

# 248TH ACS NATIONAL MEETING

**SAN FRANCISCO**, Aug. 10–14

## **“CHEMISTRY & GLOBAL STEWARDSHIP”**

will be the theme in San Francisco this August. Among symposia centered around that idea, the American Chemical Society Division of Environmental Chemistry will cel-

brate “100 Years of Scientific Contribution for a Safer & Sustainable Environment.” Other symposia will focus on reaching beyond the scientific community, such as “Communicating to the Public & the Role of Social Media” and “Global Stewardship by Increasing Climate Science Literacy.”

ACS President Tom Barton will host 29 technical divisions and nine committees in original programming over 1,013 half-

day oral sessions and 168 poster sessions, including Sci-Mix. More than 7,400 papers will be presented, and nearly 4,400 poster presentations will take place at the meeting.

In concert with the meeting theme, Barton will sponsor two presidential symposia. On Monday, Aug. 11, “‘Fracking’—Where Are We & Where Are We Going” will probe the science behind this suddenly central energy extraction technology—and its environmental implications. On Tuesday, Aug. 12, “Photocatalytic Conversion of Water to Hydrogen & Oxygen,” coorganized with Daniel G. Nocera of Harvard University, will explore the state of the art in solar-energy conversion.

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

The exposition will feature more than 250 companies showcasing services, instruments, books, lab equipment, and much more in booths that number more than 350.—CRAIG BETTENHAUSEN

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**MEETING INFO ON THE WEB**  
[www.acs.org/sanfran2014](http://www.acs.org/sanfran2014)

# TECHNICAL PROGRAM SUMMARY

## Presidential Event

PRES

Tom Barton, Program Chair

Moscone Center, South Building	S	M	Tu	W	Th
"Fracking" - Where We Are & Where We Are Going		A			
Photocatalytic Conversion of Water To Hydrogen & Oxygen			D		
Sustain-Mix: Sustainability Across the Society* (CHED)	D	A			
Environmental Chemistry: 100 Years of Scientific Contribution for a Safer & Sustainable Environment* (ENVR)		A			
Advancing Chemistry & Communicating Chemistry: Looking Around & Looking Ahead with Bassam Shakhshiri* (CHED)		D			
Evolving Science & Environmental Impacts of Hydraulic Fracturing* (ENVR)			D	DE	
Separation Science & Technology as a Convergence Platform for SusChEM* (ANYL)			D	DE	
International Collaborations with International Impact: Chemistry for Global Change* (CHED)			D		
Women Leaders of the Global Chemistry Enterprise* (WCC)			D		
Communicating Science to the Public* (MPPG)			P		

## Multidisciplinary Program Planning Group Meeting Theme: Chemistry & Global Stewardship (CGS)

MPPG

R. Rogers, Program Chair

Moscone Center, South Building	S	M	Tu	W	Th
Chemistry & Global Stewardship Plenary <b>CGS</b>	P				
Nanoscience & Nanotechnology for Sustainability <b>CGS</b>		P			
The Kavli Foundation Emerging Leader in Chemistry Lecture		P			
The Fred Kavli Innovations in Chemistry Lecture		P			
Communicating Science to the Public** <b>CGS</b>			P		

## Multidisciplinary Program Planning Group Meeting Theme: Chemistry & Global Stewardship (CGS) (continued)

R. Rogers, Program Chair

Moscone Center, South Building	S	M	Tu	W	Th
IUPAC: Developing Global Leaders for Research, Regulation & Stewardship of Crop Protection Chemistry in the 21st Century* (AGRO)	D				
Sustain-Mix: Sustainability Across the Society* (CHED)	D	A			
IUPAC: Fifty Years of Research & Mentoring: Honoring the Life & Career of Professor Fumio Matsumura* (AGRO)	P				
Environmental Chemistry: 100 Years of Scientific Contribution for a Safer & Sustainable Environment* (ENVR)		A			
Water Challenges & Solutions on the Global Scale* (ENVR)		D		E	
Global Stewardship of Critical Materials* (I&EC)		D			
IUPAC: Stewardship, Regulation & Outreach* (AGRO)		D	D		
Science in the Realm of Environmental Policy: Opportunities & Challenges* (ENVR)		P			
The Role of Entrepreneurship, Innovation & Economic Development in Sustainability* (BMGT)			A		
Separation Science & Technology as a Convergence Platform for SusChEM* (ANYL)			D	DE	
Women in Environmental Science & Engineering* (ENVR)			D	E	
Global Stewardship by Increasing Climate Science Literacy* (CHED)			D		
International Collaborations with International Impact: Chemistry for Global Change* (CHED)			D		
An International Student Summit on Global Climate Change* (CHED)			P		

**Multidisciplinary Program  
Planning Group**  
**Meeting Theme: Chemistry  
& Global Stewardship (CGS)**  
**(continued)**

**MPPG**

*R. Rogers, Program Chair*

Moscone Center, South Building	S	M	Tu	W	Th
California Air Monitoring: From Inception to Current Trends in the New Millennium* (ENVR)				E	
Green Chemistry & the Environment* (ENVR)				E	A

**Academic Employment Initiative**

**A E I**

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

Moscone Center, North Building	S	M	Tu	W	Th
Academic Employment Initiative		E			

**Division of Agricultural & Food  
Chemistry**

**AGFD**

*K. Deibler, Program Chair*

Moscone Center, South Building	S	M	Tu	W	Th
Young Scientist Award Symposium	A				
Novel Approaches for Food Verification**	A				
Trends in Cooking Science	A				
Advances in Wine Research** CGS	P	D	D		
Recent Advances in Assembly & Applications of Food Colloids & Biopolymers**	P	D	A		
Authentication & Adulteration of Food** CGS	P	D			
Advances in Food Allergen Research: Identification, Detection, Characterization & Mitigation**		D			
Sci-Mix		E			
AGFD Division Award Symposium			A		
Sterling B. Hendricks Memorial Lecture Award** CGS			A		
High Performance Foods & Beverages**			D		
Importance of Chirality to Flavor Compounds**			P	D	
Journal of Agricultural & Food Chemistry Best Paper Awards**			P		

**Division of Agricultural & Food  
Chemistry (continued)**

**AGFD**

*K. Deibler, Program Chair*

Moscone Center, South Building	S	M	Tu	W	Th
Analytical Methods in Agricultural & Food Chemistry				A	
The Chemistry of Sesquiterpenes				A	
Chemical Changes During Commercial Processing				D	A
General Posters				P	
Biologically Active Chemistry in Agriculture & Foods				P	
Nutritional Analysis				P	
Agricultural Chemistry & Food Safety					A
IUPAC: Agricultural Biotechnology* (AGRO)		D	A		D
IUPAC: Residues in Food & Feed* (AGRO)		D	D		
Undergraduate Research Posters* (CHED)		P			
Asia-America Chemical Symposium* (IAC)			D		
IUPAC: Emerging Issues & Challenges* (AGRO)					D

**Division of Agrochemicals**

**AGRO**

*C. Hapeman, Program Chair*

San Francisco Marriott Marquis	S	M	Tu	W	Th
IUPAC: Fifty Years of Research & Mentoring: Honoring the Life & Career of Fumio Matsumura**	D				
IUPAC: Developing Global Leaders for Research, Regulation & Stewardship of Crop Protection Chemistry in the 21st Century** CGS	D				
IUPAC: Crop, Environment & Public Health Protection: Technologies for a Changing World** CGS		A	A	A	A

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

\*\*Primary organizer of a cosponsored symposium.

CGS: Chemistry & Global Stewardship.

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



# PROGRAM SUMMARY

## Division of Agrochemicals (continued)

AGRO

*C. Hapeman, Program Chair*

San Francisco Marriott Marquis	S	M	Tu	W	Th
IUPAC: ACS International Award for Research in Agrochemicals: Honoring Dr. Ralf Nauen**		D			
IUPAC: Agricultural Biotechnology** <b>CGS</b>		D	D	D	D
IUPAC: Discovery & Synthesis**		D	D	D	D
IUPAC: Ecosystem & Human Exposure & Risk Assessment** <b>CGS</b>		D	D	D	D
IUPAC: Emerging Issues & Challenges** <b>CGS</b>		D	D	D	D
IUPAC: Environmental Fate & Metabolism** <b>CGS</b>		D	D	D	D
IUPAC: Residues in Food & Feed** <b>CGS</b>		D	D	D	D
IUPAC: Stewardship, Regulation & Outreach** <b>CGS</b>		D	D		
Sci-Mix		E			
IUPAC: Formulation & Application** <b>CGS</b>			D	D	
IUPAC: Mode of Action & Resistance Management**			D	D	D
Pyrogenic Carbonaceous Materials as Adsorbents of Inorganic & Organic Compounds: Fundamentals & Applications* (ENVR)	P				
Sterling B. Hendricks Memorial Lectureship Award* (AGFD)			A		
Asia-America Chemical Symposium* (IAC)			D		
Communicating Science to the Public* (MPPG)			P		
Journal of Agricultural & Food Chemistry Best Paper Awards* (AGFD)			P		

## Division of Analytical Chemistry (continued)

ANYL

*S. Olesik, Program Chair*

Moscone Center, North Building	S	M	Tu	W	Th
ACS Award for Chromatography: Honoring Professor Susan V. Olesik**	A				
Pro-Fluorogenic Probe-Based Methods for Disease Detection	A				
Advances in Ionization Techniques & Mechanisms	D				
Therapeutic Monoclonal Antibodies	D				
ACS Division of Analytical Chemistry Awards	P				
Innovations in Analytical Chemistry Education	P				
Sci-Mix	E				
Innovations in Bioanalysis			A	P	
Frontiers in Metabolomics**			A		
Coherent Multidimensional Spectroscopy for Materials Science			D		
Separation Science & Technology as a Convergence Platform for SusChEM** <b>CGS</b>			D	DE	
ACS Award for Analytical Chemistry: Honoring Professor Jonathan V. Sweedler			P		
Analytical Challenges of Poorly Soluble Drug Formulations			P		
Coupling Sequence to Omics: The Joint EMSL-JGI User Program			P		
General Posters			E		
Portable XRF Spectroscopy				A	
Innovations in Mass Spectrometry				D	A
Novel Separations for Critical Environmental Analyses <b>CGS</b>				P	
Super-Resolution Chemical Imaging				P	A
Advances in Electrochemistry					A
Advances in Bioelectrochemistry					P
Analytical Chemistry & Global Sustainability <b>CGS</b>					P
Cheaper, Better, Faster: Incorporating New Technologies in the Analytical Chemistry Curriculum**					P
General Innovations in Analytical Chemistry					P
Novel Approaches for Food Verification* (AGFD)	A				

## Division of Analytical Chemistry

ANYL

*S. Olesik, Program Chair*

Moscone Center, North Building	S	M	Tu	W	Th
Innovations in Microscale & Nanoscale Analytical Chemistry	A				
Advances in Separation Science	D				
Innovations in Analytical Spectroscopy	D				
Bioanalytical Microfluidics: Applications to Quantitative Biology	P				
Ion Funnel: Key Enabling Technology for Mass-Spectrometric Analyses	P				

## Division of Analytical Chemistry (continued)

ANYL

*S. Olesik, Program Chair*

Moscone Center, North Building	S	M	Tu	W	Th
Redefining the Mole & Kilogram: Impact on Chemistry* (NTS)		A			
Authentication & Adulteration of Food* (AGFD)	P	D			
Advances in Food Allergen Research: Identification, Detection, Characterization & Mitigation* (AGFD)		D			
IUPAC: Residues in Food & Feed* (AGRO)		D	D		
Undergraduate Research Posters* (CHED)	P				
ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences: Honoring Rigoberto Hernandez* (CMA)			D		
International Collaborations with International Impact: Chemistry for Global Change* (CHED)			D		
IUPAC: Formulation & Application* (AGRO)			D	D	
IUPAC: Agricultural Biotechnology* (AGRO)			P		
IUPAC: Environmental Fate & Metabolism* (AGRO)				D	
The IUPAC Solubility Data Series: 100 Volumes of Solubility Data Online* (CINF)				P	

## Division of Biological Chemistry (continued)

BIOL

*V. Cornish, Program Chair*

InterContinental San Francisco	S	M	Tu	W	Th
Current Topics in Biological Chemistry	E		E		
Repligen Award in the Chemistry of Biological Processes: Honoring John Lipscomb		A			
Gordon Hammes ACS Biochemistry Lectureship: Honoring Thomas Poulos		P			
Frontiers in Unnatural Amino Acid Mutagenesis		P			
Sci-Mix		E			
Lilly Award: Honoring Yi Tang			A		
Synthetic Biology for Chemical Synthesis			P		
Goodman Award: Honoring Steven Boxer				A	
Graduate Student & Postdoctoral Research Symposium				P	
Drug Discovery* (COMP)	D	A	D	D	D
New Approaches to Difficult-To-Drug Targets & Diseases* (MEDI)	P				
Tetrahedron Prize for Creativity in Organic Chemistry* (ORGN)		P			
Ameri-QSAR* (COMP)		P			
Undergraduate Research Posters* (CHED)		P			
Nucleic Acid Therapeutics* (CARB)			D		

## Division of Biochemical Technology

BIOT

*G. Bolton, C. Collins, Program Chairs*

Located with Primary Sponsor	S	M	Tu	W	Th
Undergraduate Research Posters* (CHED)		P			
IUPAC: Agricultural Biotechnology* (AGRO)				D	

## Division of Biological Chemistry

BIOL

*V. Cornish, Program Chair*

InterContinental San Francisco	S	M	Tu	W	Th
Honoring Bill DeGrado**	A				
Pfizer Award in Enzyme Chemistry: Honoring Hening Lin	P				

## Division of Business Development & Management

BMGT

*D. Daly, Program Chair*

Moscone Center, North Building	S	M	Tu	W	Th
Chemistry Plus Passions, Interests: Careers on the Road Less Traveled**	P				
Whalen Award	P				
The Role of Entrepreneurship, Innovation & Economic Development in Sustainability** CGS			A		
Polymers for Additive Manufacturing* (POLY)	D				
Innovation from International Collaborations* (IAC)		D			

# PROGRAM SUMMARY

## Division of Carbohydrate Chemistry

CARB

*E. Rozners, Program Chair*

InterContinental San Francisco	S	M	Tu	W	Th
Glycoconjugates: Design, Chemistry, Characterization & Manufacturing	D	A			
Domino & Rearrangement Reactions in Carbohydrate Chemistry		D			
Sci-Mix		E			
Nucleic Acid Therapeutics**			D		
General Posters			E		
Glyconanomaterials for Nanomedicine				D	
Current Topics in Glycoscience				D	A

## Division of Catalysis Science & Technology

CATL

*C. Sievers, P. Christopher, Program Chairs*

InterContinental San Francisco	S	M	Tu	W	Th
Catalysis for Solar-to-Fuel Conversion <b>CGS</b>	D	A			
New Advances in Well-Defined Catalysts for Selective Transformations	D	D			
Frustrated Lewis Acid/Base Catalysis	D	D			
2014 ACS Catalysis Lectureship: Honoring Suljo Linic		D	A		
Fundamentals of Catalysis at Surfaces			D	D	D
Catalysis for Biomass Conversion <b>CGS</b>			D	D	
Advances in In Situ & Operando Studies of Catalysts from Nano to Mesoscale			P	A	D
CATL Poster Session			E		
Heterogeneous Electrocatalysis				P	D
2nd International Symposium on Mesoporous Zeolites* (ENFL)	D				
Surface Science, Science Policy Making & Sustainable Development* (COLL)	P	D	A		
Heterogeneous Catalysis for Environmental & Energy Applications* (ENVR)				DE	A

## Division of Cellulose & Renewable Materials

CELL

*T. Elder, Program Chair*

Located with Primary Sponsor	S	M	Tu	W	Th
Communicating Science to the Public* (MPPG)			P		

