., **Vicki Hopper Wysocki**, Ohio State University. Address to be presented before the Division of Analytical Chemistry.

*Francis P. Garvan-John M. Olin Medal*, sponsored by the Francis P. Garvan-John M. Olin Medal Endowment, **Barbara J. Finlayson-Pitts**, University of California, Irvine. Address to be presented before the Division of Physical Chemistry.

*James T. Grady-James H. Stack Award for Interpreting Chemistry for the Public*, sponsored by ACS, **Thomas Arthur Hager**, University of Oregon. Address to be presented

before the ACS Office of Public Affairs, Division of Chemical Education and the Division of the History of Chemistry.

*Harry Gray Award for Creative Work in Inorganic Chemistry by a Young Investigator*, sponsored by the Gray Award Endowment, **Nilay Hazari**, Yale University. Address to be presented before the Division of Inorganic Chemistry.

*Ernest Guenther Award in the Chemistry of Natural Products*, sponsored by Givaudan, **Stephen F. Martin**, University of Texas at Austin. Address to be presented before the Division of Organic Chemistry.

*Kathryn C. Hach Award for Entrepreneurial Success*, sponsored by the Kathryn C. Hach Award Fund, **David R. Walt**, Tufts University. Address to be presented before the Division of Analytical Chemistry and the Division of Biochemical Technology.

*E. B. Hershberg Award for Important Discoveries in Medicinally Active Substances*, sponsored by Merck Research Laboratories, **Stanley T. Crooke**, Ionis Pharmaceuticals. Address to be presented before the Division of Medicinal Chemistry.

*Joel Henry Hildebrand Award in the Theoretical & Experimental Chemistry of Liquids*, sponsored by ExxonMobil Research & Engineering, **Salvatore Torquato**, Princeton University. Address to be presented before the Division of Physical Chemistry.

*E. V. Murphree Award in Industrial & Engineering Chemistry*, sponsored by ExxonMobil Research & Engineering, **Eleftherios Terry Papoutsakis**, University of Delaware. Address to be presented before the Division of Biochemical Technology.

*Nakanishi Prize*, sponsored by the Nakanishi Prize Endowment, **Martin Gruebele**, University of Illinois, Urbana-Champaign. Address to be presented before the Division of Physical Chemistry.

*National Fresenius Award*, sponsored by Phi Lambda Upsilon, the National Chemistry Honor Society, **Neal K. Devaraj**, University of California, San Diego. Address to be presented before the Division of Organic Chemistry.

*Nobel Laureate Signature Award for Graduate Education in Chemistry*, sponsored by Avantor Performance Materials, **Junqi Li (student)** and **Martin D. Burke (preceptor)**, University of Illinois, Urbana-Champaign.

Address to be presented before the Division of Organic Chemistry.

*James Flack Norris Award in Physical Organic Chemistry*, sponsored by the ACS North-eastern Section, **Robert A. Moss**, Rutgers University. Address to be presented before the Division of Organic Chemistry.

*George A. Olah Award in Hydrocarbon or Petroleum Chemistry*, sponsored by the George A. Olah Award Endowment, **Robert Howard Grubbs**, California Institute of Technology. Address to be presented before the Division of Organic Chemistry.

*Charles Lathrop Parsons Award*, sponsored by ACS, **John I. Brauman**, Stanford University. Address to be presented before the ACS Board of Directors.

*George C. Pimentel Award in Chemical Education*, sponsored by Cengage Learning and the ACS Division of Chemical Education, **Thomas A. Holme**, Iowa State University. Address to be presented before the Division of Chemical Education.

*Priestley Medal*, sponsored by ACS, **Tobin J. Marks**, Northwestern University. Address to be presented at the ACS National Awards Banquet Ceremony & General Meeting of the Society.

*Glenn T. Seaborg Award for Nuclear Chemistry*, sponsored by the ACS Division of Nuclear Chemistry & Technology, **David L. Clark**, Los Alamos National Laboratory. Address to be presented before the Division of Nuclear Chemistry & Technology.

*Gabor A. Somorjai Award for Creative Research in Catalysis*, sponsored by the Gabor A. & Judith K. Somorjai Endowment Fund, **John E. Bercaw**, California Institute of Technology. Address to be presented before the Division of Inorganic Chemistry.

*E. Bright Wilson Award in Spectroscopy*, sponsored by the ACS Division of Physical Chemistry, **David John Nesbitt**, JILA (NIST/University of Colorado, Boulder). Address to be presented before the Division of Physical Chemistry.

