

251ST ACS NATIONAL MEETING

SAN DIEGO, March 13-17

"COMPUTERS IN CHEMISTRY" is the theme of the ACS spring national meeting, which will be held in the San Diego Convention Center and contracted hotels.

Numerous events will support that theme, including a plenary session on Sunday, March 13, from 3 to 6 PM, featuring

MEETING INFO ON THE WEB www.acs.org/sandiego2016

experts on self-assembly, proton-coupled electron transfer, protein design, and freeenergy perturbation theory.

AGS President Donna J. Nelson will host 29 technical divisions and 5 committees in original programming over 1,028 half-day oral sessions and 141 poster sessions, including Sci-Mix. More than 12,000 papers and nearly 5,000 posters will be presented. There will also be more than 7,500 oral presentations.

Nelson will also host numerous events

and symposia during the meeting, including a public outreach event, "Exploring Our World through Chemistry," on Saturday, March 12, at 10 AM. Attendees can learn more about the world of chemistry through hands-on, age-appropriate activities.

This meeting offers programs for high school teachers, undergraduate and graduate students, postdocs, and chemical professionals. A range of professional development classes will be available; ACS Short Courses have a separate registration and fee. Job seekers can meet and interview with potential employers at the ACS Career Fair, find one-on-one career assistance, and pick among more than 20 career workshops.

The exposition will feature more than 300 companies that will showcase services, instruments, books, lab equipment, and much more in more than 400 booths.

The 2016 ACS national award winners will be recognized with a banquet on Tuesday, March 15, at 7:30 PM, and Mostafa El-Sayed, Regents' Professor and Julius Brown Chair at Georgia Institute of Technology, will deliver the Priestley Medal Address. Although the banquet is a ticketed event, the Priestley Medal Address, at 9:30 PM, is free for all registered meeting attendees. The Arthur C. Cope Award winners will be recognized at the fall national meeting in Philadelphia.—CRAIG BETTENHAUSEN

Technical Program Summary	41
General Meeting Information	63
Registration	63
Ticketed Events	65
Accommodations	67
ACS Greener Meetings	68
Travel & Transportation	69
ACS Member Services	70
On-Site Meeting Arrangements	70
Speaker Instructions	72
Abstracts & Preprints	72
Special & Educational Events	72
Presidential Events	72
2016 National Awards	73
Student & Educator Activities	76
Workshops	77
ACS Career Navigator	78
ACS Career Fair	78
ACS Short Courses	79
2016 Leadership Courses	79
Exposition	80
Governance Meetings	80
Board & Council Meetings	80
Committee Agenda	80
Registration Form	83

A

PRES **Presidential Events** D. Nelson, Program Chair S M Tu W Th San Diego Convention Center Discussions with the President's Task Force P on Employment** My Comments to the President's Task Force E on Employment** My Experiences in & Advice for Organic Chemistry Courses** My Experience with & Advice for Improving E Diversity in Chemistry**

Is There a Crisis in Organic Chemistry

Education?**	11		
How To Foster Diversity in the Chemical Sciences: Lessons Learned & Taught from the Stories of Recipients of the Stanley C. Israel Award**	A		
Diversity-Quantification-Success?**	P		
Sci-Mix	Е		
Dreyfus Award Symposium		D	
New Reality of the Chemical Enterprise: Traditional & Nontraditional Career Paths* (I&EC)	D	D	
Excellence in Graduate Polymer Research* (POLY)	D	DE	
LGBT Chemists'Symposium on Chemical Biology* (PROF)	P		

Multidisciplinary Program Planning Group	MPPG							
K. Merz, Program Chair								
San Diego Convention Center	S	М	Tu	W	Th			
Computational Materials & Nanoscience: Theory Meets Experiment** cc				D	D			
Multiscales Chemistry** cc	D	D	D	P				
Computers in Chemistry Plenary Session cc	P							
Preparing for the Real World: Challenges Faced by Young Investigators** cc		D						
The Kavli Foundation Emerging Leader in Chemistry Lecture cc		Р						
The Fred Kavli Innovations in Chemistry Lecture cc		Р						
Computers in Nanoscience & Nanotechnology cc		P						