## Division of Chemical Education

CHED

*C. Middlecamp, I. Levy, A. Cannon, Program Chairs*

Moscone Center, South Building	S	M	Tu	W	Th
High School Program**	D				
Chemistry Education Research	D			P	
NSF-Catalyzed Innovation in the Undergraduate Curriculum	D				
Sustain-Mix: Sustainability Across the Society <b>CGS</b>	D	A			
Undergraduate Research Papers**	D				
General Posters	E				
Advancing Chemistry & Communicating Chemistry: Looking Around & Looking Ahead with Bassam Shakhshiri**		D			
Global Perspectives in Chemical Education: Research & Practice <b>CGS</b>		D			
Innovative Laboratory Experiments & Programs		D			
Questioning the Unquestionable: What Should Students Learn in General Chemistry?		D			
Chemistry & Global Stewardship <b>CGS</b>		P			
Undergraduate Research Posters** <b>CGS</b>		P			
Sci-Mix		E			
Successful Student Chapter Posters		E			
An International View on Chemistry Education**			A		
Advances in Teaching Organic Chemistry			D		
Citizens First: Using Real-World Contexts for Engaging Students in Learning Chemistry**			D		
Global Stewardship by Increasing Climate Science Literacy** <b>CGS</b>			D		

## Division of Chemical Education (continued)

CHED

*C. Middlecamp, I. Levy, A. Cannon, Program Chairs*

Moscone Center, South Building	S	M	Tu	W	Th
International Collaborations with International Impact: Chemistry for Global Change** <b>CGS</b>			D		
An International Student Summit on Global Climate Change** <b>CGS</b>			P		
And They Are Off! Fast Tracking the Undergraduate Research Experience			P		
Assessing Student Success in Chemistry				A	
Reaching Out: Chemistry Outreach Programs for High School & Community College Students				A	
Teaching Analytical Method Transfer				A	
Active Learning in the Chemistry Classroom				D	
General Papers				D	A
Perspectives on Graduate Education in the Chemical Sciences**				P	
Science Education & Civic Engagement: The Role of Undergraduate Research				P	
Chemistry Plus Passions, Interests: Careers on the Road Less Traveled* (BMGT)	P				
The Impact of the IUPAC InChI on Finding & Linking Information on Chemicals* (CINF)	P				
How To Foster Diversity in the Chemical Sciences* (CMA)		A			
Mom the Chemistry Professor* (WCC)		D			
Eminent Scientist Lecture with Martin Mulvihill* (SOCED)		P			
ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences: Honoring Rigoberto Hernandez* (GMA)			D		
Exploring the Application of New Technologies in Chemical Research & Education* (CINF)				P	

## Division of Chemical Health & Safety

CHAS

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

InterContintal San Francisco	S	M	Tu	W	Th
Division of Chemical Health & Safety Awards** <b>CGS</b>	P				
Ask Dr. Safety: From Rules to Risk: Realistic Research Safety** <b>CGS</b>	P				
Supporting & Facilitating Students & Workers with Disabilities in the Research & Teaching Laboratory** <b>CGS</b>		P			
Sci-Mix**		E			
Greening Our Laboratories: How & Why?** <b>CGS</b>			A		
How Far We've Come: A Retrospective of Laboratory Safety Over the Decades** <b>CGS</b>			P		

## Division of Chemical Information

CINF

*E. Bolstad, Program Chair*

Palace Hotel	S	M	Tu	W	Th
Computational Methods & the Development/Production of Biologics & Biosimilars	A				
Hunting for Hidden Treasures: Chemistry Text Mining in Patents & Other Documents	A	D			
Nature's Second Act: Revisiting Natural Products <b>CGS</b>	D				
Science & the Law: How the Communication of Science Influences Science-Based Policy Development in the Environment, Food, Health & Transport Sectors	P				
The Impact of the IUPAC InChI on Finding & Linking Information on Chemicals**	P	A			
CINF Scholarships for Scientific Excellence	E				
Global Challenges in the Communication of Scientific Research		D			
Sci-Mix		E			

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

\*\*Primary organizer of a cosponsored symposium.

CGS: Chemistry & Global Stewardship.

A = AM AE = AM/EVE P = PM D = AM/PM  
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## Division of Chemical Information (continued)

C I N F

*E. Bolstad, Program Chair*

Palace Hotel	S	M	Tu	W	Th
The Herman Skolnik Award Symposium			D		
Inspiring the Next Generation To Pursue Computational Chemistry & Cheminformatics				A	
It Takes Two To Tango: Chemistry Librarians Partnering with Publishers & Researchers To Advance the Chemical Sciences				A	
ChemEpInformatics: In the Pursuit of Epidrugs Using Chemoinformatics & Computational Approaches				P	
Exploring the Application of New Technologies in Chemical Research & Education**				P	
The IUPAC Solubility Data Series: 100 Volumes of Solubility Data Online**				P	
General Papers					D
Drug Discovery* (COMP)	D	A	D	D	D
Cyber Security for Small Businesses* (SCHB)		A			
Ameri-QSAR* (COMP)		P			

## Division of Chemical Toxicology

T O X I

*W. Humphreys, Program Chair*

InterContinental San Francisco	S	M	Tu	W	Th
Chemical Research in Toxicology Young Investigator Award Symposium: Disrupting the Flow of Genetic Information	A				
Founders' Award Lecture & Symposium	P				
Young Investigators Symposium		A			
Overview of Transporter-Mediated Hepatotoxicity**		P			
Sci-Mix		E			
Biomarkers of Exposure <b>CGS</b>			A		
Biomarkers of Oxidative Stress <b>CGS</b>			P		
Division of Chemical Toxicology Keynote Address <b>CGS</b>			P		
General Posters			E		
General Papers				A	
Mechanisms of Base Excision Repair				P	

## Division of Chemistry & the Law

C H A L

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

Moscone Center, South Building	S	M	Tu	W	Th
Strengthening Your Patent Rights in Light of Recent Federal Circuit Court Decisions	A				
Protecting & Enforcing Your Chemical & Pharmaceutical Patent Rights	P				
Taking Your Inventions Abroad		D			
Sci-Mix		E			
Inter Partes Review			A		
Alternative Careers in Chemistry**			P		
Some Chemical & Legal Challenges to Global Stewardship				A	
Recent U.S. Supreme Court Opinions in Patent Law				P	
The Many Faces of CHAL: Where Chemistry Meets the Law					A

## Division of Colloid & Surface Chemistry

C O L L

*R. Nagarajan, Program Chair*

Moscone Center, South Building	S	M	Tu	W	Th
Basic Research in Colloids, Surfactants & Nanomaterials	D		A	P	D
Liquid State Theory: Honoring Jay Rasaiah**	D	D	A	D	
Spectroscopic & Imaging Methods in Interfacial Phenomena**	D				
Advances in Molecular-Level Understanding of Surface Reactivity	DE	D	A	A	
Engineered Nanomaterials Interacting with Natural & Engineered Interfaces**	DE	D	A	D	D
Environmental Interfaces in the Atmosphere: From Surface Chemistry to Air Quality, Climate & Health Effects** <b>CGS</b>	DE	D			
Supramolecular Nanoparticles	DE	D	A		
Surface Science, Science Policy Making & Sustainable Development** <b>CGS</b>	P	D	A		
Advances in Nanomedicine	E	D	A		
Control, Characterization & Impact of Nanocrystal Surface Chemistry**	E			D	D
Fundamental Research in Colloids, Surfaces & Nanomaterials	E				



## Division of Colloid & Surface Chemistry (continued)

COLL

*R. Nagarajan, Program Chair*

Moscone Center, South Building	S	M	Tu	W	Th
Frontier of the Interface of Materials & Biology: Using Nanotechnology To Investigate Cellular & other Biological Systems		D	A	D	
Sci-Mix		E			
Langmuir Award Lectures & Nano Letters Young Investigator Lectureship Award			P		
Chemical Foundations of Tribology				D	D
Graphene-Based Nanomaterials for Biosensors, Nanomedicine & Bioelectronic Applications				D	
Novel Hybrid Materials				D	D
Nanoscale Materials & Surfaces for Detection & Control of Pathogens & Biohazards <b>CGS</b>					D
Membranes* (COMP)	A				
Assessing the Implications of Nanotechnology* (ENVR)	D	D		E	
Metal-Containing & Metallo-Supramolecular Polymers & Materials* (POLY)	D	D	DE	D	D
Recent Advances in Assembly & Applications of Food Colloids & Biopolymers* (AGFD)	P	D	A		
International Collaborations with International Impact: Chemistry for Global Change* (CHED)			D		

## Division of Computers in Chemistry

COMP

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

Moscone Center, West Building	S	M	Tu	W	Th
Membranes**	A				
Modeling of Protein Kinases & Phosphorylation: Protein Dynamics, Regulation, Function & Signal Transduction	A	D			
Computational Study of Water	D				
Drug Discovery**	D	A	D	D	D

## Division of Computers in Chemistry (continued)

COMP

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

Moscone Center, West Building	S	M	Tu	W	Th
Modeling the Effects of Water & Solvation in Biological Systems: Developments & Applications	D	D	D	D	A
Quantum Chemical Calculation of Molecular Properties: Honoring Nicholas C. Handy**	D	D	A	D	A
Emerging Technologies in Computational Chemistry	P				
Quantum Chemistry**	P	P	P	P	P
Molecular Mechanics**		A	A	A	A
Modeling & Simulations of Electrochemical Interfaces & Materials for Energy Storage**		D	D	D	A
Ameri-QSAR**		P			
Sci-Mix		E			
Macrocycles in Small-Molecule Drug Discovery**			D		
Teach-Discover-Treat: Results from the 2014 Challenge			P		
NVIDIA GPU Award			E		
Poster Session			E		
The Chemical Computing Group Excellence Award for Graduate Students**			E		
The OpenEye Outstanding Junior Faculty Award**			E		
Material Science				D	A
Computational Spectroscopy* (PHYS)	D	D	A	D	A
Photoinduced Proton Transfer in Chemistry & Biology* (PHYS)	D	D	A	DE	D
The Future of Computational Chemistry* (PHYS)	D	D	A	D	D
The Impact of the IUPAC InChI on Finding & Linking Information on Chemicals* (GINF)	P				

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\*\*Primary organizer of a cosponsored symposium.

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A = AM AE = AM/EVE P = PM D = AM/PM  
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# PROGRAM SUMMARY

## Division of Computers in Chemistry (continued)

COMP

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

Moscone Center, West Building	S	M	Tu	W	Th
Applications of Theoretical Chemistry for Energy & Fuel Production* (ENFL)		P	D	D	D
Undergraduate Research Posters* (CHED)		P			
ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences: Honoring Rigoberto Hernandez* (CMA)			D		

## Division of Energy & Fuels

ENFL

*R. Koodali, A. Park, Program Chairs*

Moscone Center, South Building	S	M	Tu	W	Th
Advances in High Throughput Catalyst Development & Screening	A				
Production, Distribution & Utilization of Dimethyl Ether as a Transportation Fuel	A				
1st United States-China Symposium on Energy** CGS	D	D	D	D	D
2nd International Symposium on Mesoporous Zeolites**	D				
Biofuels for Powering the World** CGS	D	D	D		
Metal-Organic Frameworks for Sustainable Energy CGS	D	D			
Carbon Dioxide Management: Recent Advances in Carbon Dioxide Capture, Conversion, Utilization & Storage** CGS	D	D	D		
Batteries & Fuel Cell Technologies: Challenges & Solutions Toward Global Stewardship** CGS	D	D	D		
Energy & Fuels Storch Award in Fuel Science: Honoring Professor S. Ted Oyama	P	D	A		
Hydrogen Generation & Hydrogen Based Global Economy CGS	P	D	A		
Mesoporous & Nanostructured Hybrid Materials: Honoring Thomas J. Pinnavaia		A			
Applications of Theoretical Chemistry for Energy & Fuel Production**		P	D	D	D
Sci-Mix		E			
Carbon-Based Materials for Energy Conversion & Storage** CGS			D	D	A

## Division of Energy & Fuels (continued)

ENFL

*R. Koodali, A. Park, Program Chairs*

Moscone Center, South Building	S	M	Tu	W	Th
Advances in Analytical Methods for Petroleum Upstream Applications			P		
Advances in Chemistry of Energy & Fuels			P		
3rd International Symposium on Graphene for Energy & Fuel CGS				D	D
Fischer-Tropsch Chemistry & Catalysis				D	D
Applications of X-Ray & Neutron Scattering Techniques in Energy Technologies CGS				D	D
Challenges & Opportunities in Petroleum Oil Production, Refining & Utilization				D	A
10th International Symposium on Hydrotreating/Hydrocracking Technologies					P
Physical Chemistry of Ionic Liquids* (PHYS)	D	D	A	DE	D
Renewable Energy Generation at the Interface Between Theory & Experiment* (PHYS)	D	D	A	D	A
International Collaborations with International Impact: Chemistry for Global Change* (CHED)			D		
Communicating Science to the Public* (MPPG)			P		
Green Chemistry & the Environment* (ENVR)				E	D

## Division of Environmental Chemistry

ENVR

*D. Dionysiou, Program Chair*

San Francisco Marriott Marquis	S	M	Tu	W	Th
Toxicology of Environmental Pollutants CGS	A			E	
Assessing the Implications of Nanotechnology** CGS	D	D		E	
Environmental Applications & Implications of Graphene-Based Nanomaterials CGS	D				E
Great Lakes Restoration Initiative: An Environmental Chemistry Challenge CGS	D			E	
Occurrence, Formation, Health Effects & Control of Disinfection By-Products (DBPs)** CGS	D	D	D	DE	

## Division of Environmental Chemistry (continued)

ENVR

*D. Dionysiou, Program Chair*

San Francisco Marriott Marquis	S	M	Tu	W	Th
Pyrogenic Carbonaceous Materials as Adsorbents of Inorganic & Organic Compounds: Fundamentals & Applications** <b>CGS</b>	D			E	
Reactive Membranes & Surfaces in Water Treatment Applications	D			E	
Synergism Between Microbiology & Chemistry for Environmental Sustainability** <b>CGS</b>	D	A		E	
Thermodynamics & Kinetics in Treatment Processes, Past, Present & Future: Honoring Chin-Pao Huang <b>CGS</b>	D	D		E	
Theoretical & Computational Approaches to Environmental Chemistry <b>CGS</b>		A		E	
Environmental Chemistry: 100 Years of Scientific Contribution for a Safer & Sustainable Environment** <b>CGS</b>		A			
Occurrence, Fate & Removal of Pharmaceutical & Personal Care Products & Endocrine Disrupting Chemicals** <b>CGS</b>	D	D	E		
Water Challenges & Solutions on the Global Scale** <b>CGS</b>	D		E		
Engineering Nanomaterials for Energy, Environmental Science & Biomedical Applications <b>CGS</b>		D	E		
New Advances in the Chemistry & Application of Advanced Oxidation Processes for Removal of Contaminants of Emerging Concern <b>CGS</b>	P	D	DE	D	
Science in the Realm of Environmental Policy: Opportunities & Challenges** <b>CGS</b>	P				
Sci-Mix	E				
Natural Attenuation of Emerging Contaminants in the Urban Water Cycle** <b>CGS</b>			A		
Recent Development of Environmental Chemistry in Asia <b>CGS</b>			A	E	
Evolving Science & Environmental Impacts of Hydraulic Fracturing** <b>CGS</b>			D	DE	
Novel Membranes & Membrane Processes for Desalination & Water Treatment** <b>CGS</b>			D	E	
Women in Environmental Science & Engineering** <b>CGS</b>			D	E	

## Division of Environmental Chemistry (continued)

ENVR

*D. Dionysiou, Program Chair*

San Francisco Marriott Marquis	S	M	Tu	W	Th
C. Ellen Gonter Environmental Chemistry Award Symposium			P		
Special Symposium Honoring Richard L. Valentine <b>CGS</b>			P	DE	
Real Time Monitoring of Surface Waters for Nutrient & Water Supply Management <b>CGS</b>				A	
Chemistry of Atmospheric Nitrogen-Containing Compounds** <b>CGS</b>				DE	A
Heterogeneous Catalysis for Environmental & Energy Applications** <b>CGS</b>				DE	A
Humic Substances & Its Critical Role in Environmental Chemistry: The Past 50 Years, Present Knowledge & Future Research Opportunities <b>CGS</b>				DE	D
Analytical Methods for Detecting & Prioritizing Contaminants of Concern <b>CGS</b>				PE	D
California Air Monitoring: From Inception to Current Trends in the New Millennium**				E	
General Posters				E	
Green Chemistry & the Environment** <b>CGS</b>				E	D
Monitoring & Evaluating Environmental Exposures <b>CGS</b>				E	A
Fundamental Processes of Atmospheric Chemistry* (PHYS)	D	D	A	A	
Environmental Interfaces in the Atmosphere: From Surface Chemistry to Air Quality, Climate & Health Effects* (COLL)	DE	D			
Hot Topics: Communicating Risk* (CEI)	P				
A Lifetime of Contributions to Science, Summer Schools & Our NUCL Division Family: Honoring Frank Kinard* (NUCL)		A			
IUPAC: Agricultural Biotechnology* (AGRO)		D	A		

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\*\*Primary organizer of a cosponsored symposium.