*Ahmed Zewail Award in Ultrafast Science & Technology*, sponsored by the Ahmed Zewail Endowment Fund established by Newport Corp., **Stephen R. Leone**, University of California, Berkeley, and Lawrence Berkeley National Laboratory. Address to be presented before the Division of Physical Chemistry.

## 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/sanfran2017](http://www.acs.org/sanfran2017).

**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 Dr. Carolyn Bertozzi of Stanford University will present, "What life and research share in common: Finding opportunity in failure."

### ► Sunday, April 2

**Undergraduate Hospitality Center**, 8 AM to 5 PM

**Making the Most of your First National Meeting**, 8:30 to 9:15 AM

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

**Symposium: Frontiers in Nanoscience** (cosponsored by POLY), 9:30 to 11:30 AM  
**Chem Demo Exchange**, 11 AM to 12:30 PM  
**Graduate School Reality Check, Step I: Getting In** (cosponsored by YCC), 10 to 11:30 AM

**Graduate School Reality Check, Step II: You're In—Now What?** (cosponsored by YCC), 11:30 AM to 12:45 PM

**Networking Social with Graduate School Recruiters**, 1 to 5 PM

**Networking 101**, 1:30 to 3 PM

**Two-Year to Four-Year College Transfer Survival Guide**, 2:30 to 3:30 PM

**SciBabe, Chemistry Blogger**, 4 to 5:30 PM

**Student Awards Ceremony**, 7 to 8:30 PM

**Undergraduate Social**, 8:30 to 11 PM

### ► Monday, April 3

**Undergraduate Hospitality Center**, 8 AM to 5 PM

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

**Improving Scientific Communications**, 9 to 10:15 AM

**Symposium: The Chemistry of Fermented Beverages**, 10 to 11:30 AM

**Undergraduate Research Poster Session** (cosponsored by CHED, AGFD, ENVR,

INOR, MEDI, PHYS, POLY, GEOC, and BIOT), noon to 2 PM

**Eminent Scientist Lecture with Dr. Carolyn Bertozzi, Stanford University** (cosponsored by MEDI), 2:30 to 4 PM  
**Student Speed Networking with Chemistry Professionals**, 4 to 5:15 PM  
**Sci-Mix/Successful Student Chapter Posters**, 8 to 10 PM

## ► Tuesday, April 4

**NSF Graduate School Fellowships**, 9 to 9:45 AM  
**Chemistry & the Environment Film Series**, noon to 2 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, April 2

**ChemIDP™: Planning for Your Career**, 11:30 AM to 1:15 PM  
**Graduate & Postdoctoral Scholars Focus Group**, 2 to 4 PM  
**Faculty & Postdoc Afternoon Networking Coffee Break**, 4 to 6 PM

## ► Monday, April 3

**Student Speed Networking with Chemistry Professionals**, 4 to 5:15 PM  
**Graduate & Postdoctoral Scholars Reception**, 7 to 8:30 PM

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

**CHEMISTRY TEACHER PROGRAM.** The Division of Chemical Education and the ACS Education Division are sponsoring the Chemistry Teacher Program. It will include presentations on current pedagogies, resources, and activities. The 2017 recipient of the James Bryant Conant Award in High School Chemistry Teaching will be a featured presenter during the program. 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 and professors.

High school and middle school teach-

ers can register for the program directly through Attendee Registration as a pre-college teacher; the reduced registration fee includes program materials, lunch, access to the full ACS meeting, and entry to the exhibition. Teachers can receive a certificate documenting up to 24 professional development hours for attending sessions.

## ► Sunday, April 2

**Chemistry Teacher Program**, 8:30 AM to 4:30 PM

## ► Monday, April 3

**High School Polymer Program** (cosponsored by POLY), 5 to 8:30 PM

For more information, contact the Office of High School Chemistry at [education@acs.org](mailto:education@acs.org) or at (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 \$300; non-CHAS member: full registration \$425/early registration \$350. Early registration ends Feb. 17. 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](mailto:scholarships@labsafetyinstitute.org).

**Half-day workshops fees.** CHAS member: \$175 early registration/\$200 after Feb. 17; non-CHAS member: \$200 early registration/\$225 after Feb. 17.

Registration is required for all CHAS workshops. Register online at [dchas.org/workshop-registration-page](http://dchas.org/workshop-registration-page).

**Laboratory Safety—Beyond the Fundamentals.** Friday, March 31, 8 AM to 5 PM. Moscone Center, Room 121. Presenter: James Kaufman. The Laboratory Safety Institute will present a new course at the ACS national meetings which is designed to meet the needs of scientists and science educators wanting to learn more about laboratory safety. "Lab Safety—Beyond the Fundamentals" continues where LSI's introductory course (The Laboratory Safety Workshop) leaves off and explores new areas in lab safety. There is an emphasis on simple and inexpen-

sive steps to create more effective lab safety programs and grow the culture of lab safety.