Multidisciplinary Program Planning Group (continued)

MPPG

K. Mer	z, P	rog	ran	n Ch	ıair
San Diego Convention Center	S	М	Tu	W	Th
Computer-Aided Drug Design** €€			D	D	A
The Centrality of Computing across Chemistry cc			P		
The History of Chemistry & Computing** cc				A	
Big Data Science** cc					D
Fall 2015 InterCollegiate Cheminformatics Course* (CHED)	D				
Analytical & Computational Isotope Geochemistry* (GEOC)	D				
Environmental Interfaces* (GEOC)	P	D	D	DE	
Molecular Modeling at the Undergraduate Level* (CHED)	P				
Current Topics in Chemical Business Development & Management* (BMGT)	P				
GSSPC: Resolving the Big Picture: Bringing Molecules into Focus* (CHED)		D			
Adsorption of Metals by Geomedia* (GEOC)		Р	D	DE	A
Nonlinear Spectroscopy & Modeling* (ANYL)		Р			
Communicating Chemistry through Social Media* (CHED)		Р			
Advances in E-Learning* (CHED)			D		
Teaching & Implementing Effective Data Analysis & Computational Approaches across the Undergraduate Chemistry Program* (CHED)			P		
Homework: Past, Present & Future* (CHED)				A	
Know Your Unknowns: Estimating the Reliability of Individual Activity & Property Predictions* (COMP)				A	
Chemical Imaging: Applications, Advances & Challenges* (ANYL)				D	A
Big Data & Small Data* (ANYL)				D	
Computer-Aided Data Analysis in Chemical Education Research (CADACER)* (CHED)				D	
Online Approaches in Chemical Education* (CHED)				D	
Peptide Modeling* (COMP)				P	
Applied Geochemical Modeling* (GEOC)				Е	D

AGFD **Division of Agricultural & Food** Chemistry B. Park, Program Chair S M Tu W Th **US Grant Hotel** A Undergraduate Symposium D Flavor Chemistry of Alcoholic Beverages Α $D \mid D$ Bioactives & Neurodegenerative Diseases P Graduate Student Symposium Cannabis: Exploring the Chemistry, D History & Future** Advances in Food Peptide & Food Protein Р Research: Nutrition, Functionality & Food Safety Е Sci-Mix Chemical Modification of Natural Bio-Α based Material: Design & Application for Value-Added Products D D Public Health Perspectives of Mycotoxins in Food** D Applied Nanotechnology for Food & Agriculture Р General Posters Р Metabolomics in Agriculture & Food Chemistry: Current Status & Future Scopes D General Papers Natural & Modified Carbohydrate D Polymers: Effects on Obesity-Related Metabolic Diseases Advances & Applications in Water-Sensing | D Technologies for Drinking Water, Reuse,

Division of Agrochemicals	AGRO)	
J. Gan, P. Rice, Program Chairs						
Located with Primary Sponsor	S	М	Tu	W	Th	
Wolfrom Award* (CARB)	A					
Public Health Perspectives of Mycotoxins in Food* (AGFD)			D	D		

Agri-Tech & Research* (ENVR)

History & Future* (SCHB)