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# PROGRAM SUMMARY

## Division of Environmental Chemistry (continued)

ENVR

*D. Dionysiou, Program Chair*

San Francisco Marriott Marquis	S	M	Tu	W	Th
IUPAC: Ecosystem & Human Exposure & Risk Assessment* (AGRO)		D	D	D	D
IUPAC: Emerging Issues & Challenges* (AGRO)		D	D	D	D
IUPAC: Environmental Fate & Metabolism* (AGRO)		D	D	D	D
Undergraduate Research Posters* (CHED)	P				
Asia-America Chemical Symposium* (IAC)			D		
International Collaborations with International Impact: Chemistry for Global Change* (CHED)			D		
Environmental Radiochemistry* (NUCL)			D	D	
IUPAC: Formulation & Application* (AGRO)			D	D	
Transport in Polymer Membranes* (POLY)			E		

## Division of Fluorine Chemistry

FLUO

*V. Petrov, Program Chair*

Palace Hotel	S	M	Tu	W	Th
Radiopharmaceutical Chemistry	D				
ACS Award for Creative Work in Fluorine Chemistry: Honoring Teruo Umemoto		D	D		
Exploring the Frontiers of Fundamental & Applied Fluorine Chemistry: Honoring Gary J. Schrobilgen		D	D	D	A
Poster Session		E			

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## Division of Geochemistry

GEOC

*S. Kerisit, Program Chair*

San Francisco Marriott Marquis	S	M	Tu	W	Th
CO <sub>2</sub> Trapping in Geologic Storage & Enhanced Hydrocarbon Recovery	D				
Uptake & Incorporation of Radionuclides in Minerals		D			
Sci-Mix		E			
Natural & Engineered Clay Barriers			D		
Solid-State Transformations in Geochemistry				D	
Nanoscale Structure of Rocks & Soils & Rock-Geofluid Interactions at the Nanoscale: Experiment & Modeling					A
Assessing the Implications of Nanotechnology* (ENVR)	D	D		E	
Undergraduate Research Posters* (CHED)		P			

## Division of the History of Chemistry

HIST

*S. Rasmussen, Program Chair*

InterContinental San Francisco	S	M	Tu	W	Th
HIST Tutorial & General Papers	A				
Symposium on the HIST Citation for Chemical Breakthrough Award Program	P				
Found & Lost: Incredible Tales of Spurious, Erroneous & Rehabilitated Elements**		D			
Sci-Mix		E			
Science & Legacy of Attila Pavlath			A		
HIST Award Symposium Honoring Ernst Homburg			P		
General Papers				A	
The Role of the Chemical Technician through the Decades* (I&EC)		A			
Women Leaders of the Global Chemistry Enterprise* (WCC)			D		
What Does 20th Century Physical Chemistry Have To Say to 21st Century Physical Chemists?* (PHYS)				D	
The IUPAC Solubility Data Series: 100 Volumes of Solubility Data Online* (CINF)				P	



## Division of Industrial & Engineering Chemistry

I & E C

*P. Smith, Program Chair*

Moscone Center, North Building	S	M	Tu	W	Th
Self-Assembled Coordination Architectures	D				
Rare Earth Separation Chemistry**	P				
The Role of the Chemical Technician through the Decades**		A			
Global Stewardship of Critical Materials** CGS		D			
Sci-Mix		E			
Chemistry for Sustainability** CGS			D	A	
The Industrial & Engineering Chemistry Division Graduate Student Award Symposium			D		
General Posters			E		
General Papers				P	A
2nd International Symposium on Mesoporous Zeolites* (ENFL)	D				
Innovation from International Collaborations* (IAC)		D			

## Division of Inorganic Chemistry (continued)

I N O R

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

Moscone Center, West Building	S	M	Tu	W	Th
Electronic Structure Contributions to Physical Properties & Reactivity in Transition Metal Chemistry		D	DE	D	
The Inorganic Chemistry of Neurobiology, Immunology & Bioenergy: New Faces		D	A		
Silicon-Based Inorganic Nanomaterials in Medicine		D			
Metal Ion Interactions with Nitric Oxide & Reactive Nitrogen Species in Chemistry & Biology		P	D	A	
Sci-Mix		E			
ExxonMobil Solid State Chemistry Faculty Fellow Award: Honoring Daniel Fredrickson			A		
Nanoscience			AE	D	D
The 2014 Organometallics Symposium**			DE		
Inorganic Nanoscience Award: Honoring Song Jin			P		
Environmental & Energy-Related Inorganic Chemistry CGS			PE	A	A
Solid State Inorganic Chemistry			E	A	
Organotransition Metal Chemistry: From Bonding to Catalysis				D	
2nd International Symposium on Mesoporous Zeolites* (ENFL)	D				
Physical Chemistry of Ionic Liquids* (PHYS)	D	D	A	DE	D
Metal-Containing & Metallo-Supramolecular Polymers & Materials* (POLY)	D	D	DE	D	D
Renewable Energy Generation at the Interface Between Theory & Experiment* (PHYS)	D	D	A	D	A
Found & Lost: Incredible Tales of Spurious, Erroneous & Rehabilitated Elements* (HIST)		D			
Undergraduate Research Posters* (CHED)		P			
The 2014 Organometallics Symposium* (ORGN)			P		

## Division of Inorganic Chemistry

I N O R

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

Moscone Center, West Building	S	M	Tu	W	Th
Chemistry of Materials	AE	P		P	A
Lanthanide & Actinide Chemistry	AE				A
Inorganic Catalysts	AE				P
Hydrogen Peroxide & Dioxygen in Transition Metal Mediated C-H Functionalization Chemistry	D	A	E		
The Chemistry of Inorganic Nanocrystals & Clusters: Structural Characterization & Mechanisms of Growth	D	D			
Bioinorganic Chemistry	DE		E	A	A
Organometallic Chemistry	DE	D	DE	D	D
Young Investigator Award Symposium	P				
Coordination Chemistry	PE	P	DE	P	P
Main Group Chemistry	PE			P	
Electrochemistry	E	A			
Inorganic Spectroscopy	E		P		
Inorganic Chemistry Lectureship Award: Honoring Jeffrey R. Long		A			

# PROGRAM SUMMARY

## Division of Medicinal Chemistry

MEDI

*J. Macor, Program Chair*

Moscone Center, West Building	S	M	Tu	W	Th
PAINS (Pan Assay Interference Compounds), Promiscuity & Probes: Are Drug & Probe Development Mutually-Exclusive?	A				
Polypharmacology Drugs	A				
General Oral Session**	D	A		D	
New Approaches to Difficult-To-Drug Targets & Diseases**	P				
General Poster Session**	E			E	
Can Molecular Design Modulate Drug-Target Binding Kinetics?		A			
Recent Advances in Phosphodiesterase Inhibitors as Therapeutic Agents		A			
New Developments in Drug Discovery & Chemical Process Development**		P			
Novel Glutamate-Based Therapeutics for Psychiatric Disorders**		P			
Sci-Mix		E			
A Medicinal Chemist's Toolbox**			A		
Inducing Proteasomal Protein Degradation with Bifunctional Molecules**			A		
MEDI Awards Symposium**			A		
Antibacterial Agents that Target the Cell Division Protein FtsZ**			P		
Evolution of Medicinal Chemistry: Outlook & Opportunities**			P		
Tactical Strategies in the Design & Application of Affinity Probes			P		
Orexin Receptor Antagonist for Insomnia & CNS Disorders**				A	
Targeting the WNT Signaling Pathway**				A	
First Time Disclosures**				P	
Honoring Bill DeGrado* (BIOL)	A				
Drug Discovery* (COMP)	D	A	D	D	D
The Role of Organic Chemistry in Early Clinical Drug Development* (ORGN)		A			
Overview of Transporter-Mediated Hepatotoxicity* (TOXI)		P			
Tetrahedron Prize for Creativity in Organic Chemistry* (ORGN)		P			
Ameri-QSAR* (COMP)		P			

## Division of Medicinal Chemistry (continued)

MEDI

*J. Macor, Program Chair*

Moscone Center, West Building	S	M	Tu	W	Th
Undergraduate Research Posters* (CHED)		P			
High Performance Foods & Beverages* (AGFD)			D		
International Collaborations with International Impact: Chemistry for Global Change* (CHED)			D		
Macrocycles in Small-Molecule Drug Discovery* (COMP)			D		
Nucleic Acid Therapeutics* (CARB)			D		
Start-Up Chemical Businesses in Drug Discovery* (SCHB)			P		

## Division of Nuclear Chemistry & Technology

NUCL

*P. Mantica, J. Braley, Program Chairs*

San Francisco Marriott Marquis	S	M	Tu	W	Th
High-Level Waste Storage	A				
Nuclear Fusion: From NIF to the Stars	D	D			
Comprehensive Test Ban Treaty Verification	P				
A Lifetime of Contributions to Science, Summer Schools & Our NUCL Division Family: Honoring Frank Kinard**		D			
Environmental Radiochemistry**			D	D	
Young Investigators in Nuclear & Radiochemistry**			D	D	A
Rare Earth Separation Chemistry* (I&EC)	P				

## Division of Organic Chemistry

ORGN

*A. Abdel-Magid, M. McIntosh, Program Chairs*

Moscone Center, West Building	S	M	Tu	W	Th
Metal-Mediated Reactions & Syntheses	A	P	D	A	
Small Splash, Big Waves: Research at Primarily Undergraduate Institutions	A				
Young Investigators	A				
Asymmetric Reactions & Syntheses	D	D	A		
Material, Devices & Switches	D	A			

## Division of Organic Chemistry (continued)

ORGN

*A. Abdel-Magid, M. McIntosh, Program Chairs*

Moscone Center, West Building	S	M	Tu	W	Th
New Reactions & Methodology	D	D	D	D	
Total Synthesis of Complex Molecules	D	D			
Peptides, Proteins & Amino Acids	D	A			
Flow Chemistry & Continuous Processes	P				
Synthetic Chemical Biology	P				
Young Academic Investigators Award Symposium	P	A			
Chemistry & Global Stewardship; Asymmetric Reactions & Syntheses; Chemistry of Fullerenes, Carbon Nanotubes & Graphene; Flow Chemistry & Continuous Processes; Materials, Devices & Switches	E				
Chemistry of Fullerenes, Carbon Nanotubes & Graphene		A			
The Role of Organic Chemistry in Early Clinical Drug Development**		A			
Chemical Approaches Toward Understanding & Reprogramming RNA**	P				
Heterocycles & Aromatics		P	D	D	
Nanomaterials		P			
Tetrahedron Prize for Creativity in Organic Chemistry**		P			
Sci-Mix		E			
Journal of Organic Chemistry & Organic Letters Lectureship Symposium			A		
Arthur C. Cope & Arthur C. Cope Scholars Award Symposium**			D		
Biologically Related Molecules & Processes			D	D	
Molecular Recognition & Self-Assembly			D	D	
Physical Organic Chemistry			P	D	
The 2014 Organometallics Symposium**			P		
Biologically Related Molecules & Processes; Metal-Mediated Reactions & Syntheses; Molecular Recognition & Self-Assembly; Physical Organic Chemistry			E		
Total Synthesis as a Driver of Synthetic Innovation				A	
Technical Achievements in Organic Chemistry Award Symposium				D	

## Division of Organic Chemistry (continued)

ORGN

*A. Abdel-Magid, M. McIntosh, Program Chairs*

Moscone Center, West Building	S	M	Tu	W	Th
Emerging Frontiers in Synthesis: Transformative Advances in Reagent Based Organic Synthesis				P	
Heterocycles & Aromatics; New Reactions & Methodology				E	
Metal-Containing & Metallo-Supramolecular Polymers & Materials* (POLY)	D	D	DE	D	D
IUPAC: Discovery & Synthesis* (AGRO)		D	D	D	DE
New Developments in Drug Discovery & Chemical Process Development* (MEDI)		P			
The 2014 Organometallics Symposium* (INOR)			A		
Macrocycles in Small-Molecule Drug Discovery* (COMP)			D		
Nucleic Acid Therapeutics* (CARB)			D		
Importance of Chirality to Flavor Compounds* (AGFD)			P	D	

## Division of Physical Chemistry

PHYS

*N. Levinger, Program Chair*

Moscone Center, West Building	S	M	Tu	W	Th
Computational Spectroscopy**	D	D	A	D	A
Photoinduced Proton Transfer in Chemistry & Biology**	D	D	A	DE	D
Physical Chemistry of Ionic Liquids** <i>CGS</i>	D	D	A	DE	D
Fundamental Processes of Atmospheric Chemistry**	D	D	A	A	
The Future of Computational Chemistry**	D	D	A	D	D
Nano-Probes for Biological Systems	D	D	A	P	

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# PROGRAM SUMMARY

## Division of Physical Chemistry (continued)

PHYS

*N. Levinger, Program Chair*

Moscone Center, West Building	S	M	Tu	W	Th
Extreme Biochemistry from Small Molecules to Large Proteins: Formation, Stability, Structure & Function	D	D	A	D	
Renewable Energy Generation at the Interface Between Theory & Experiment** CGS	D	D	A	D	A
Sci-Mix		E			
Physical Chemistry Awards Symposium			P		
What Does 20th Century Physical Chemistry Have To Say To 21st Century Physical Chemists?*				D	
Poster Session				E	
Membranes* (COMP)	A				
Liquid State Theory: Honoring Jay Rasaiah* (COLL)	D	D	A	D	
Quantum Chemical Calculation of Molecular Properties: Honoring Nicholas C. Handy* (COMP)	D	D	A	D	A
Spectroscopic & Imaging Methods in Interfacial Phenomena* (COLL)	D				
Engineered Nanomaterials Interacting with Natural & Engineered Interfaces* (COLL)	DE	D	A	D	D
Quantum Chemistry* (COMP)	P	P	P	P	P
Control, Characterization & Impact of Nanocrystal Surface Chemistry* (COLL)	E			D	D
Molecular Mechanics* (COMP)		A	A	A	A
Modeling & Simulations of Electrochemical Interfaces & Materials for Energy Storage* (COMP)		D	D	D	A
ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences: Honoring Rigoberto Hernandez* (CMA)			D		
International Collaborations with International Impact: Chemistry for Global Change* (CHED)			D		

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## Division of Physical Chemistry (continued)

PHYS

*N. Levinger, Program Chair*

Moscone Center, West Building	S	M	Tu	W	Th
Chemistry of Atmospheric Nitrogen-Containing Compounds* (ENVR)				DE	A

## Division of Polymer Chemistry

POLY

*S. Iacono, M. Jeffries-El, D. Boday, J Youngblood, Chairs*

Hilton San Francisco Union Square	S	M	Tu	W	Th
Controlled Radical Polymerization	D	D	DE	D	D
General Topics: New Synthesis & Characterization of Polymers	D	A	AE	D	D
Poly(2-Oxazoline)s & Polypeptoids**	D	D	DE		
Green Polymer Chemistry: Biobased Materials & Biocatalysis** CGS	D	D	DE	D	D
Metal-Containing & Metallo-Supramolecular Polymers & Materials**	D	D	DE	D	D
Polymers for Additive Manufacturing**	D		E		
Industrial Polymer Scientist Award: Honoring Robert D. Allen, IBM		A			
Industrial Innovations in Polymer Chemistry		P			
2014 Biomacromolecules/Macromolecules Young Investigator Award		P			
Sci-Mix		E			
Transport in Polymer Membranes**			DE	D	D
DSM Science & Technology Award: Innovative Polymer Solutions for Biomedical Applications			P		
Polymer Degradation, Performance & Ultimate Stability			E	D	D
POLY/PMSE Plenary Lecture & Awards Reception				E	
Undergraduate Research Posters* (CHED)		P			
Novel Membranes & Membrane Processes for Desalination & Water Treatment* (ENVR)			D	E	
ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences: Honoring Rigoberto Hernandez* (CMA)			D		