There is extensive opportunity for questions during the workshop with follow-up by phone and e-mail. This includes a one-hour conference call to help with the implementation of course concepts. Course participants are encouraged to submit in advance five questions or topics they wish to be sure are covered in the course: [jim@labsafetyinstitute.org](mailto:jim@labsafetyinstitute.org).

**Laboratory Waste Management.** Friday, March 31, 8 AM to 5 PM. Moscone Center, Room 120. Presenter: Russ Phifer. CHAS offers this workshop to assist participants with the various regulatory requirements that apply to laboratories that generate hazardous waste, as well as to provide insight into the options for on-site management and off-site disposal. Focus will include discussion on recycling/reclamation techniques, economical handling of waste, and liability issues. There is extensive opportunity for questions during the workshop with follow-up by phone and e-mail.

**Cannabis Extraction Workshop.** Saturday, April 1. Moscone Center, Room 120. Presenters: Ezra Pryor, Jahan Marcu, and Melissa Wilcox. Half-day program (AM). CHAS and CANN (Cannabis Chemistry Subdivision) present a Cannabis Extraction Workshop, which is a comprehensive review of current methodologies and best practices in the extraction and processing of cannabis. Participants will learn the latest developments in extraction technologies, how to comply with regulations, and how to operate safely. There is extensive opportunity for questions during the workshop with follow-up by phone and e-mail.

**Cannabis Analysis Workshop.** Saturday, April 1. Moscone Center, Room 120. Presenters: Ezra Pryor, Jahan Marcu, and Melissa Wilcox. Half-day program (PM). CHAS and CANN (Cannabis Chemistry Subdivision) present a Cannabis Analysis Workshop, which is a comprehensive review of current testing requirements, methodologies, and best practices in the analysis of cannabis and cannabis-infused products. Participants will learn how to overcome testing challenges, how to comply with standards, and how to operate safely. There is extensive opportunity for questions during the workshop with follow-up by phone and e-mail.

**Reactive Chemical Management for Laboratories & Pilot Plants.** Saturday, April 1, 8 AM to 5 PM. Moscone Center, Room 125. Sponsored by CHAS. Presenters: Neal Langerman



and Harry Elston. Chemical reactivity hazards contribute to a significant number of incidents in laboratories and pilot plants. This workshop will provide participants with the knowledge and skill to screen processes for potential hazards, recognize when reactive hazards are present, and 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 in order 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, April 1, 8 AM to 5 PM. Moscone Center, Room 121. Sponsored by CHAS. Presenters: Russ Phifer and Jim Kaufman. CHAS offers the How to Be a More Effective Chemical Hygiene Officer workshop to provide participants with a detailed analysis of the CHO position and to prepare for the CHO Certification exam. Participants receive a clear perspective on safety issues in the laboratory, focusing on what the CHO does and how to do it better. The workshop covers the content areas of the certification exam, including a sample test in the same format as the real one. Whether you are a new Chemical Hygiene Officer or an old one, you will find something to put to real use in this fast-paced presentation. There is extensive opportunity for questions during the workshop with follow-up by phone and e-mail.

**Using ACS Resources to Teach Lab Safety** (replacing Meeting New Chemical Safety Expectation in Instructional Laboratories). Saturday, April 1, 8 AM to 5 PM. Moscone Center, Room 124. Presenters: Samuella Sigmann and Ralph Stuart. Over the last few years, ACS has released several important new resources and updated others to support teaching laboratory safety at a variety of academic levels from secondary school to undergraduate and research settings. They are built around the RAMP paradigm supported by the ACS Committee on Professional Training guidelines. This two-part workshop will discuss how the ACS publications can be used to support chemical safety education and to promote a proactive safety culture in these settings. Each module, which has separate but complementary content, can be taken individually or both can be taken on the same day.

**Part 1: ACS Safety Tools for Secondary School and Undergraduate Labs.** Half-

day program (AM). This module will use a variety of tools available from ACS to cover topics such as hazard recognition, basic risk assessment, understanding the Globally Harmonized System of Labeling (GHS), selecting personal protective equipment, engineering controls, safe chemical management and storage, and basic chemical waste management principles. The information presented in this module is appropriate for secondary school teachers (including those who are preservice) as well as undergraduate faculty.