Undergraduate Research Posters* (CHED) Cannabis: Exploring the Chemistry,

Division of Analytical Chemistry

I Harris I Raker Program Chaire

J. Harris, L. Baker, Program Chairs								
Wyndham San Diego Bayfront	S	М	Tu	W	Th			
Sampling & Processing of Biological Particles Enabled by Micro- or Nano- Fluidics	A							
Luminescent Proteins, Dyes & Sensors	D							
XRF: Cutting-Edge Elemental Spectrometry	Р	A						
Capillary Electrophoresis Applied to Bioanalysis	Р							
Analytical Division Poster Session	Е							
Electrochemical Measurements at Biological Interfaces		A						
Protein Structure & Folding: From Solution to the Gas Phase**		D						
Analytical Methodologies & Research Partnerships at the Interface of Chemistry & Art/Archaeology		P	D					
Nonlinear Spectroscopy & Modeling**		Р						
Sci-Mix		Е						
Frank H. Field & Joe L. Franklin Award for Outstanding Achievement in Mass Spectrometry: Honoring Albert J. R. Heck**			A					
Biosensing of Proteins, Peptides, DNAs & RNAs			D	D				
Approaches for Engaging Students in Analytical Chemistry Courses**			P					
Chemical Imaging: Applications, Advances & Challenges**				D	A			
Big Data & Small Data** cc				D				
Advances in Analytical Separations					D			
Advances in Structural Mass Spectrometry					Р			
Multiscales Chemistry* (MPPG)	D	D	D	P				
Global Initiatives in Research Data Management & Discovery* (CINF)	P	D						
Advances in Chemical Imaging: Ultra- Resolution to Single Molecules* (SOCED)		A						

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

CC = Computers in Chemistry

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

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

Р

A

^{**}Primary organizer of a cosponsored symposium.

Division of Analytical Chemistry ANYL (continued)

J. Harris, L. Baker, Program Chairs

J. 1101 1 13, 11. Danci	, . ,	<u> </u>	ciii	On the	
Wyndham San Diego Bayfront	S	М	Tu	W	Th
GSSPC: Resolving the Big Picture: Bringing Molecules into Focus* (CHED)		D			
Undergraduate Research Posters* (CHED)		P			
Public Health Perspectives of Mycotoxins in Food* (AGFD)			D	D	

BIOT **Division of Biochemical** Technology S. Tobler, P. Tessier, Program Chairs S M Tu W Th Westin San Diego Α David Perlman Memorial Lectureship & Van Lanen Service Award Presentation $D \mid D \mid D$ Biomolecular & Biophysical Processes D D D D D D D **Upstream Processes** D D Biofuel & Biobased Chemical Production DE D $D \mid D \mid$ D Downstream Processes D Computationally Enabled Biotechnology at the Molecular, Cellular & Process Scales co Marvin J. Johnson Award in Microbial & Α Biochemical Technology Presentation Sci-Mix Е BIOT Young Investigator & Peterson A Awards Presentations $D \mid D \mid D$ **Emerging Technologies** D Biosimilars Е Poster Session Е BIOT Industrial Biotechnology Award Quality by Design for Biopharmaceuticals DA Biotechnology & Bioengineering Daniel I. Е C. Wang Award Biotechnology & Bioengineering Elmer Α Gaden Award ACS Award in Separations Science & Α Technology: Honoring Steven M. Cramer* (I&EC) P Undergraduate Research Posters* (CHED) Р LGBT Chemists' Symposium on Chemical

Biology* (PROF)

Division of Biological Chemistry BIOL V. Bandarian, L. Hedstrom, Program Chairs S M Tu W Th Marriott Marquis San Diego Marina Α Computational Enzymology cc Р Young Investigators in Biological D Α Α Chemistry E. Bright Wilson Award in Spectroscopy: Honoring Robert G. Griffin** Е Е Current Topics in Biochemistry Frontiers in Biomolecular Recognition: A From Materials to Cells Sci-Mix Е Chemistry in Service of Biology: Tools for Α Probing Cellular Processes ACS Chemical Biology Award Symposium P RNA Structure & Function: Perspectives Α from Inside the Cell & Out Goodman Award: Honoring Joan Steitz Р D D Α Structure & Dynamics in Enzymatic A Catalysis across Multiple Timescales: Experiment & Theory* (PHYS) DDP Multiscales Chemistry* (MPPG) Discussions with the President's Task Force P on Employment* (PRES) My Experience with & Advice for Improving E Diversity in Chemistry* (PRES) My Comments to the President's Task Force E on Employment* (PRES) My Experiences in & Advice for Organic Е Chemistry Courses* (PRES) Is There a Crisis in Organic Chemistry A Education?* (PRES) Undergraduate Research Posters* (CHED) P LGBT Chemists' Symposium on Chemical Р Biology* (PROF)