## Division of Polymeric Materials Science & Engineering

PMSE

*A. Nelson, M. Becker, C. Stafford, Q. Lin, Program Chairs*

Hilton San Francisco Union Square	S	M	Tu	W	Th
Eastman Chemical Student Award in Applied Polymer Science**	A				
General Papers/New Concepts in Polymeric Materials <b>CGS</b>	A			D	A
Polymer Hybrids & Alloys for Coatings & Films**	A				
Roy W. Tess Award: Honoring James V. Crivello	D				
Frontiers in Computational Methods for Polymeric Materials**	D				
Stimuli-Responsive Supramolecular, Macromolecular & Nanostructured Systems & Biopolymer-Driven Organization of Nanostructures**	D	D	D	D	
Journal of Polymer Science Award: Honoring Brent Sumerlin**	P				
Kathryn C. Hach Award of Entrepreneurial Success: Honoring Joseph M. DeSimone, Benjamin W. Maynor & Jason P. Rolland**	P				
Porous Polymers**	P	D	D	D	A
Self-Healing & Shape Memory Materials		D	D	A	
Advanced Materials Synthesis & Assembly Toward Technology Challenges**		D	D	A	
Advances in Polymer Science & Engineering: The 4th Joint Symposium Between ACS-PMSE & the Chinese Chemical Society (CCS)-Polymer Division (PD)** <b>CGS</b>		D			
National Fresenius Award: Honoring William R. Dichtel		D			
Sci-Mix		E			
Functional Fluids: Synthesis, Structure & Properties**			D		
Functional Supramolecular Polymers**			D	D	
Joint PMSE/POLY Poster Session			E		
Award for Outstanding Graduate Research in Polymer Chemistry Symposium				P	
Metal-Containing & Metallo-Supramolecular Polymers & Materials* (POLY)	D	D	DE	D	D
Undergraduate Research Posters* (CHED)		P			

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

PMSE

*A. Nelson, M. Becker, C. Stafford, Q. Lin, Program Chairs*

Hilton San Francisco Union Square	S	M	Tu	W	Th
ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences: Honoring Rigoberto Hernandez* (CMA)			D		

## Division of Professional Relations

PROF

*R. Libby, Program Chair*

Hilton San Francisco Union Square	S	M	Tu	W	Th
Asian-American Women Chemists: Career Experiences**	P				
Celebrating 40 years of ACS Public Policy Fellowships: When Chemists Go to Washington**		A			
Workplace Issues Facing the LGBT Chemistry Community		P			
What Does the Affordable Care Act (Obamacare) Mean for Chemists & the Chemical Industry?*			A		
Chemical Angel Network: Chemists Investing in Chemical Companies**			P		
Over 50 & Got a Job**				A	
IUPAC: Fifty Years of Research & Mentoring: Honoring the Life & Career of Fumio Matsumura* (AGRO)	D				
Intellectual Property 101: What Students & Post-docs Need To Know* (SCHB)	P				
Advances in Small Molecule Approaches to HIV* (YCC)	P				
Next Generation Ambassadors of Chemistry Symposium* (IAC)	P				
Chemistry Plus Passions, Interests: Careers on the Road Less Traveled* (BMGT)	P				
Best Practices in Launching a University Start-Up* (SCHB)	P				
SCHB Entrepreneurs' Poster Session* (SCHB)		A			
Innovation from International Collaborations* (IAC)		D			
Mom the Chemistry Professor* (WCC)		D			

# PROGRAM SUMMARY

## Division of Professional Relations (continued)

PROF

*R. Libby, Program Chair*

Hilton San Francisco Union Square	S	M	Tu	W	Th
Current & Future Trends To Provide Equal Access in the Commercial Sector for Employees with Special Needs* (SCHB)	P				
Supporting & Facilitating Students & Workers with Disabilities in the Research & Teaching Laboratory* (CHAS)	P				
True Stories from Entrepreneurs* (SCHB)			A		
Women in Environmental Science & Engineering* (ENVR)			D	E	
ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences: Honoring Rigoberto Hernandez* (CMA)			D		
International Collaborations with International Impact: Chemistry for Global Change* (CHED)			D		
Women Leaders of the Global Chemistry Enterprise* (WCC)			D		
Start-Up Chemical Businesses in Drug Discovery* (SCHB)			P		

## Division of Small Chemical Businesses

SCHB

*J. Sabol, Program Chair*

Moscone Center, South Building	S	M	Tu	W	Th
Intellectual Property 101: What Students & Post Doctorates Need To Know**	P				
Best Practices in Launching a University Start-Up**	P				
SCHB Entrepreneurs' Poster Session**		A			
Cyber Security for Small Businesses**		A			
Current & Future Trends To Provide Equal Access in the Commercial Sector for Employees with Special Needs**		P			
Sci-Mix		E			
True Stories from Entrepreneurs**			A		
Start-Up Chemical Businesses in Drug Discovery**			P		
Celebrating 40 years of ACS Public Policy Fellowships: When Chemists Go to Washington* (PROF)		A			

## Division of Small Chemical Businesses (continued)

SCHB

*J. Sabol, Program Chair*

Moscone Center, South Building	S	M	Tu	W	Th
Environmental Chemistry: 100 Years of Scientific Contribution for a Safer & Sustainable Environment* (ENVR)		A			
Innovation from International Collaborations* (IAC)		D			
The Role of Entrepreneurship, Innovation & Economic Development in Sustainability* (BMGT)			A		
What Does the Affordable Care Act (Obamacare) Mean for Chemists & the Chemical Industry?* (PROF)			A		
Women in Environmental Science & Engineering* (ENVR)			D	E	
Chemical Angel Network: Chemists Investing in Chemical Companies* (PROF)			P		
Over 50 & Got a Job* (PROF)				A	

## Committee on Chemical Safety

C C S

*R. H. Hill, Program Chair*

Located with Primary Sponsor	S	M	Tu	W	Th
Division of Chemical Health & Safety Awards* (CHAS)	P				
Ask Dr. Safety: From Rules to Risk: Realistic Research Safety* (CHAS)	P				
Supporting & Facilitating Students & Workers with Disabilities in the Research & Teaching Laboratory* (CHAS)		P			
Sci-Mix* (CHAS)		E			
Greening Our Laboratories: How & Why?* (CHAS)			A		
How Far We've Come: A Retrospective of Laboratory Safety Over the Decades* (CHAS)			P		

## Committee on Environmental Improvement

C E I

*R. Lomneth, Program Chair*

San Francisco Marriott Marquis	S	M	Tu	W	Th
Hot Topics: Communicating Risk** <b>CGS</b>	P				
Biofuels for Powering the World* (ENFL)	D	D	D		
Occurrence, Formation, Health Effects & Control of Disinfection By-Products (DBPs)* (ENVR)	D	D	D	DE	
Synergism Between Microbiology & Chemistry for Environmental Sustainability* (ENVR)	D	A		E	
Carbon Dioxide Management: Recent Advances in Carbon Dioxide Capture, Conversion, Utilization & Storage* (ENFL)	D	D	D		
Batteries & Fuel Cell Technologies: Challenges & Solutions Towards Global Stewardship* (ENFL)	D	D	D		
Green Polymer Chemistry: Biobased Materials & Biocatalysis* (POLY)	D	D	DE	D	D
Sustain-Mix: Sustainability Across the Society* (CHED)	D	A			
Environmental Chemistry: 100 Years of Scientific Contribution for a Safer & Sustainable Environment* (ENVR)		A			
IUPAC: Emerging Issues & Challenges* (AGRO)		A	D	D	D
Occurrence, Fate & Removal of Pharmaceutical & Personal Care Products & Endocrine Disrupting Chemicals* (ENVR)		D	D	E	
Water Challenges & Solutions on the Global Scale* (ENVR)		D		E	
IUPAC: Ecosystem & Human Exposure & Risk Assessment* (AGRO)		D	D	D	D
IUPAC: Environmental Fate & Metabolism* (AGRO)		D	D	D	D
Undergraduate Research Posters* (CHED)		P			

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

\*\*Primary organizer of a cosponsored symposium.

CGS: Chemistry & Global Stewardship.

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

## Committee on Environmental Improvement (continued)

C E I

*R. Lomneth, Program Chair*

San Francisco Marriott Marquis	S	M	Tu	W	Th
Natural Attenuation of Emerging Contaminants in the Urban Water Cycle* (ENVR)			A		
Carbon-Based Materials for Energy Conversion & Storage* (ENFL)			D	D	A
Evolving Science & Environmental Impacts of Hydraulic Fracturing* (ENVR)			D	DE	
Novel Membranes & Membrane Processes for Desalination & Water Treatment* (ENVR)			D	E	
Separation Science & Technology as a Convergence Platform for SusChEM* (ANYL)			D	DE	
Citizens First: Using Real-World Contexts for Engaging Students in Learning Chemistry* (CHED)			D		
Global Stewardship by Increasing Climate Science Literacy* (CHED)			D		
An International Student Summit on Global Climate Change* (CHED)			P		
Green Chemistry & the Environment* (ENVR)				E	D

## Committee on Minority Affairs

C M A

*J. Sarquis, Program Chair*

Hilton San Francisco Union Square	S	M	Tu	W	Th
How To Foster Diversity in the Chemical Sciences**		A			
ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences: Honoring Rigoberto Hernandez: Advancing the Chemical Sciences Through Diversity in Participation**			D		

## Committee on Nomenclature, Terminology & Symbols

N T S

*A. Censullo, Program Chair*

Moscone Center, North Building	S	M	Tu	W	Th
Redefining the Mole & Kilogram: Impact on Chemistry**		A			

# PROGRAM SUMMARY

## Committee on Science

COMSCI

*S. Bonser, Program Chair*

Hilton San Francisco Union Square	S	M	Tu	W	Th
Younger Investigator Awardee Forum: Emerging Frontiers In Chemistry Research		P			
Separation Science & Technology as a Convergence Platform for SusChEM* (ANYL)			D	DE	

## Committee on Technician Affairs

CTA

*S. Marine, Program Chair*

Located with Primary Sponsor	S	M	Tu	W	Th
The Role of the Chemical Technician through the Decades* (I&EC)		A			

## Diversity & Inclusion Advisory Board

D & I

*T. Quinn Gray, Program Chair*

Located with Primary Sponsor	S	M	Tu	W	Th
ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences: Honoring Rigoberto Hernandez* (CMA)			D		

## International Activities Committee

IAC

*H. N. Cheng, B. Henry, Program Chairs*

Moscone Center, South Building	S	M	Tu	W	Th
Next Generation Ambassadors of Chemistry Symposium** <b>CGS</b>	P				
Innovation from International Collaborations** <b>CGS</b>		D			
Asia-America Chemical Symposium**			D		
Redefining the Mole & Kilogram: Impact on Chemistry* (NTS)		A			
Global Stewardship by Increasing Climate Science Literacy* (CHED)			D		
Women Leaders of the Global Chemistry Enterprise* (WCC)			P		
An International Student Summit on Global Climate Change* (CHED)			P		

## Society Committee on Education

SOCED

*A. Jorgensen, Program Chair*

Moscone Center, North Building	S	M	Tu	W	Th
Eminent Scientist Lecture with Martin Mulvihill** <b>CGS</b>		P			
High School Program* (CHED)	D				
Undergraduate Research Papers* (CHED)	D				
Chemistry Plus Passions, Interests: Careers on the Road Less Traveled* (BMGT)	P				
Undergraduate Research Posters* (CHED)		P			
Perspectives on Graduate Education in the Chemical Sciences* (CHED)				P	

## Women Chemists Committee

WCC

*K. Woznick, Program Chair*

Hilton San Francisco Union Square	S	M	Tu	W	Th
Mom the Chemistry Professor**		D			
Women Leaders of the Global Chemistry Enterprise**			D		
Asian-American Women Chemists: Career Experiences* (PROF)	P				
ACS Award for Chromatography: Honoring Susan V. Olesik* (ANYL)		A			
Arthur C. Cope & Arthur C. Cope Scholars Award Symposium* (ORGN)			D		
Women in Environmental Science & Engineering* (ENVR)			D	E	
International Collaborations with International Impact: Chemistry for Global Change* (CHED)			D		
Alternative Careers in Chemistry* (CHAL)			P		

## Younger Chemists Committee

YCC

*T. Matos, Program Chair*

Hilton San Francisco Union Square	S	M	Tu	W	Th
Advances in Small Molecule Approaches to HIV**	P				
Young Investigators in Nuclear & Radiochemistry* (NUCL)			D	D	A



# GENERAL MEETING INFORMATION

**YOUR MEETING REGISTRATION** entitles you to a range of programming, including 1,013 scientific sessions, invited symposia, poster sessions, special lectures and events, award presentations, workshops, and the exposition. Interact with chemical scientists from around the world by participating in social events, networking opportunities, exhibitor sessions, and educational activities, with many events offered at no additional charge. Certain workshops, short courses, and ticketed events require a separate entry fee, as indicated in this program.

**EARLY REGISTRATION:**  
**UP TO JUNE 29**

**STANDARD REGISTRATION:**  
**June 30–Aug. 14**

**ON-SITE ATTENDEE REGISTRATION:**  
**Moscone Center, North Bldg., Lobby**

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

**Standard & On-Site Registration.** Attendees who register after June 29 must pick up their badge credentials on-site.

**Registration Changes.** Attendees can modify their existing registration or generate a receipt from the registration website by following the instructions in their confirmation message. Attendees can also contact the ACS National Meeting Regis-

tration Center before Aug. 8 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/sanfran2014](http://www.acs.org/sanfran2014) until Aug. 14. Valid credit card is required to register online, and online registrations are real-time transactions.

**Telephone.** Call the ACS National Meeting Registration Center by Aug. 8 at (800) 251-8629 (U.S./Canada only) or (508) 743-0192 (international), Monday to Friday, 9 AM to 5 PM EDT.

**Fax/Mail.** Submit the registration form (page 60) by fax: (508) 743-9604 or mail: ACS Registration, c/o CDS, 107 Waterhouse Rd., Bourne, MA 02532. Mailed registrations will be accepted until Aug. 8.

**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 Bldg., lobby area, 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 EST by telephone, fax, mail, or e-mail. Service representatives can be reached at (800) 251-8629 (U.S./Canada only) or (508) 743-0192 (international); fax: (508) 743-9604; e-mail: [acs@xpressreg.net](mailto:acs@xpressreg.net); or mail: ACS Registration, c/o CDS, 107 Waterhouse Rd., Bourne, MA 02532.

### Registration Cancellations/Refunds.

All cancellations and refund requests must be submitted in writing by July 14 to guarantee the registrant a full refund less a \$50 administrative fee. Refund requests made after July 14 will not be honored. Your registration badge credentials and a copy of your registration confirmation must be attached to your request. All refunds will be issued via the original payment method, and refunds will be processed within 30 days after the meeting. Send your request to ACS Registration Cancellation, c/o CDS, 107 Waterhouse Rd., Bourne, MA 02532 or fax (508) 743-9604 (save your fax confirmation sheet).

**Social Event Ticket Cancellations/Refunds.** Social event cancellations received by July 14 entitle the registrant to a full refund. Refund requests made after July 14 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.

REGISTRATION CATEGORY	FEE	
	EARLY BY JUNE 29	STANDARD AFTER JUNE 30
<b>MEMBERS</b>		
ACS member or society affiliate	\$380	\$455
Postdoctoral member	380	455
Emeritus or retired member	195	235
50-year member	No fee	No fee
Unemployed member (Dues waiver required)	No fee	No fee
Precollege teacher	105	105
Graduate student	195	195
Undergraduate	105	105
One-day registrant	195	235
<b>NONMEMBERS</b>		
Chemical scientist	\$660	\$790
Postdoctoral scientist	660	790
Visitor: Nonchemical scientist or chemical technician	380	455
Precollege teacher	105	105
Graduate student	370	370
Undergraduate	185	185
One-day registrant	380	455
Guest of registrant <sup>a</sup>	40	40
<b>EXPOSITION-ONLY VISITORS</b>		
Adult, exposition only	\$50	\$50
Student, exposition only	25	25

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

**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); (614) 447-3776 (international); or e-mail: [service@acs.org](mailto:service@acs.org).

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

**PRESS/MEDIA REGISTRATION.** Press registration is complimentary for credentialed members of the news media 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).

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

**EXHIBITOR REGISTRATION.** Exhibitor registration is handled exclusively through ACS National Expositions at [www.acs.org/expositions](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/sanfran2014](http://www.acs.org/sanfran2014).