**Part 2: ACS Safety Tools for Chemistry Majors and Research Laboratories.** Half-day program (PM). In 2016, ACS released an updated web version of its *Identifying and Evaluating Hazards in Research Laboratories* document. The methods outlined in this document are designed to address operations in research laboratory settings, which are less defined and more changeable than those in teaching settings. The workshop focuses on the Job Hazard Analysis and Control Banding tools, which are appropriate for most laboratory research at the undergraduate level. Examples of Lessons Learned programs in the research setting will also be reviewed.

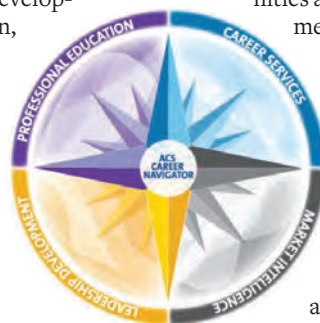
**COACHing Strong Women in the Art of Strategic Performance.** Saturday, April 1, 8 AM to 5 PM. San Francisco Marriott Union Square, Sutter 2. Workshop facilitators: Lee Warren and Nancy Houfek. Open to women in academia, industry, national labs, and government. This workshop is designed to provide powerful women with skills to succeed in accomplishing their goals in negotiations and meetings. Participants will be introduced to performance techniques that people in the theater and in leadership training understand about how to be effective,

such as body language and nonverbals. They will learn how to articulate a clear purpose, land their message, be heard, enhance personal presence, depersonalize attacks, and manage hot moments. Participants are asked to bring examples of past challenging negotiations or meetings. These moments are examined in the workshop through the use of role plays. Discussion, coaching, and the replay of scenarios creates highly interactive, personal, and powerful learning of the wide range of tactics available for success. Travel assistance is available for women in academia and national labs. Preregister at [coach.uoregon.edu](http://coach.uoregon.edu). For more information, contact Priscilla Lewis at [coach@uoregon.edu](mailto:coach@uoregon.edu).

**Upping your Game: Refresher Workshop for Past Workshop Alums.** Saturday, April 1, 8 AM to 5 PM. San Francisco Marriott Union Square, Sutter 1. Workshop facilitators: Barbara Butterfield and Jane Tucker. This workshop is designed to be a refresher of what is learned in COACHing Strong Women in the Power of Strategic Persuasion. It begins with a preview of essential negotiation skills and moves into examination of Cialdini's six principles of influence, dealing with abrasive people, mentoring influence strategies, and dealing with difficult people. Factors contributing to personal success and failure are examined and applied to case studies. You will also be given refresher tools and concepts for making change happen where it needs to happen through exercises and role-plays, learn how to make effective interventions, and get your voice heard at the table. Travel assistance is available for women in academia and national labs. Preregister at [coach.uoregon.edu](http://coach.uoregon.edu). For more information, contact Priscilla Lewis at [coach@uoregon.edu](mailto:coach@uoregon.edu).

## 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 San Francisco 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 science and advanced





**ACS**  
Chemistry for Life®

Book your hotel for the American Chemical Society  
**253rd National Meeting & Exposition**  
April 2–6, 2017 in San Francisco, CA



## HOUSING OPENED **DECEMBER 19, 2016**

Enter the ACS San Francisco, CA 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 Moscone 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!**

[www.acs.org/sanfran2017](http://www.acs.org/sanfran2017) or 1-844-293-7040

Monday - Friday, 8:30am – 9pm EST.  
Housing will close March 6, 2017.

**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 May 1, 2017. Complete details at [www.acs.org/sanfran2017](http://www.acs.org/sanfran2017).

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 Moscone Center and speak to a 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 San Francisco!

## 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, April 2, from 6 PM to 8:30 PM; Monday, April 3, from 9 AM to 5 PM, and Tuesday, April 4, from 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 on request

The ACS Career Fair is a free event with a national meeting registration. All attendees are free to visit recruiters' booths and drop off their résumés. ACS members interested in a private interview must create a profile and upload their résumés in the ACS Career Fair database. The ACS Career Fair will be held in conjunction with the ACS National Exposition, Sunday through Tuesday.

**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 Moscone Center. Sign-up begins at 9 AM on Sunday, April 2, 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 or acing an interview. Workshop times are subject to change. Please consult the online workshop schedule at [www.acs.org/careerfair](http://www.acs.org/careerfair) for locations.

### ▶ Sunday, April 2

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

**ChemIDP: Planning for Your Career,** 11:30 AM to 1:15 PM

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

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

**Finding Yourself: Identifying a Career That Matches Your Strengths and Values,** 1 to 4 PM

**Foreign National Scientist Obtaining a Job in the US,** 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, April 3

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

**Working in Higher Education,** 8 AM to noon

**Working for Yourself,** 8 AM to noon

**How to Find and 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 and 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, April 4

**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 and 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 and Apply for a Chemistry Position in the Federal Government,** 3:30 to 5:30 PM

### ▶ Wednesday, April 5

**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 and 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

**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 most recent 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 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](http://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](http://www.acs.org/careerfair). You can also contact Heather McNeill at (202) 452-8918 or e-mail her at [h\\_mcneill@acs.org](mailto:h_mcneill@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](http://www.proed.acs.org). If you have questions, call (202) 872-4508, fax (202) 872-6336, or e-mail [proed@acs.org](mailto:proed@acs.org).

### ANALYTICAL

**1-D & 2-D NMR Spectroscopy: Structure Determination of Small-Molecule Organic Compounds**, April 1–2  
**Fundamentals of High-Performance Liquid Chromatography**, April 3–4

**BIOLOGICAL/PHARMACEUTICAL/MEDICINAL CHEMISTRY**  
**Application of Pharmacokinetics & Safety Pharmacology for Chemists in Drug Development**, April 4–5

### COMPUTERS/STATISTICS/ENGINEERING

**Chemical Engineering for Chemists**, April 1–2  
**Statistical Analysis of Laboratory Data**, April 2–4

### ORGANIC/PHYSICAL CHEMISTRY

**1-D & 2-D NMR Spectroscopy: Structure Determination of Small-Molecule Organic Compounds**, April 1–2  
**Dispersions in Liquids: Suspensions, Emulsions & Foams**, April 2–3  
**Organic Synthesis: Methods & Strategies for the 21st-Century Chemist**, April 4–5

### POLYMER CHEMISTRY

**Polymeric Coatings**, April 1–2  
**Polymer Science & Technology**, April 1–2

### PROFESSIONAL DEVELOPMENT

**Effective Technical Writing**, April 4–5  
**Chemistry for Non-Chemists: The Basics, Language, and Function of Chemistry**, April 2–3  
**Write Your Own Patent Applications**, April 2

### REGULATORY/ENVIRONMENTAL

**Intellectual Property Strategies for Technical Professionals**, April 2  
**Methods Development, Validation Procedures & Regulatory Compliance Issues**, April 3–4  
**Write Your Own Patent Applications**, April 2  
**Highlights of FDA and Other cGMP Regulations**, April 5

## 2017 ACS Leadership Development System courses

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 nonmembers. Register for these courses when you register for the meeting. For more information and full course descriptions, visit [www.acs.org/leadershipdevelopment](http://www.acs.org/leadershipdevelopment).

**Engaging Colleagues in Dialogue.** Sunday, April 2, 1 to 5 PM. Engaging Colleagues in Dialogue is a four-hour, hands-on interactive course that helps you develop your one-on-one communication skills. You will learn how to improve both sides of the communication exchange: first working to understand how to better communicate your messages, and second working on listening and acknowledging others' messages. You will even have an opportunity to assess your own communication skills through conversations with colleagues.

### Developing Communication Strategies.

Monday, April 3, 8 AM to noon. With the skills that you'll gain from this half-day workshop, you'll be a better communicator in your role as an ACS leader and as a leader in your workplace and in your community. Working in small interactive groups, you'll have the chance to develop and practice your own effective communication strategy. Plan to attend this workshop and discover how a comprehensive communication strategy can make both your goals and the goals of ACS possible.

**Leading Change.** Monday, April 3, 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 key to increasing your professional success.

**Coaching and Feedback.** Tuesday, April 4, 8 AM to noon. This hands-on, four-hour course will provide you with a proven process and practical tools to help coach team members, project groups, employees, and volunteers more regularly and effectively. As a participant, you will work on real



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coaching opportunities to help you practice addressing the development and performance issues you have identified.

**Leading Without Authority.** Tuesday, April 4, 1 to 5 PM. Whether in a lab, the office, the classroom, or on a volunteer committee, you will likely find yourself leading others without formal or “positional” authority and need to be able to influence them to accomplish the project. This four-hour interactive workshop provides practical tools to help you gain cooperation and engage others in accomplishing project and team goals.

## Exposition

### SEE WHAT'S NEW INSIDE THE

**EXPOSITION.** Visit the ACS National Exposition and Career Fair at the Moscone Center, South Halls B and C, from Sunday, April 2, through Tuesday, April 4. 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 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 in 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/sanfran2017](http://www.acs.org/sanfran2017) 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 Moscone Center. These workshops will introduce new products and services, build skills with specific tools and techniques, and highlight innovative applications that may improve your productivity. Exhibitor workshop registration is available at [www.acs.org/sanfran2017](http://www.acs.org/sanfran2017).