The following social events require purchase of a ticket (event number in red), which can be purchased through Attendee Registration. Tickets will remain on sale until the evening prior to the event, if available. All tickets are sold on a first-come, first-served basis. Cancellations or refund requests must be made by July 14. No tickets will be refunded after that date.

## EVENTS & ACTIVITIES

### SUNDAY, AUG. 10

**Society Communications—Improvisation Training for Chemists/SE-01/\$10**  
9 AM to 4:30 PM, San Francisco Marriott Marquis

**CHED High School-College Interface Luncheon/SE-02/\$45**  
(Included at no charge with high school teacher registration.)  
Noon to 1 PM, Moscone Center

**TOXI (Division of Chemical Toxicology) Professional Development Workshop/SE-03/\$40**  
Noon to 1 PM, InterContinental San Francisco

**International Affairs—Next-Generation Ambassadors of Chemistry Symposium/SE-04/no charge**  
1 to 5:30 PM, Moscone Center

**International Affairs—International Welcome Reception/SE-05/no charge**  
5:30 to 7:30 PM, Hilton San Francisco Union Square

**CTA (Committee on Technician Affairs) 50th Anniversary Dinner/SE-06/\$55**

7 to 9 PM, The Argonaut Hotel's Blue Mermaid Restaurant, 495 Jefferson St.; (415) 563-0800

**"Journey to the Dark Side"/SE-07/\$20**  
7 to 8 PM, Moscone Center

### MONDAY, AUG. 11

**Women in the Chemical Enterprises Breakfast/SE-08/\$40 (regular)/SE-09/\$20 (student)**  
7:30 to 9 AM, Hilton San Francisco Union Square (A limited number of student tickets are available. Students may purchase regular tickets if student tickets are sold out.)

**Committee on Minority Affairs Luncheon/SE-10/\$50 (regular)/SE-11/\$25 (student)**  
11:30 AM to 1:30 PM, Hilton San Francisco Union Square

**CHAL (Chemistry & the Law) Drug & Power Luncheon/SE-12/\$40**  
Noon to 1:30 PM, Moscone Center

**TOXI (Division of Chemical Toxicology) Professional Development Workshop II/SE-13/\$40**  
Noon to 1 PM, InterContinental San Francisco

**AGFD (Agriculture & Food Division) Communicating Chemistry: California Cuisine/SE-14/\$15**  
4:30 to 6 PM, Art Institute of California, 1170 Market St.

**Purdue University Department of Chemistry Alumni Reception/SE-15/no charge**  
7 to 8:30 PM, Moscone Center

### TUESDAY, AUG. 12

**University of Minnesota Alumni & Friends Breakfast/SE-16/\$5.00**  
7:30 to 9:30 AM, Moscone Center

**I&EC (Industrial & Engineering Chemistry) Graduate Symposium Luncheon/SE-17/\$50**  
11:45 AM to 1:15 PM, Moscone Center

**COLL (Colloid Division) Luncheon/SE-18/\$40**  
Noon to 1:45 PM, Moscone Center



**ACS**  
Chemistry for Life®

**ADVANCE REGISTRATION FORM**  
AMERICAN CHEMICAL SOCIETY • 248th NATIONAL MEETING & EXPOSITION  
AUGUST 10 – 14, 2014 • SAN FRANCISCO, CA

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

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

**Phone:** 508-743-0192 or 800-251-8629, Monday - Friday, 9 AM to 5 PM EST (credit cards only) by August 14, 2014.

**Mail** completed form with payment to: ACS Registration c/o CDS, 107 Waterhouse Road, Bourne, MA 02532 by August 14, 2014.

**Fax** completed form with payment to: 508-743-9604 (credit cards only) by August 14, 2014.

**– 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 and exhibitor promotions before and after the meeting? (check all that apply) ☐ Mail ☐ E-mail ☐ Do not contact me for non-official purposes

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 hand-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** **STANDARD**  
*from May 19* *after June 30*

- |   |        |        |
|---|--------|--------|
| <input type="checkbox"/> ACS member or Society affiliate  | \$380  | \$455  |
| <input type="checkbox"/> Postdoctoral   | \$380  | \$455  |
| <input type="checkbox"/> Emeritus or retired  | \$195  | \$235  |
| <input type="checkbox"/> 50-year  | No Fee | No Fee |
| <input type="checkbox"/> Unemployed   | No Fee | No Fee |
| (dues waiver required)  |        |        |
| <input type="checkbox"/> Graduate student   | \$195  | \$195  |
| <input type="checkbox"/> Undergraduate Student  | \$105  | \$105  |
| <input type="checkbox"/> Precollege teacher   | \$105  | \$105  |
| <input type="checkbox"/> One day member registrant  | \$195  | \$235  |
| <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   | \$660 | \$790 |
| <input type="checkbox"/> Postdoctoral scientist   | \$660 | \$790 |
| <input type="checkbox"/> Visitor: Non-chemical scientist  | \$380 | \$455 |
| <input type="checkbox"/> Visitor: Chemical technician   | \$380 | \$455 |
| <input type="checkbox"/> Graduate Student   | \$380 | \$380 |
| <input type="checkbox"/> Undergraduate Student  | \$195 | \$195 |
| <input type="checkbox"/> Pre-College Teacher  | \$105 | \$105 |
| <input type="checkbox"/> One-day registrant   | \$380 | \$455 |
| <input type="checkbox"/> Su <input type="checkbox"/> M <input type="checkbox"/> Tu <input type="checkbox"/> W <input type="checkbox"/> Th |       |       |

☐ Guest of Registrant (1) \$40 \$40

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

Guest Name \_\_\_\_\_

**Exposition Visitors**

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

8. Registration Subtotal \$ \_\_\_\_\_

**PAYMENT**

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

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 248th 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

9. Social Event Subtotal \$ \_\_\_\_\_

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

**ABSTRACT FEES**

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

10. Abstract Subtotal \$ \_\_\_\_\_

Abstracts ordered by June 30, 2014, 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**

11. Grand Total of 8-10 \$ \_\_\_\_\_

**Registrant Procedures:** U.S. attendees who register by June 30, 2014, will receive their registration credentials and tickets via mail prior to the meeting. Unless an international attendee has provided a U.S. mailing address on their registration form, their credentials must be picked-up onsite at the Attendee Registration (this includes Canada and Mexico). After June 30, 2014, registrations will continue to be accepted at the standard rate on-line and by phone or fax (credit card payment only) until August 14, 2014.

**Registration Cancellation/Refund Policy:** By adhering to the following cancellation procedure, cancellations received by July 14, 2014, are entitled to a full refund, less a \$50 administrative fee. Registrants must return a copy of the registration confirmation along with the original registration credentials before payment will be posted to the account. All refunds are issued via the same method used for payment. Refunds are processed within 30 days after the conclusion of the meeting.

1. Submit your written cancellation to the ACS Registration Customer Service Center by mail, fax or e-mail by July 14, 2014.
2. Return your unused registration credentials to ACS by July 14, 2014. If you cancel before receiving your registration credentials, contact the ACS Registration Customer Service Center for further instructions.
3. Refund requests made after July 14, 2014, will not be honored.
4. No cancellation or refund for Abstract flash drives and/or postage charges for mailing will be made.

**Women Chemist Committee Luncheon/  
SE-19/\$50 (regular)/SE-20/\$25  
(student)**

Noon to 1:30 PM, Hilton San Francisco  
Union Square

**CINF (Chemical Information Division)  
Luncheon/SE-21/\$15**

12:15 to 1:30 PM, InterContinental San  
Francisco

**ANYL (Division of Analytical Chemistry)  
Reception/SE-22/\$20**

5 to 7 PM, InterContinental San Francisco

**ENVR (Division of Environmental  
Chemistry) Reception/SE-23/\$25  
(regular)/SE-24/\$15 (student)**

6:30 to 7:30 PM, The McLoughlin Gallery,  
49 Geary St.

**CACS (Chinese American Chemistry  
Society) Dinner/SE-25/\$35**

6 to 9 PM, Four Seas Restaurant, 731 Grant  
Ave.

**ENFL (Energy & Fuels Division) Dinner/  
SE-26/\$65**

6:15 to 9:30 PM, Hornblower Bay Dinner  
Cruise, Pier 3, on the Embarcadero at  
Washington St.

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## ACCOMMODATIONS

**ACS HAS CONTRACTED** a wide selection of hotel rooms with competitive rates for the national meeting in San Francisco. Orchid Event Solutions is the official housing bureau. ACS does not endorse booking hotel reservations through any other sources. Reserve your hotel rooms directly through Orchid Event Solutions by July 15. A listing of official hotels with their guaranteed ACS rates and amenities can be found on page 62. All attendees who make reservations through Orchid Event Solutions will receive complimentary Internet access in their sleeping rooms and are automatically entered in the ACS Housing Drawing (see ad on page 64 for details).

**Late Housing.** Some hotels may have rooms available after July 15. A listing of these hotels will be posted on the ACS meeting website at [www.acs.org/sanfran2014](http://www.acs.org/sanfran2014).

**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.

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

Published ACS rates apply to hotel stays between Aug. 5 and 16. To extend your stay beyond these dates, you must reserve additional nights directly through the hotel.

**Internet.** Reserve online at [www.acs.org/sanfran2014](http://www.acs.org/sanfran2014). Online reservations require a valid credit card (American Express, Discover, MasterCard, or VISA), and you will receive a confirmation to your e-mail address within 24 hours.

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

**Fax/Mail.** Fax the ACS Housing Form (available online) with your valid credit card information to (801) 355-0250 or mail the form with your valid credit card information or a check for the amount of one night's room and tax made payable to Orchid Event Solutions and mail to ACS Housing, c/o Orchid Event Solutions, 175 South West Temple, Suite 30, Salt Lake City, UT 84101. Faxed and mailed reservations will be processed on a first-come, first-served basis and require 10 to 14 days to be confirmed. If your requested hotel is no longer available, we will attempt to honor your indicated preference according to cost and location.

### MEETING INFO ON THE WEB

Registration, housing, technical programming, special events, participating exhibitors, and other meeting details are available at [www.acs.org/sanfran2014](http://www.acs.org/sanfran2014).

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

Although a valid credit card or check deposit for one night's room and tax is required to confirm a reservation, a payment will not be charged by Orchid Event Solutions. The credit card information or check deposit will be forwarded with your reservation to your hotel on July 15 after 5 PM MDT. Hotels may elect to charge a deposit of one night's room and tax to your credit card prior to your arrival. You will need to handle all payment arrangements directly with your assigned hotel. All hotel rooms are subject to 16.33% room and occupancy tax (subject to change).

Reservation changes and cancellations can be made without penalty until July 15. Hotels do not have individual reservations or credit card guarantees yet. After July 15, you may continue to make changes and cancellations through Orchid Event Solutions until July 31; however, canceled reservations may incur a \$25 fee that will be charged by Orchid Event Solutions. A one night's room and tax charge will be charged by the hotel for reservations that are not canceled 72 hours prior to arrival. Penalties for early departures may be enforced and vary by hotel, so call your hotel for details.

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

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

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





# American Chemical Society

## 248th National Meeting & Exposition Participating Hotel List San Francisco

FOR BEST AVAILABILITY, MAKE YOUR RESERVATION VIA THE INTERNET

[www.acs.org/sanfran2014](http://www.acs.org/sanfran2014)

OR BY PHONE (866) 847-8570 (U.S. & Canada) or (801) 505-4140 (international)

**ALL RATES INCLUDE COMPLIMENTARY INTERNET**

Hotels*	Single (1 person)	Double (2 persons)	Triple (3 persons)	Quad (4 persons)	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	Complimen- tary Internet	Pets Allowed*	Fitness Center	Swimming Pool	Accessible Rooms	Smoking Rooms* Available
1- Courtyard by Marriott San Francisco Downtown	\$228	\$228	\$248	\$268	4	18	No	No	\$52	No	Yes	Service	Yes	Yes	Yes	No
2a- Grand Hyatt San Francisco Standard Rooms	\$199	\$199	\$224	\$249	4	18	Yes	Yes	\$63	Yes	Yes	Yes	Yes	No	Yes	No
2b- Grand Hyatt San Francisco View Rooms	\$239	\$239	\$264	\$289	4	18	Yes	Yes	\$63	Yes	Yes	Yes	Yes	No	Yes	No
2c- Grand Hyatt San Francisco Grand Club Rooms	\$299	\$299	N/A	N/A	2	18	Yes	Yes	\$63	Yes	Yes	Yes	Yes	No	Yes	No
3a- Hilton San Francisco Union Square - Classic Room	\$199	\$199	\$219	\$239	4	18	No	Yes	\$47 / \$52	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3b- Hilton San Francisco Union Square - Deluxe Room	\$219	\$219	\$239	\$259	4	18	No	Yes	\$47 / \$52	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4- InterContinental San Francisco	\$245	\$245	\$265	\$285	4	17	Yes	No	\$52	Yes	Yes	Yes	Yes	Yes	Yes	No
5- Marriott Union Square - San Francisco	\$234	\$234	\$254	\$274	4	18	No	Yes	\$51	Yes	Yes	No	Yes	No	Yes	No
6- The Mosser Hotel	\$175	\$175	N/A	N/A	2	12	No	No	\$49	No	Yes	Service	No	No	Yes	No
7- Hotel Nikko San Francisco	\$209	\$209	\$239	\$269	4	18	No	Yes	\$50	Yes	Yes	Yes	Yes	Yes	Yes	No
8- Palace Hotel, A Luxury Collection Hotel	\$249	\$249	\$289	N/A	3	17	Yes	Yes	\$64	Yes	Yes	Yes	Yes	Yes	Yes	No
9- Hotel Palomar	\$249	\$249	\$269	\$289	4	12	Yes	No	\$48	Yes	Yes	Yes	Yes	No	Yes	No
10- Parc 55 Wyndham San Francisco - Union Square	\$229	\$229	\$249	\$269	4	18	Yes	Yes	\$49	Yes	Yes	Yes	Yes	No	Yes	No
11- San Francisco Marriott Marquis	\$245	\$245	\$265	\$285	4	13	No	No	\$62	Limited	Yes	Service	Yes	Yes	Yes	No
12- Sir Francis Drake Hotel	\$235	\$235	\$255	\$275	4	17	No	Yes	\$60	Yes	Yes	Yes	Yes	No	Yes	No
13- W San Francisco	\$269	\$269	\$299	\$329	4	10	Yes	No	\$59	Yes	Yes	Yes	Yes	No	Yes	No
14- The Westin San Francisco Market Street	\$245	\$245	\$265	N/A	4	13	No	No	\$48	Yes	Yes	Yes	Yes	No	Yes	No
15- The Westin St. Francis San Francisco on Union Square	\$239	\$239	\$269	\$299	4	17	Yes	Yes	\$60	Yes	Yes	Yes	Yes	No	Yes	No

The rates listed above do not include the current 16.33% room and occupancy tax per room per night, which is subject to change.

### \*Additional fees may apply if:

A rollaway bed is required.

There are pets in guestrooms.

Smoking occurs in guestrooms.

ask for the listed ACS rate. This property is not included on the ACS shuttle route. Therefore, daily transportation costs are the responsibility of the attendee.

**King George Hotel**, 334 Mason St.;  
(415) 781-5050; ACS rate \$159 single/double  
occupancy

**KEEP YOUR MEETING COSTS AFFORD-  
ABLE.** Attendee support of the official  
hotels allows ACS to use meeting space at  
a discount and to keep registration fees to  
a minimum. Stay in an official hotel when-  
ever possible, and reserve your hotel room  
through Orchid Event Solutions at [www.acs.org/sanfran2014](http://www.acs.org/sanfran2014).

## ACS GREENER MEETINGS

### THE AMERICAN CHEMICAL SOCIETY

Department of Meetings & Expositions  
Services and the Committee on Meetings  
& Expositions are committed to greener  
meetings. For each national meeting, we  
collaborate with the destination city, con-  
vention center, and our hotel and vendor  
partners to reduce our environmental foot-  
print and raise the bar for industry sustain-  
ability 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 our efforts, ACS has been recognized  
by the Capital Chapter of the Professional  
Convention Management Association as  
a sustainable event leader. Here are a few  
reasons why: ACS ...

■ Seeks sustainable convention center  
partners (both 2014 venues are LEED-  
certified facilities).

■ Offsets staff event emissions in partner-  
ship with American Forests (~1,220 trees  
planted in 2014) and shuttle emissions in  
partnership with Transportation Manage-  
ment Services (TMS) and Carbonfund.org.

■ Performs on-site walkthroughs for 80%  
of our hotel room block properties, survey-  
ing hotels on more than 40 sustainability  
practices.

# 248th ACS National Meeting & Exposition

August 10–14, 2014 | San Francisco

## SHUTTLE SERVICE SCHEDULE

### HOURS OF OPERATION

#### SUNDAY, August 10

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

#### MONDAY, August 11

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

#### TUESDAY, August 12

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

#### WEDNESDAY, August 13

7:00 AM–11:00 PM ..... 30-minute service

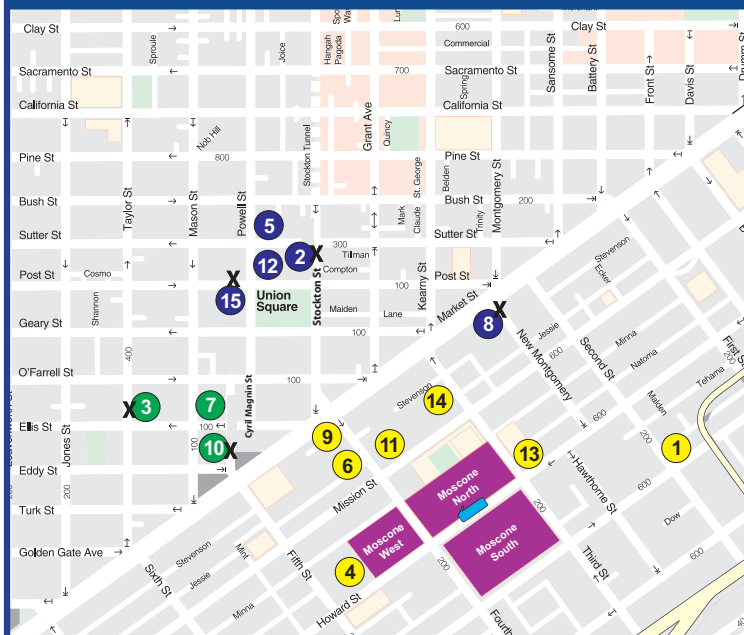
#### THURSDAY, August 14

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



Scan here to download  
this document on to 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

### MAP #.. HOTELS ..... ROUTE ..... BOARDING

1	Courtyard by Marriott San Francisco Downtown	W	Walk to Moscone Center
2	Grand Hyatt San Francisco	1	Curbside on Stockton Street
3	Hilton San Francisco Union Square	2	Taylor Street
4	InterContinental San Francisco	W	Walk to Moscone Center
5	Marriott Union Square—San Francisco	1	Walk to Grand Hyatt—Stockton Street
6	The Mosser Hotel	W	Walk to Moscone Center
7	Hotel Nikko San Francisco	2	Walk to Parc 55
8	Palace Hotel, A Luxury Collection Hotel	1	New Montgomery Street
9	Hotel Palomar	W	Walk to Moscone Center
10	Parc 55 Wyndham San Francisco—Union Square	2	Curbside on Cyril Magnin Street
11	San Francisco Marriott Marquis	W	Walk to Moscone Center
12	Sir Francis Drake Hotel	1	Walk to Westin St Francis—Post Street
13	W San Francisco	W	Walk to Moscone Center
14	The Westin San Francisco Market Street	W	Walk to Moscone Center
15	The Westin St. Francis San Francisco on Union Square	1	Post Street Entrance



Wheelchair-accessible transportation is available during hours of operation. Please call (866) 439-8564 to schedule (please allow 30 minutes).



For all shuttle inquiries, please call  
**(866) 439-8564**



Shuttle services managed and operated by Transportation Management Services.



Carbon Neutral Shuttles



**Enter the ACS San Francisco, CA Housing Drawing by Staying at a Hotel Booked Through Orchid Event Solutions!**

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

**First Prize – A New iPad\***

**Second Prize – A New Kindle\***

**Top Reasons To Book Your Reservation Through Orchid Event Solutions:**

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

**Housing Opens May 1, 2014**

Online at [www.acs.org/meetings](http://www.acs.org/meetings)  
or by calling 1-866-847-8570

**Monday - Friday, 7am - 6pm MST.**  
Housing will close on July 15.

Rooms are limited, so make your  
reservation today.

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



■ Designates Sci-Mix as a “zero waste” event. We achieved nearly 100% diversion for our spring meeting in Dallas. Help us keep up the great work!

■ Served 65% of food ingredients from local farms (<100 miles) at the 247th Attendee Welcome Reception in Dallas. We look forward to bringing you healthy and local foods in San Francisco as well.

**Be A Catalyst For Change.** Facilities are only as effective as the people who operate and occupy them. Go to [www.acs.org/greenermeetings](http://www.acs.org/greenermeetings) and take the Greener Meeting Challenge to show your support and share your personal national meeting sustainability story. Challenge participants are eligible to win fantastic prizes. Challenge activities include:

■ Take advantage of linen reuse initiatives at your hotel, decline delivery of unread newspapers, and turn off the lights when away from your hotel room.

■ Responsibly dispose of recyclable materials (paper, plastic, glass, aluminum) in the convention center and hotels.

■ Use the meeting mobile app and digital program instead of the printed On-site Program.

■ Enjoy the city, burn calories, and travel carbon dioxide-neutral by walking to and from your hotel.

■ When walking isn't an option, use the ACS carbon-offset shuttle service.

■ 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 [nationalmeetings@acs.org](mailto:nationalmeetings@acs.org).

## TRAVEL & TRANSPORTATION

### IMPORTANT TRAVEL INFORMATION

The San Francisco International Airport is undergoing runway maintenance this summer. As a result, there are fewer flights going in and out of the airport, and these flights will potentially be more costly. For additional information, please access [www.sanfrancisco.travel/meeting-planners/general-info/meeting-transportation.html](http://www.sanfrancisco.travel/meeting-planners/general-info/meeting-transportation.html).

**TRANSPORTATION DISCOUNTS.** ACS has negotiated special travel discounts with the following partners. To get the best rates

and avoid service fees, it is recommended to make reservations online (except Amtrak).

### AIRLINES:

#### American Airlines

[aa.com](http://aa.com); (800) 433-1790

Discount code: 4284AA

#### Delta

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

Discount codes: NMGHE, NMGHF (international)

#### United Airlines

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

Discount code: ZQYZ872186

### Amtrak

[amtrak.com](http://amtrak.com); (800) 872-7245

Discount code: X66S-905 (for phone reservations only)

### RENTAL CARS:

#### AVIS

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

Discount code: B923099

#### Hertz

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

Discount code: CV#02UZ0013

### AIRPORT GROUND TRANSPORTATION

A greener way to go! This year, we are launching our ACS Group Networking Transportation service to transport you from the San Francisco and Oakland airports to your hotel. Visit <http://eda.webdestin.net/EventTariff/270>, enter your flight information, and make your online payment. The cost is \$25 per person one-way and \$45 per person round-trip. Benefits include automatic vehicle scheduling service, electronic departure notices, meet and greet staff to assist you with luggage, and networking with other ACS meeting colleagues en route. Online assistance is available via a live chat box.

#### BART—Go Green from SFO and OAK.

Take BART from SFO or OAK airport to San Francisco and Go Green at the 2014 ACS national meeting. BART costs much less than taxis and shuttles and is just as fast. Most importantly, taking BART keeps 20 lb of CO<sub>2</sub> per round trip out of the atmosphere and reduces the conference's carbon footprint. Take BART and help sustain the air.

**BART OAK Transfers.** Go to the AirBART shuttle stop on the traffic island outside the terminal and take the AirBART bus. Deposit \$3.00 in the AirBART fare box when you board. Then purchase a round-trip ticket at the Coliseum station

for \$7.70. Enter the fare gates, go up the escalator, and take any San Francisco-bound train. It usually takes 45 minutes to take the AirBART shuttle and BART to San Francisco. Exit at the station that's closest to your hotel.

**Taxi.** Taxi service is available from SFO to downtown. Approximate fare to a downtown destination is \$45. Taxis may add a \$2.00 pass-through fee to all airport fares leaving SFO. Voluntary ride sharing for two or more persons with a maximum of three destinations is permitted.

### TRAVELING TO MEETING VENUES

A list of official ACS properties and hotels is shown on pages 62 and 63.

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.** Moscone Center does not include a public parking facility. Several public parking garages are in close proximity to the facility, each of which provides certain spaces reserved for use by authorized, handicapped individuals. Please visit [www.moscone.com](http://www.moscone.com) for more information.

## ACS MEMBER SERVICES

**ACS MEMBER SERVICES.** ACS staff can assist you on-site with joining ACS, renewing memberships, completing adjustments to member records, and answering general membership questions. ACS members 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, Aug. 9, 3 to 6 PM; Sunday, Aug. 10, 7:30 AM to 7:30 PM; Monday, Aug. 11, 7:30 AM to 9 PM; Tuesday, Aug. 12, 7:30 AM to 5 PM; Wednesday, Aug. 13, 7:30 AM to 4 PM; and Thursday, Aug. 14, 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.

**MEETING POCKET GUIDE.** View high-

lights and meeting information for the fall national meeting using the Meeting Pocket Guide. Pocket Guides will be available for free throughout the convention center and available at many official ACS hotels.

## ATTENDEE NATIONAL MEETING

**E-NEWSLETTER.** Receive official updates on ACS national meetings, including locations, registration and accommodation dates, information and discounts, resources, and event details. You can sign up and manage your subscriptions with your free ACS ID. Subscribe at [www.emailpref.acs.org](http://www.emailpref.acs.org).

**BUSINESS CENTER.** The Moscone Business Center provides full-service business needs for your convenience. Shipping is provided through UPS. Office supplies and souvenirs are also available for purchase. During the ACS national meeting, the business center will be open to attendees, Friday, Aug. 9, thru Tuesday, Aug. 12, from 8 AM to 5 PM.

## MEMBER INSURANCE PROGRAM.

Exposition Booth No. 624. The ACS Member Insurance Program is committed to offering quality comprehensive insurance plans and financial security programs to members and their families. Stop by the Member Insurance Station to learn how you can sign up for Life & Health Insurance, Auto & Homeowners Plus, Disability Income, Long-Term Care, Medicare Supplement, Medical Discount Cards, Pet Insurance, Professional Liability, and more. Also learn more about our newest offerings: Commercial Business Insurance and International Term Life. The ACS Member Insurance Program offers coverages and policies for every stage of life, from being a student in college, to raising a family, to enjoying retired life—and everything in between! To learn more about the 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

## TIPS FOR A SAFE STAY IN SAN FRANCISCO

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

functions. More information is available at [www.moscone.com](http://www.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 participate in the meeting, communicate your needs to ACS Meeting Services by e-mail: [nationalmeetings@acs.org](mailto:nationalmeetings@acs.org); fax: (202) 872-6128; or phone: (202) 872-6111 by June 29 to allow enough time to fulfill your request. Keep in mind that ACS may not be able to accommodate last-minute requests.

If you have an emergency or need immediate assistance during the meeting, contact any ACS Operations Office.

**ASSISTANCE.** Our greeters will be positioned throughout the meeting and can help you navigate the On-site Program, find a particular session or room, and answer questions. Lost-and-found items at the convention center should be directed to the ACS Operations Office located in

the South Bldg., Room 100 and West Bldg., 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/sanfran2014](http://www.acs.org/sanfran2014). Use the Meeting Mail 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.

## AUDIOTAPING, PHOTOGRAPHY &

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

**CHILD CARE.** Camp ACS will be available to all meeting attendees free of charge from 7 AM to 6 PM on Sunday, Aug. 10, through Thursday, Aug. 14. At Camp ACS, children two (and potty-trained) to 16 years of age can participate in age-appropriate activities, including arts and crafts and active games, while you enjoy the meeting. To ensure your child's participation, register online by Aug. 4 at [www.acs.org/sanfran2014](http://www.acs.org/sanfran2014). For your child's safety, the location of Camp ACS will not be communicated until your registration is confirmed. On-site registration will be accepted on a space-available basis.

**ELECTRONIC DEVICES.** As a courtesy to other meeting attendees, electronic devices must be operated in silent/vibrate mode



within technical or educational sessions. Cell phone conversations are not permitted in meeting rooms.

**EMERGENCIES DURING ACS MEETING EVENTS.** ACS will place detailed instructions inside each meeting room to be used if an emergency occurs during an ACS meeting event. These instructions will revolve around following the established 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 California and Santa Clara Valley local sections and their members in handling local arrangements. Volunteers have planned many interesting activities; the Host Local Section booth will be located in the Moscone Center, North Bldg., Lobby Area.

**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/sanfran2014](http://www.acs.org/sanfran2014).

**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 pro-

motional items in public meeting space except the ACS Operations Office at a given location. Items left in violation of this policy will be removed and discarded. Literature distribution at specific division tables is under the control of that division, and permission must be secured from the division before placing any items on their table.

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

**Career Fair:** Hall A

**Exhibitor Registration:** South Bldg., Lobby Area

**Exposition:** Halls B & C

**Finance Office:** Room 216, South Bldg.

**Host Local Section Center:** North Bldg., Lobby Area

**Member Services:** North Bldg., Lobby Area

**Press Center:** Room 112, North Bldg.

**Shuttle Desk:** Outside, North Bldg.

The following offices are located at the identified properties:

**Operations Offices:** Moscone Center, Hilton San Francisco Union Square, Inter-Continental San Francisco, Palace Hotel, Parc 55, San Francisco Marriott Marquis.

**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 Operations Office, South Bldg., Room 100, for access to the room.

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

## SPEAKER INSTRUCTIONS

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

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

### TECHNICAL SESSION EQUIPMENT.

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

### SPEAKER READY ROOMS & AUDIO-

**VISUAL SERVICE CENTERS.** Presenters may use the speaker ready rooms to preview their presentation, ensure compatibility with our LCD projectors, or fulfill last-minute audiovisual equipment orders. We strongly recommend that all presenters come to the speaker ready room the day

### THANK YOU

The society thanks the many volunteers of the California and Santa Clara Valley local sections who are contributing to the 248th ACS National Meeting & Exposition by participating as division officers or program chairs, symposium organizers, session or award presiders, oral and poster presenters, short course or workshop instructors, career consultants, and society governance members.

before their presentation to check for connectivity and resolution. The hours of operation will be from 3 to 5 PM Saturday and 7 AM to 6 PM Sunday through Thursday. Visit the ACS Operations Office at any ACS property for speaker ready room locations. Speaker ready rooms are not equipped with copy machines. There is a service center located in the South Bldg, near Hall C of the convention center that provides a range of services including copying, incoming and outgoing faxes, computer access, laser printing, and shipping.

**POSTER SESSIONS.** All materials must be confined to a 4-foot-high by 8-foot-wide display board in the convention center and 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 248th national meeting is now available at [www.acs.org/sanfran2014](http://www.acs.org/sanfran2014). You can search by divisions or committees, symposia, speakers, or keywords from abstracts as well as presidential events and the multidisciplinary theme of “Chemistry & Global Stewardship.”

**ABSTRACTS (USB FLASH DRIVE).** Abstracts of all scientific sessions at the meeting can be purchased in USB flash drive (thumb drive) format through ACS

Attendee Registration either online before June 29 or on-site in San Francisco from Aug. 10 to 14. 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 June 29, pay an \$8.00 postage fee per item, and provide a valid street address within the U.S. or Canada. If you are not attending the meeting, you can purchase abstracts only from the ACS Office of Society Services, 1155—16th St., N.W., Washington, DC 20036; (800) 227-5558. Abstract USB flash drives and their shipping costs are nonrefundable.

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

### Energy & Fuels.

Visit [www.proceedings.com/2256.html](http://www.proceedings.com/2256.html)

### Polymer Chemistry.

Kathy Mitchem, e-mail: [kathyl@vt.edu](mailto:kathyl@vt.edu)

### Polymeric Materials: Science & Engineering Inc.

Visit [www.pmse.sites.acs.org/pmsepreprints.htm](http://www.pmse.sites.acs.org/pmsepreprints.htm)

## SPECIAL & EDUCATIONAL EVENTS

### PRESIDENTIAL EVENTS

**TOM BARTON**, 2014 ACS president, kicks off the national meeting by inviting children and families to the ACS Public Outreach Event at the Children’s Creativity Museum on Saturday, Aug. 9, from 10 AM to 2 PM. There, attendees can experience hands-on, age-appropriate activities showcased under the theme “Exploring Our World Through Chemistry.”