### Presentations, prizes & special events.

Don't forget to join us on Sunday from 6 to 8:30 PM for the Attendee Welcome Reception. Take an afternoon break on Tuesday from 3 to 5 PM and visit the exhibitors before the exposition closes. Access the mobile app, play a game with visiting exhibitors, and win special prizes!

**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 Moscone Center.

### 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 \$60. Students with school identification can obtain an expo-only badge for \$30. Registration can be handled online, by mail, or in person at ACS Attendee Registration at the Moscone Center, North Lobby.

# Governance meetings

## 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 Moscone Center from noon to 1 PM on Sunday, April 2.

**ACS COUNCIL.** The ACS Council meeting will begin at 8 AM, Wednesday, April 5, at the Hilton San Francisco Union Square. 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.

### COUNCIL POLICY COMMITTEE

The Council Policy Committee will open the floor during its meeting at 11 AM on Tuesday, April 4, to councilors who would like to raise issues of concern that affect them and/or their local sections or divisions. For further information, contact Mary Carroll, vice chair of CPC, at [cpc@acs.org](mailto:cpc@acs.org). For the complete list of committee meetings and agendas, please consult [www.acs.org/sanfran2017](http://www.acs.org/sanfran2017).

## 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, and 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 com-



mittee 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

Joseph A. Heppert, chair;  
b\_feedback@acs.org

Open Meeting  
**Saturday, April 1, 8 to 10:30 AM**  
Hilton San Francisco Union Square

## ► Chemical Safety

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

Open Executive Session  
**Monday, April 3, 8:30 to 11:30 AM**  
Hilton San Francisco Union Square

## ► Chemistry & Public Affairs

Raymond E. Forslund, chair;  
reforslund@me.com

Open Meeting  
**Saturday, April 1, 3 to 4:30 PM**  
Hilton San Francisco Union Square

## ► Chemists with Disabilities

John J. Johnston, chair; USDA-FSIS, 2150  
Centre Ave., Fort Collins, CO 80526-8116

Open Executive Session  
**Sunday, April 2, 8:30 AM to 4:30 PM**  
Hilton San Francisco Union Square

## ► Committees

Wayne E. Jones Jr., chair; Department of  
Chemistry, Binghamton University, SUNY,  
4400 Vestal Pkwy. East, Binghamton, NY  
13902-6000

Open Meeting  
**Monday, April 3, 1:30 to 2:15 PM**  
Hilton San Francisco Union Square

## ► Community Activities

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

Executive Session  
**Sunday, April 2, 10 AM to noon**  
Hilton San Francisco Union Square

CCA/LSAC Joint Open Meeting  
**Tuesday, April 4, 2 to 3:30 PM**  
Hilton San Francisco Union Square

## ► Constitution & Bylaws

James C. Carver, chair, the Carver Law  
Firm, 451 Florida St., Ste. 750, Baton Rouge,  
LA; bylaws@acs.org

Open Meeting  
**Sunday, April 2, 1:30 to 1:45 PM**  
Hilton San Francisco Union Square

Executive Session  
**Sunday, April 2, 9:30 to 11:15 AM and  
1:45 to 4:30 PM**  
Hilton San Francisco Union Square

## ► Corporation Associates

Diane Grob Schmidt, chair;  
d\_schmidt@acs.org

Open Meeting  
**Monday, April 3, 8 AM to noon**  
Hilton San Francisco Union Square

## ► Council Policy

Mary K. Carroll, vice chair; cpc@acs.org

Open Executive Session  
**Tuesday, April 4, 9:30 AM to noon**  
Hilton San Francisco Union Square

## ► Divisional Activities

Rodney M. Bennett, chair;  
rodbennett@comcast.net

Open Meeting  
**Sunday, April 2, 8 AM to noon**  
Hilton San Francisco Union Square

## ► Economic & Professional Affairs

Rick Ewing, chair; ewingwre@comcast.net

Executive Session  
**Saturday, April 1, 8 to 10:30 AM**  
Hotel Nikko San Francisco

Open Meeting  
**Saturday, April 1, 10:30 AM to noon**  
Hotel Nikko San Francisco

## ► Education

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

Open Meeting  
**Monday, April 3, 3 to 4 PM**  
Hilton San Francisco Union Square

Executive Session  
**Friday, March 31, 1 to 5:30 PM**  
Hotel Nikko San Francisco

## ► Environmental Improvement

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

Breakfast/Open Meeting  
**Monday, April 3, 7:45 to 9 AM**  
San Francisco Marriott Marquis

## COUNCILOR CAUCUS MEETINGS

**District I Councilor Caucus**  
Sunday, April 2, 6 to 7 PM  
Hilton San Francisco Union Square

**District II Councilor Caucus**  
Sunday, April 2, 6 to 7 PM  
Hilton San Francisco Union Square

**District III Councilor Caucus**  
Sunday, April 2, 6 to 7 PM  
Hilton San Francisco Union Square

**District IV Councilor Caucus**  
Sunday, April 2, 6 to 7 PM  
Hilton San Francisco Union Square

**District V Councilor Caucus**  
Sunday, April 2, 6 to 7 PM  
Hilton San Francisco Union Square

**District VI Councilor Caucus**  
Sunday, April 2, 6 to 7 PM  
Hilton San Francisco Union Square

**Division Officers/Councilors  
Caucus**  
Tuesday, April 4, 4 to 6 PM  
Moscone Center

## ► Ethics

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

Open Executive Session  
**Sunday, April 2, 9 AM to 4:30 PM**  
Hilton San Francisco Union Square

## ► International Activities

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

Open Meeting  
**Saturday, April 1, 1 to 3 PM**  
Hilton San Francisco Union Square

## ► Local Section Activities

Jason E. Ritchie, chair, University of Mis-  
sissippi Department of Chemistry & Bio-  
chemistry; 222 Coulter Hall, University, MS  
38677; jritchier@olemiss.edu

LSAC/CCA Joint Open Meeting  
**Tuesday, April 4, 2 to 3:30 PM**  
Hilton San Francisco Union Square

Open Executive Session  
**Sunday, April 2, 8 AM to noon**  
Hilton San Francisco Union Square

## ► Meetings & Expositions

Kevin J. Edgar, chair; M&E@acs.org

Open Executive Session  
**Sunday, April 2, 7:30 to 10 AM**  
Moscone Center

Closed Executive Session  
**Sunday, April 2, 10 AM to noon**  
Moscone Center

## ► Membership Affairs

Margaret J. Schooler, chair; 5 Alexan-  
der Court, Hockessin, DE 19707-9797;  
margaret.j.schooler@axaltacs.com

Open Executive Session  
**Sunday, April 2, 3 to 4 PM**  
Hilton San Francisco Union Square

## ► Minority Affairs

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

Closed Executive Session  
**Sunday, April 2, 8 AM to 12:30 PM**  
Hilton San Francisco Union Square

Open Meeting  
**Sunday, April 2, 12:30 to 2 PM**  
Hilton San Francisco Union Square

## ► Nomenclature, Terminology & Symbols

Michael D. Mosher, chair; Uni-  
versity of Northern Colorado;  
michael.mosher@unco.edu

Open Meeting  
**Monday, April 3, 2 to 5 PM**  
Hilton San Francisco Union Square

## ► Nominations & Elections

Les W. McQuire, chair; nomelect@acs.org

Open Executive Session  
**Monday, April 3, 11:30 AM to noon**  
Hilton San Francisco Union Square

## ► Patents & Related Matters

Sadiq Shah, chair; sadiq@utpa.edu

Open Meeting  
**Saturday, April 1, 9 AM to 5 PM**  
Hilton San Francisco Union Square

## ► Professional Training

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

Open Meeting  
**Sunday, April 2, 4 to 5 PM**  
Hotel Nikko San Francisco

## ► Project SEED

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

Open Meeting  
**Sunday, April 2, 8 to 9 AM**  
Hilton San Francisco Union Square

Closed Executive Session  
**Saturday, April 1, 1 to 5 PM**  
Hilton San Francisco Union Square

## ► Publications

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

Open Meeting  
**Friday, March 31, 4:30 to 5 PM**  
Hotel Nikko San Francisco

## ► Science

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

Open Meeting  
**Saturday, April 1, 8:30 AM to 4:30 PM**  
Hilton San Francisco Union Square

## ► Senior Chemists

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

Open Executive Session  
**Monday, April 3, 8 AM to 1 PM**  
Hilton San Francisco Union Square

## ► Technician Affairs

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

Closed Executive Session  
**Sunday, April 2, 8:30 AM to 2 PM**  
Hilton San Francisco Union Square

Open Executive Session  
**Sunday, April 2, 2 to 2:30 PM**  
Hilton San Francisco Union Square