His first presidential symposium, “Fracking”—Where Are We and Where Are We Going,” will take place on Monday,

Aug. 11. This symposium will cover the environmental implications and the science behind hydraulic fracturing, as well as potential impacts on drinking water and results of methane emissions during fracturing.

His other presidential symposium, on Tuesday, Aug. 12, covers the chemistry behind “Photocatalytic Conversion of Water to Hydrogen and Oxygen.” Organized by Daniel Nocera, this symposium will cover solar photovoltaics, solar storage, and include presentations by emerging energy scholars.

Always a highlight at the ACS national meetings are The Kavli lectures, which will take place on Monday, Aug. 11, at the Moscone Center. The first is The Kavli Foundation Emerging Leader in Chemistry Lecture given by Ali Khademhosseini, an associate professor at the Harvard-MIT Division of Health Sciences & Technology, Brigham & Women’s Hospital, and Harvard Medical School. He is also an associate faculty at the Wyss Institute for Biologically Inspired Engineering. His lecture on developing micro- and nanoscale technologies to control cellular behavior is from 4 to 5 PM. Shortly afterward, from 5:30 to 6:30 PM, is The Fred Kavli Foundation Innovations in Chemistry Lecture, by Joan Brennecke, Keating-Crawford Professor of Chemical & Biomolecular Engineering and director of the Center for Sustainable Energy at the University Notre Dame. Brennecke’s lecture will focus on “How Ionic Liquids Can Contribute to Global Stewardship.”

Details of presidential events and other recommended symposia can be found at [www.acs.org/sanfran2014](http://www.acs.org/sanfran2014) and in the on-site program.

### STUDENT & TEACHER ACTIVITIES

**EDUCATION-FOCUSED** programs and specialty activities are being held for undergraduate students, graduate students, high school teachers, and chemical professionals. Explore these opportunities in-depth at [www.acs.org/sanfran2014](http://www.acs.org/sanfran2014).

**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 Martin Mulvihill, executive director at the Berkeley Center for Green Chemistry, University of California, will present "Berkeley Center for Green Chemistry: An interdisciplinary approach to education, research and engagement."

## SUNDAY, AUG. 10

**Undergraduate Hospitality Center**, 9 AM to 5 PM

**Nuclear Energy Stewardship Panel** (cosponsored by NUCL), 9:30 to 10:30 AM  
**Graduate School Reality Check, Step I: Getting In** (cosponsored by YCC), 10:30 to 11:45 AM

**Graduate School Reality Check, Step II: You're In—Now What?** (cosponsored by YCC), 11:45 AM to 1 PM  
**ACS Diversity Panel: Defining Diversity & Supporting Students** (cosponsored by PROF), 12:30 to 1:30 PM  
**Chemistry Plus Purpose: Careers on the Road Less Traveled** (cosponsored by BGMT and PROF), 1:30 to 4:30 PM  
**Networking Social with Graduate School Recruiters**, 2:30 to 5:30 PM  
**"Journey to the Dark Side,"** 7 to 8 PM

## MONDAY, AUG. 11

**Undergraduate Hospitality Center**, 9 AM to 5 PM

**Opportunities for International Careers & Studies** (cosponsored by CIA), 9 to 11 AM

**Networking Basics for Students**, 11 AM to noon

**Eminent Scientist Lecture & Luncheon** (cosponsored by CHED, CTA, and GCI), noon to 1:30 PM

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

**Undergraduate Speed Networking with Chemistry Professionals** (cosponsored by the ACS Senior Chemists Committee and ACS Corporation Associates), 4 to 5:30 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.

## MONDAY, AUG. 11

**Graduate & Postdoctoral Scholars Reception**, 7 to 8:30 PM, Moscone Center, Room 125

## WEDNESDAY, AUG. 13

**Perspectives on Graduate Education in the Chemical Sciences**, 1:30 to 5 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 (800) 227-5558 ext. 4588.

### HIGH SCHOOL TEACHERS PROGRAM.

The Division of Chemical Education and the ACS Education Division are sponsoring the High School Teachers Program. It will include presentations on current pedagogies, resources, and activities that align with the meeting's theme, "Chemistry & Global Stewardship." The High School/College Interface Luncheon will bring together educators from all grade levels with the goal of facilitating an exchange of ideas and networking among teachers.

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

## SUNDAY, AUG. 10

**High School Teachers Program**, 8:30 AM to 6 PM, Moscone Center

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

## WORKSHOPS

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

*Division of Chemical Health & Safety (CHAS)-sponsored workshop fees (unless otherwise indicated).* CHAS member: full registration \$325/early registration \$250; non-CHAS member: full registration \$375/early registration \$300. Early registration ends June 27. Registration is required for all CHAS workshops. Register online at [dchas.org](http://dchas.org).

**Laboratory Waste Management.** Friday, Aug. 8, 8 AM to 4:30 PM, InterContinental San Francisco. Sponsored by CHAS. Presenter: Russ Phifer. This comprehensive course will identify the various regulatory requirements that apply to laboratories that generate hazardous waste, as well as provide insight to the options for on-site management and off-site disposal. The instructor will include discussion of recycling/reclamation techniques, economical handling of waste, and liability issues.

**Laboratory Safety.** Friday, Aug. 8, 8 AM to 4:30 PM. Sponsored by CHAS. Presenters: James Kaufman and/or Jack Breazeale. This presentation on laboratory safety by the Laboratory Safety Institute has been attended by thousands of safety professionals. With experience in both industrial and academic laboratories, the presenters take a real-world approach to safety issues in the laboratory. Interactive demonstrations will teach you about issues such as creative wiring in the lab and how to work with administrators to keep a safe working environment. This workshop will provide a forum to speak openly about safety in your workplace.

**How To Be a More Effective Chemical Hygiene Officer,** Saturday, Aug. 9, 8 AM to 4:30 PM. InterContinental San Francisco. Sponsored by CHAS. Presenter: Russ Phifer. Take a close look at the Chemical Hygiene Officer (CHO) position, and prepare at the same time for the CHO Certification exam, which will be held on Sunday, Aug. 10, through the National Registry of Certified Chemists. The instructors provide a different slant to safety issues in the laboratory, focusing on what you do and how you can do it better. The course covers



all of the content areas of the certification exam, including a sample test in the same format as the real one.

**Chemical Reactivity Hazards: Laboratory-Scale Recognition & Control.** Saturday, Aug. 9, 8 AM to 4:30 PM, InterContinental San Francisco. Sponsored by CHAS. Presenter: Neal Langerman. The Process Safety Alliance, in cooperation with the Occupational Safety & Health Administration, is presenting this workshop. The objective is to provide participants with the knowledge and skill to screen processes for potential hazards, to recognize when reactive hazards are present, and to implement appropriate controls to reduce the risk of an incident associated with the hazards. Workshop attendees will review case studies of actual incidents and do screening examples to understand the screening and recognition process. Group discussions of control methods will allow participants to share their experiences and to evaluate methods for controlling reactivity risks.

**Job Hazard Analysis.** Saturday, Aug. 9, 8 AM to 4:30 PM, InterContinental San Francisco. Sponsored by CHAS. Presenter: Sammuella Sigmund. The Job Hazard Analysis (JHA) is one method to consider hazards associated with lab research and guide the control of those hazards. A JHA can assist the researcher in uncovering potential hazards in synthesis, instrumental studies, physical manipulations, and more. Identified hazards can then be mitigated or eliminated. In this workshop, participants will learn the basic principles, required elements, and format of the common JHA. Each participant will create a ready-to-use JHA based on a task specifically applicable to their laboratory. Attendees should come with a specific idea of a chemical or process they would to investigate.

**Professional Development Workshop I.** Sunday, Aug. 10, noon to 1 PM. Sponsored by TOXI. F. Peter Guengerich, Division of Chemical Toxicology (TOXI), is organizing these workshops and will act as moderator. Speakers include Guengerich, Vanderbilt University; W. Griffith Humphreys, Bristol-Myers Squibb; Trevor Penning, University of Pennsylvania; Daniel C. Liebler, Vanderbilt University; and Kaushik Mitra, Merck. The first session will cover the "Transition from Grad School to Postdoc," including "Why Post-

doc?"; choosing labs to consider—what to look for; writing your letter; fellowships; and things to be learning as a postdoc. Fee: \$40, see registration form.

**Professional Development Workshop II.** Monday, Aug. 11, noon to 1 PM. This session will cover "Getting a Job: Both Academia & Industry," and includes how to apply; how to interview—what the drill is; how to negotiate; and wrapping up in your lab before moving on. Fee: \$40, see registration form.

**Career Launch & Acceleration for Postdoctoral Associates.** Saturday, Aug. 9, 8 AM to 4 PM. Sponsored by COACH. Learn how to assimilate fundamentals of responsible negotiation and communication skills. Attendees will examine the Best Alternative to a Negotiated Agreement (BANTA) concept as a tool to prepare and build confidence, as well as communication styles that are effective for women, projecting confidence, and using powerful rather than weak words. Discussions will focus on making the best impression in the job interview process, succeeding in the negotiating stage, and securing an academic appointment that will position you for career success. This workshop will be held concurrently with the COACH-the-COACHes workshop. Preregister at <http://coach.uoregon.edu>. Registration is free; travel assistance is available. For more information, contact Priscilla Lewis: [coach@uoregon.edu](mailto:coach@uoregon.edu), phone: (541) 346-0116.

**COACH-the-COACHes.** Saturday, Aug. 9, 8 AM to 4 PM. Sponsored by COACH. This new workshop is designed for women faculty who are interested in being trained to offer COACH workshops to graduate students and postdoctoral associates and who

have attended COACH workshops in the past. COACH-the-COACHes is being offered in conjunction with the "Career Launch & Acceleration for Postdoctoral Associates" workshop. This session will be a refresher of the negotiation and communication skills taught in faculty COACH workshops and also cover interview techniques, CV and website building, and effective scientific presentations. The workshop will also provide attendees an opportunity to work directly with the postdoctoral associates to practice skills in interviewing and negotiation. Participants must attend the full day of activities. The traditional COACH reception will follow the day's activities. Space is limited with priority given to early applicants and applicant qualifications. Apply at <http://coach.uoregon.edu>. For more information, contact Priscilla Lewis: [coach@uoregon.edu](mailto:coach@uoregon.edu), phone: (541) 346-0116.



## ACS CAREER NAVIGATOR

**ACS CAREER NAVIGATOR** is your home for career services, leadership development, in-person and online professional education, and market intelligence resources. We offer comprehensive and easily identified tools that allow you to achieve your career goals by landing a new job, finding a new career path, or comparing your salary and viewing current trends in the field to make more informed decisions.

There are many opportunities at the ACS national meeting in San Francisco to take advantage of the many resources and tools the ACS Career Navigator offers to help you succeed in the global scientific enterprise. Are you ready to get started? Refresh skills and branch into new areas of emerging science and advanced applications with a short course or with an ACS Leadership Development Systems course that gives you skills

### ENVR NRCC CERTIFICATION EXAMS

**WHAT:** Certification exams of the National Registry of Certified Chemists  
**WHEN:** Sunday, Aug. 10, 8 AM to noon  
**WHERE:** InterContinental San Francisco  
**HOW:** Advance registration and completion (with approval) of application must be done before July 31. Applications may be downloaded from [www.nrcc6.org](http://www.nrcc6.org).

For additional information, contact Russ Phifer by e-mail at [rphifer@nrcc6.org](mailto:rphifer@nrcc6.org).

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 convention center and speak to a personal career consultant. 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 ON-SITE AND ONLINE

**JOB SEEKERS**, are you looking to jump-start your job search or enhance your professional development? **EMPLOYERS**, are you looking to hire scientists and engineers? Then you need to attend the ACS Career Fair, open Sunday, Aug. 10, 9 AM to 5:30 PM; Monday, Aug. 11, 9 AM to 5 PM; and Tuesday, Aug. 12, 8 AM to 5 PM, in the Moscone Center, Hall A. The Virtual Career Fair will be held on Aug. 11 and 12, 9 AM to 6 PM. Whether on-site or online, the career fair is the place where the best talent and the best employers in chemistry meet.

### ON-SITE ACTIVITIES FOR JOB SEEKERS

Let the ACS Career Fair help you reach your career goals. ACS will help you prepare for your next career move by providing resources that make it possible to map out your personal job search strategy, strengthen your résumé, and build your interview skills, all with the support of career consultants. 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
- Request live and virtual interviews

On-site job seekers must be ACS members, be registered for the national meeting, and complete career fair registration at [www.acs.org/careers](http://www.acs.org/careers) (pick up a career fair registration badge in Hall A of the convention center beginning Sunday, Aug. 10).

### 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 strate-

gy. Please bring a copy of your résumé or CV to all appointments. All one-on-one on-site career consulting sessions will take place in the Résumé Review/Mock Interview area in Hall A. Sign-up begins at 9 AM on Sunday, Aug. 10, on a first-come, first-served basis.

### CAREER AND PROFESSIONAL DEVELOPMENT WORKSHOPS.

More than 30 career-related workshops will help you with everything from your résumé to optimizing job performance to how to ace 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, AUG. 10

**New Technologies To Find Jobs & Manage Your Career**, 10 to 11:30 AM  
**Working in Industry**, 1:30 to 5:30 PM  
**Working in Government**, 1:30 to 5:30 PM  
**Acing the Interview**, 1:30 to 5:30 PM  
**Foreign-National Scientist: Obtaining a Job in the U.S.**, 1:30 to 3 PM  
**Writing Excellent Proposals**, 3:30 to 5 PM  
**Soup to Nuts of Entrepreneurship**, noon to 1:30 PM

## MONDAY, AUG. 11

**Working in Government**, 8:30 AM to 12:30 PM  
**Working for Yourself**, 8:30 AM to 12:30 PM  
**Working in Higher Education**, 8:30 AM to 12:30 PM  
**Finding Your Path**, 1:30 to 5:30 PM  
**Acing the Interview**, 1:30 to 5:30 PM  
**Working in Industry**, 1:30 to 5:30 PM

## TUESDAY, AUG. 12

**Finding Your Path**, 8:30 AM to 12:30 PM  
**Acing the Interview**, 8:30 AM to 12:30 PM  
**Working in Industry**, 8:30 AM to 12:30 PM  
**Working in Government**, 1:30 to 5:30 PM  
**Working for Yourself**, 1:30 to 5:30 PM  
**Working in Higher Education**, 1:30 to 5:30 PM

## WEDNESDAY, AUG. 13

**Finding Your Path**, 8:30 AM to 12:30 PM  
**Acing the Interview**, 8:30 AM to 12:30 PM  
**Working in Industry**, 8:30 AM to 12:30 PM

### VIRTUAL ACTIVITIES FOR JOB

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

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

### EMPLOYERS—FIND THE TALENT YOU NEED AT THE ACS CAREER FAIR.

Leading employers around the world trust and depend on ACS to provide them with the talent they need to innovate and excel. At our last event, approximately 1,000 global job seekers—from recent grads to seasoned professionals—met with on-site and virtual recruiters seeking to fill positions in all facets of chemistry, pharmaceuticals, and biotechnology.

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

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

### 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 in the Moscone Center, Hall A, to pick up their blue badge. For more information, please visit [www.acs.org/careerfair](http://www.acs.org/careerfair). You can also contact Garretta Rollins at (800) 227-5558 ext. 6209 (U.S./Canada only), (202) 872-6209 (international), or e-mail [g\\_rollins@acs.org](mailto:g_rollins@acs.org).