## ► Women Chemists

Laura Sremaniak, chair; wcc@acs.org

Closed Executive Session  
**Saturday, April 1, 8 AM to 5 PM**  
Hilton San Francisco Union Square

## ► Younger Chemists

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

Open Meeting  
**Sunday, April 2, 8 AM to noon**  
Hilton San Francisco Union Square

Executive Session  
**Sunday, April 2, noon to 1 PM**  
Hilton San Francisco Union Square



**ACS**  
Chemistry for Life®

**ADVANCE REGISTRATION FORM**  
AMERICAN CHEMICAL SOCIETY • 253rd NATIONAL MEETING & EXPOSITION  
APRIL 2 – 6, 2017 • SAN FRANCISCO, CA

**4 ways to register: (see Registration Procedures)**

**Online:** <http://www.acs.org/sanfran2017> (credit cards only).

**Phone:** 508-743-0192 or 800-251-8629, Monday - Friday, 9 AM to 5 PM EST (credit cards only) by April 6, 2017.

**Mail:** completed form with payment to: ACS Registration c/o CDS, 107 Waterhouse Road, Bourne, MA 02532 by February 20, 2017.

**Fax:** completed form with payment to: 508-743-9604 (credit cards only) by April 6, 2017.

**– 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 from Dec 19	STANDARD after Feb 20
<input type="checkbox"/> ACS member or Society affiliate	\$445	\$535
<input type="checkbox"/> Postdoctoral	\$445	\$535
<input type="checkbox"/> Emeritus or retired	\$225	\$270
<input type="checkbox"/> 50-year	No Fee	No Fee
<input type="checkbox"/> Unemployed (dues waiver required)	No Fee	No Fee
<input type="checkbox"/> Graduate student	\$225	\$225
<input type="checkbox"/> Undergraduate Student	\$110	\$110
<input type="checkbox"/> Precollege teacher	\$110	\$110
<input type="checkbox"/> One day member registrant	\$225	\$270
<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	\$780	\$935
<input type="checkbox"/> Postdoctoral scientist	\$780	\$935
<input type="checkbox"/> Visitor: Non-chemical scientist	\$445	\$535
<input type="checkbox"/> Visitor: Chemical technician	\$445	\$535
<input type="checkbox"/> Graduate Student	\$445	\$445
<input type="checkbox"/> Undergraduate Student	\$225	\$225
<input type="checkbox"/> Pre-College Teacher	\$110	\$110
<input type="checkbox"/> One-day registrant	\$445	\$535
<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	\$60	\$60
<input type="checkbox"/> Student	\$30	\$30

**8. Registration Subtotal**

\$ \_\_\_\_\_

**PROGRAM BOOK FEE**

Early rate \$10.00 (Dec 19, 2016 – Feb 20, 2017) Qty \_\_\_\_\_  
Standard/Onsite rate \$20.00 (Feb 21, 2017 – April 6, 2017) 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.

**9. Program Book Subtotal**

\$ \_\_\_\_\_

**PAYMENT**

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

Paid 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 253rd ACS National Meeting in San Francisco, CA.

Credit Card Number \_\_\_\_\_

Exp Date \_\_\_\_\_

Credit Card Billing Address & Zip \_\_\_\_\_

Card Holder Name \_\_\_\_\_

Card Holder Signature \_\_\_\_\_

**SOCIAL EVENT FEES**

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

**10. 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.

**11. Abstract Subtotal**

\$ \_\_\_\_\_

Abstracts ordered by February 20, 2017, 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)

**GRAND TOTAL**

**12. Grand Total of 8-11**

\$ \_\_\_\_\_

**Registrant Procedures:** U.S. attendees who register by February 20, 2017, 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 February 20, 2017, registrations will continue to be accepted at the standard rate on-line and by phone or fax (credit card payment only) until April 6, 2017.

**Registration Cancellation/Refund Policy:** By adhering to the following cancellation procedure, cancellations received by March 6, 2017, 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.

**ADDITIONAL INFORMATION**

Would you like add your twitter handle to be included on your registration badge? ☐ yes or ☐ no. Twitter handle: \_\_\_\_\_

**Peer Finder** is a private networking tool through the ACS San Francisco mobile app that will help you connect with other meeting attendees and exhibitors. Peer Finder is prepopulated with content that helps you find the right contacts to maximize your networking efforts. The filtering and searching options help you find new professional connections based on program area, location, name, etc.  
☐ Yes, I would like to use Peer Finder ☐ No, I would not like to use Peer Finder

Are you an ACS Publications Author or Reviewer? ☐ yes or ☐ no.  
If so, you will receive a lapel pin with your registration.