## 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 in San Francisco, to obtain pricing details, or to view a full course catalog, visit [www.proed.acs.org/sanfrancisco](http://www.proed.acs.org/sanfrancisco). 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**, Aug. 8–9  
**Analysis & Interpretation of Mass Spectral Data**, Aug. 8–9  
**Fundamentals of High-Performance Liquid Chromatography**, Aug. 8–9  
**Groundwater Geochemistry for Chemists**, Aug. 8–9  
**NMR Spectral Interpretation & Organic Spectroscopy: A Problem-Based Learning Approach**, Aug. 8–9  
**How To Develop Validated HPLC Methods: Rational Design with Practical Statistics & Troubleshooting**, Aug. 10–11

### BIOLOGICAL/PHARMACEUTICAL/MEDICINAL CHEMISTRY

**Structure-Based Drug Design**, Aug. 8–9  
**Chemical Toxicology: A Chemist's Roadmap To Reduce Bioactivation Liabilities in Drug Candidates**, Aug. 9  
**Druglike Properties: Optimizing Pharmacokinetics & Safety in Drug Discovery**, Aug. 9–10

**Introduction to Drug Metabolism: Role & Practice in Drug Discovery & Development**, Aug. 10

### COMPUTERS/STATISTICS/ENGINEERING

**Chemical Engineering for Chemists**, Aug. 8–9  
**Experimental Design for Productivity & Quality in Research & Development**, Aug. 8–10  
**Getting Started with Excel and VBA in the Laboratory**, Aug. 9–10

### ORGANIC/PHYSICAL CHEMISTRY

**1-D & 2-D NMR Spectroscopy: Structure Determination of Small-Molecule Organic Compounds**, Aug. 8–9  
**Dispersions in Liquids: Suspensions, Emulsions & Foams**, Aug. 8–9  
**Mastering the Art of Writing Reasonable Organic Reaction Mechanisms**, Aug. 8–9  
**NMR Spectral Interpretation & Organic Spectroscopy: A Problem-Based Learning Approach**, Aug. 8–9  
**Organic Synthesis: Methods & Strategies for the 21st-Century Chemist**, Aug. 8–9

### POLYMER CHEMISTRY

**Polymeric Coatings**, Aug. 8–9  
**Polymer Science & Technology**, Aug. 8–9  
**Surfactants & Block Copolymers**, Aug. 10

### PROFESSIONAL DEVELOPMENT

**Technical Staff**, Aug. 8–9  
**Effective Technical Writing**, Aug. 8–9  
**Mastering the Art of Writing Reasonable Organic Reaction Mechanisms**, Aug. 8–9  
**Project Management for Technical Professionals**, Aug. 8–9  
**Analytical Property Strategies for Technical Professionals**, half-day course, Aug. 10  
**Chemists in Chemical Industry: Roles, Responsibilities & Opportunities**, Aug. 10  
**Improving Your Negotiating Skills**, Aug. 10  
**Effective Supervision of Scientists & the Write Your Own Patent Applications**, half-day course, Aug. 10

### REGULATORY/ENVIRONMENTAL

**Groundwater Geochemistry for Chemists**, Aug. 8–9  
**How To Develop Validated HPLC Methods: Rational Design with Practical Statistics & Troubleshooting**, Aug. 10–11  
**Safety & Selectivity in the Scale-up of Chemical Reactions**, Aug. 10–11

## 2014 ACS LEADERSHIP DEVELOPMENT SYSTEMS COURSE OFFERINGS

**WHETHER YOU** are a manager, experienced professional, or new to the workforce, we invite you to attend an ACS Leadership Development Systems 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).

**Collaborating Across Boundaries.** Monday, Aug. 11, 1 to 5 PM. Do you work with people from other departments or from other countries? As the world becomes more complex, the ability to reach across boundaries to work on projects and share information is critical to organizational success. It's not just a matter of communication but of genuine collaboration—working in partnership to achieve common goals, create innovative solutions, and share expertise. Learn strategies and tools to be more effective in leading collaborative efforts, and gain practical skills that you can apply immediately in the lab, at school, in the office, or at ACS.

### Engaging & Motivating Volunteers.

Tuesday, Aug. 12, 1 to 5 PM. Recruiting and engaging volunteers to help accomplish a project are challenges leaders of volunteers face. Leaders must understand what help is needed, what skills are required, and what motivation will excite volunteers to commit to the project. Learn practical tools to engage volunteers and make the assignment successful and rewarding so volunteers will participate in future assignments.

**Fostering Innovation.** Sunday, Aug. 10, 1 to 5 PM. Keeping pace in an environment of constant change requires innovation. Whether you are part of a nonprofit, business, or academic environment, the ability to contribute to the creation of new ideas, new processes, and new approaches is a key to success. Coming up with new ideas is challenging, and few of us have the tools and skills to do this effectively. This course will teach a proven, systematic process to generate ideas. You will learn your innovation style and how to stimulate innovative thinking among team members and colleagues.

**Leading Change.** Monday, Aug. 11, 8 AM to

noon. In today's world, change is a given, whether in the workplace, the lab, at school, or within ACS. Most people experience some level of stress or discomfort when confronting the disruptions change can bring. Whether it is a change in priorities, budgets, direction of a project, or new team members, understanding how we react to change and how to lead others through change is critical to your professional success. Learn a stepwise process to guide you to more effectively lead yourself and others through change.

**Leading Without Authority.** Tuesday, Aug. 12, 8 AM to noon. Leading volunteers comes with many challenges, including having no direct authority over the members. Leaders need to be able to engage and influence members to get things done, even when they may put up barriers or have different viewpoints. Learn practical tools to help you gain cooperation without formal authority and motivate your colleagues or volunteers.

## EXPOSITION

**SEE WHAT'S NEW INSIDE THE EXPOSITION.** Visit the ACS National Exposition at the Moscone Center, Halls B/C, South Bldg., from Sunday, Aug. 10, through Tuesday, Aug. 12. The show hours will be Sunday, 6 to 8:30 PM, and Monday and Tuesday, 9 AM to 5 PM.

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

**Online Exposition.** The Online Exposition is a component within the Exhibitor Directory that enables attendees to view videos, press releases, brochures, and flyers of participating exhibitors. Access the Online Exposition at [www.acs.org/sanfran2014](http://www.acs.org/sanfran2014) 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/sanfran2014](http://www.acs.org/sanfran2014).

### Presentations, Prizes & Special

**Events.** Visit the Daily Prize Booths, 337 and 1137, on Sunday through Tuesday for a chance to win a prize. Also, don't forget to join us on Sunday from 6 to 8:30 PM for the Attendee Welcome Reception inside the Town Center (booth 1401) and visit the exposition on Monday and Tuesday for morning and afternoon breaks, exciting activities, prizes, and networking opportunities. Meet the ACS president-elect candidates inside the exposition on Monday, from 1 to 3 PM.

**Internet & Technology.** Use free Internet access and leave messages for one another at the Meeting Mail terminals located throughout the meeting. Also, enjoy free Wi-Fi service at designated areas in 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 \$50. Students with school identification can obtain an expo-only badge for \$25. Registration can be handled online, by mail, or in person at ACS Attendee Registration at the Moscone Center, North Lobby.

## GOVERNANCE MEETINGS

For the complete list of committee meetings and agendas, please consult [www.acs.org/sanfran2014](http://www.acs.org/sanfran2014) or the on-site program distributed during the meeting.

### 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, Aug. 10. The guest speaker will be Sam Kean, author of "The Disappearing Spoon."

**ACS COUNCIL.** The ACS Council meeting will begin at 8 AM, Wednesday, Aug. 13, at the Hilton San Francisco Union Square hotel. The meeting will be preceded by a continental breakfast for councilors beginning at 7 AM. Councilors are asked to check in beginning at 7 AM and proceed to the breakfast area, keeping in mind that the meeting starts promptly at 8 AM. Space will be available for ACS members and nonmembers to observe the council in action. We hope that many will take advantage of this opportunity to learn firsthand of the society's operation. Alternate councilors and division and local section officers are particularly urged to attend.

## COMMITTEE AGENDA

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

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

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

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

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

## BUDGET & FINANCE

Bonnie A. Charpentier, chair;  
b\_feedback@acs.org

Open Meeting  
**Saturday, Aug. 9, 8 to 10:30 AM**  
Hilton San Francisco Union Square

## CHEMICAL SAFETY

Robert Hill, chair; safety@acs.org

Combined Open Meeting  
and Executive Session  
**Monday, Aug. 11, 8:30 to 11:30 AM**  
Hilton San Francisco Union Square

## CHEMISTRY & PUBLIC AFFAIRS

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

Open Meeting  
**Saturday, Aug. 9, 8 AM to 4 PM**  
Hilton San Francisco Union Square

## CHEMISTS WITH DISABILITIES

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

Combined Open Meeting  
and Executive Session  
**Sunday, Aug. 10, 8 AM to 4:30 PM**  
Hilton San Francisco Union Square

## COMMITTEES

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

Open Session  
**Monday, Aug. 11, 1:30 to 2:15 PM**  
San Francisco Hilton Union Square

## COMMUNITY ACTIVITIES

George L. Heard, chair; gheard@unca.edu

Executive Session  
**Sunday, Aug. 10, 10 AM to noon**  
Hilton San Francisco Union Square

CCA/LSAC Joint Open Meeting  
**Tuesday, Aug. 12, 2 to 3:30 PM**  
Hilton San Francisco Union Square

## CONSTITUTION & BYLAWS

Donna G. Friedman, chair; St. Louis Community College, 3400 Pershall Rd., St. Louis, MO 63135-1408

Open Meeting  
**Sunday, Aug. 10, 10:30 to 11:30 AM**  
Hilton San Francisco Union Square

Executive Session  
**Sunday, Aug. 10, 9 to 10:30 AM**  
Hilton San Francisco Union Square

## CORPORATION ASSOCIATES

Dawn Mason, chair; P.O. Box 431, Kingsport, TN 37662

Open Meeting  
**Monday, Aug. 11, 8 AM to noon**  
Hilton San Francisco Union Square

## COUNCIL POLICY

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

### COUNCIL POLICY COMMITTEE

The Council Policy Committee will open the floor during its meeting at 11 AM on Tuesday, Aug. 12, to councilors who would like to raise issues of concern that affect them and/or their local sections or divisions. For further information contact Alan M. Ehrlich, vice chair of CPC, at cpc@acs.org. For more committee meeting details and agendas, please consult the meeting website at [www.acs.org/sanfran2014](http://www.acs.org/sanfran2014) or the on-site program distributed during the meeting.

Open Meeting  
**Tuesday, Aug. 12, 9:30 AM to noon**  
Hilton San Francisco Union Square

## DIVISIONAL ACTIVITIES

Michael J. Morello, chair; mike.morello@pepsico.com

Open Session  
**Sunday, Aug. 10, 8 AM to noon**  
Hilton San Francisco Union Square

## ECONOMIC & PROFESSIONAL AFFAIRS

Louise M. Lawter, chair; 475 Prince William Ct., Yardley, PA 19067

Executive Session  
**Saturday, Aug. 9, 8 AM to 5:30 PM**  
San Francisco Marriott Marquis

Open Executive Session  
**Sunday, Aug. 10, 8 AM to noon**  
San Francisco Marriott Marquis

## EDUCATION

Andy Jorgensen, chair; University of Toledo, Chemistry, MS #602, 2801 West Bancroft St., Toledo, OH 43606-3328

Open Meeting  
**Monday, Aug. 11, 3 to 4 PM**  
Hilton San Francisco Union Square

Executive Session  
**Friday, Aug. 8, 1 to 5:30 PM**  
Hilton San Francisco Union Square

## ENVIRONMENTAL IMPROVEMENT

Laura Pence, chair; lpence@hartford.edu

Open Executive Session  
**Saturday, Aug. 9, 4 to 6 PM**  
Hilton San Francisco Union Square

## ETHICS

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

Open Executive Session  
**Sunday, Aug. 10, 9 AM to 4:30 PM**  
Hilton San Francisco Union Square

## INTERNATIONAL ACTIVITIES

H. N. Cheng, chair; c/o ACS Office of International Activities, 1155-16th St., N.W., Washington, DC 20036

Open Meeting  
**Saturday, Aug. 9, 1 to 3 PM**  
Hilton San Francisco Union Square

Subcommittee Meetings  
**Saturday, Aug. 9, 9 AM to noon**  
Hilton San Francisco Union Square

## LOCAL SECTION ACTIVITIES

Martin Rudd, chair; martin.rudd@uwc.edu

LSAC/CCA Joint Open Meeting  
**Tuesday, Aug. 12, 2 to 3:30 PM**  
Hilton San Francisco Union Square

Open Executive Session  
**Sunday, Aug. 10, 8 AM to noon**  
Hilton San Francisco Union Square

## MEETINGS & EXPOSITIONS

Will E. Lynch, chair; Department of Chemistry & Physics, Armstrong Atlantic State University, 11935 Abercorn St., Savannah, GA 31419-1997

Open Executive Session  
**Sunday, Aug. 10, 7 AM to noon**  
Hilton San Francisco Union Square

## MEMBERSHIP AFFAIRS

James M. Landis Jr., chair; jim.landis@us.henkel.com

Open Meeting  
**Sunday, Aug. 10, 3 to 4 PM**  
Hilton San Francisco Union Square

## MINORITY AFFAIRS

Alvaro Ribes, chair; aribes@dow.com

Executive Session  
**Sunday, Aug. 10, 8 AM to 12:30 PM**  
Hilton San Francisco Union Square

Open Executive Session  
**Sunday, Aug. 10, 12:30 to 2 PM**  
Hilton San Francisco Union Square

## NOMENCLATURE, TERMINOLOGY & SYMBOLS

Albert C. Censullo, chair; 1595 Cordova Dr., San Luis Obispo, CA 93405

Open Meeting  
**Monday, Aug. 11, 2 to 5 PM**  
Hilton San Francisco Union Square

## NOMINATIONS & ELECTIONS

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

Open Meeting  
**Sunday, Aug. 10, 1 to 1:30 PM**  
Hilton San Francisco Union Square

## PATENTS & RELATED MATTERS

Brian G. R. Treco, chair; trecob@aol.com

Open Meeting  
**Saturday, Aug. 9, 9 AM to 5 PM**  
Hilton San Francisco Union Square

## PROFESSIONAL TRAINING

Anne B. McCoy, chair; cpt@acs.org

Open Meeting  
**Sunday, Aug. 10, 4 to 5 PM**  
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## PROJECT SEED

Sandra Bonetti, chair; Colorado State University, Pueblo, Department of Chemistry, 2200 Bonforte Blvd., Pueblo, CO 81001-4901

Open Meeting  
**Sunday, Aug. 10, 9:30 to 10:30 AM**  
Hilton San Francisco Union Square

Executive Session  
**Saturday, Aug. 9, 10:30 AM to 5 PM**  
Hilton San Francisco Union Square

## PUBLIC RELATIONS & COMMUNICATIONS

David S. Gottfried, chair; dsgottfried@gatech.edu

Open Executive Session  
**Monday, Aug. 11, 8 AM to 1 PM**  
Hilton San Francisco Union Square

## PUBLICATIONS

Stephanie Brock, chair; Wayne State Uni-

versity, Chemistry, 5101 Cass Ave., Detroit, MI 48202-3929

Open Meeting  
**Friday, Aug. 8, 4:30 to 5 PM**  
Hilton San Francisco Union Square

Executive Session  
**Friday, Aug. 8, 1 to 5 PM (Closed Executive Session until 4:30 PM)**  
Hilton San Francisco Union Square

## SCIENCE

Katherine Glasgow, chair; Nomacorc LLC, 400 Vintage Park Dr., Zebulon, NC 27597-3803

Open Meeting  
**Saturday, Aug. 9, 8 AM to 4:30 PM**  
Hilton San Francisco Union Square

## SENIOR CHEMISTS

George Heinze, chair; 30 Bunker Hill Run, East Brunswick, NJ 08816-3317

Open Meeting  
**Monday, Aug. 11, 8 AM to noon**  
Hilton San Francisco Union Square

## TECHNICIAN AFFAIRS

Susan S. Marine, chair; Miami University Middletown, 4200 East University Blvd., Middletown, OH 45042

Closed Executive Session  
**Sunday, Aug. 10, 8:30 AM to 2 PM**  
Hilton San Francisco Union Square

Open Session  
**Sunday, Aug. 10, 2 to 2:30 PM**  
Hilton San Francisco Union Square

## WOMEN CHEMISTS

Amber F. Charlebois, chair; afcharleb@gmail.com

Closed Executive Session  
**Saturday, Aug. 9, 8 AM to 5 PM**  
Hilton San Francisco Union Square

## YOUNGER CHEMISTS

Douglas B. Hausner, chair; doug.hausner@gmail.com

Open and Executive Session  
**Sunday, Aug. 10, 8 AM to noon**  
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