Р

Α

 $D \mid D$ A

D

Diversity-Quantification-Success?* (PRES)

ACS Award for Encouraging Women

Honoring Carol A. Fierke* (WCC)

Big Data Science* (MPPG)

into Careers in the Chemical Sciences:

Computer-Aided Drug Design* (MPPG)

Division of Business Development & Management

BMGT

D. Dalv, Program Chair

Westin San Diego Gaslamp Quarter	S	М	Tu	W	Th
Current Topics in Chemical Business Development & Management** cc	Р				
Industrial Research at the Interface of Inorganic Chemistry & Polymer Science* (POLY)	P		Е		
Discussions with the President's Task Force on Employment* (PRES)	P				
My Comments to the President's Task Force on Employment* (PRES)	Е				
Women in Innovation: Science & Technology* (PROF)		A			
Industrial Innovation in Polymer Chemistry: Sustainable Polymerization Feedstocks & Process Technology* (POLY)		P			
Chemical Angel Network* (PROF)			Р		

Division of Carbohydrate Chemistry

CARB

N. Snyder, Program Chair

Marriott Marquis San Diego Marina	S	М	Tu	W	Th
Wolfrom Award**	A				
Isbell Award	P				
Gin New Investigator Award	P				
Glycosylases: Inhibition & Therapeutic Applications**		D			
Sci-Mix		Е			
Carbohydrate Research at Predominantly Undergraduate Institutions**			D		
General Posters			Е		
From mAb to ADCs: Tailored Antibodies & Dedicated Chemistry Technologies for Site-Specific ADCs**				A	
Click Chemistry in Carbohydrate, Materials Science & Biomedicine: Honoring Professor Sharpless's 75th Birthday**				D	A
Functional Lignocellulosics & Nanotechnology* (CELL)	D	D	A	D	
Discussions with the President's Task Force on Employment* (PRES)	Р				

Division of Carbohydrate Chemistry (continued)

CARB

N. Snyder, Program Chair

Marriott Marquis San Diego Marina	S	М	Tu	W	Th
My Comments to the President's Task Force on Employment* (PRES)	Е				
Biomedical & Drug Delivery Applications of Polysaccharide-Based Materials* (CELL)				D	A

Division of Catalysis Science & Technology

CATL

E. Nikolla, K. Ramasamv, Program Chairs

E. Nikolla, K. Ramasamy, Program Chair.							
Manchester Grand Hyatt San Diego	S	М	Tu	W	Th		
Catalytic Materials for Methane Conversion** cc	D	A					
Catalysis at the Subnanometer Scale**	D	A					
Computational Chemistry across Catalysis** cc	D	D	D	A			
Amorphous Catalytic Materials cc	D	D					
Fundamental Surface Chemistry of Non- oxide Transition-Metal Ceramic Catalysts: Carbides, Nitrides, Sulfides, Phosphides, Selenides** cc	D						
Ipatieff Prize: Honoring Aditya Bhan		D	D				
Elucidation of Mechanisms & Kinetics on Surfaces**		Р	D	D	D		
Surface Chemistry & Catalysis of Metal Oxides cc		Р	D	D			
Sci-Mix		Е					
Condensed Phase Catalysis** cc			A				
Fischer-Tropsch Catalysis: From Fundamentals to Industrial Practice**			Р	D	D		
Poster Session			Е				
Catalytic Processes at Interfaces: Fundamentals & Applications cc				D	A		
James Flack Norris Award in Physical Organic Chemistry: Honoring Juan C. Scaiano				D			

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

CC = Computers in Chemistry

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

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

^{**}Primary organizer of a cosponsored symposium.

Division of Catalysis Science & Technology (continued)

CATL

E. Nikolla, K. Ramasamv, Program Chairs

E. Nikolia, K. Kamasamy, Frogram Ghali						
Manchester Grand Hyatt San Diego	S	М	Tu	W	Th	
General Papers					D	
Structure, Dynamics & Reactivity at Complex Interfaces with Relevance in Renewable Energy & Environmental Applications* (COMP)	D	D				
Alpha-Olefin Catalysis: Production & Transformations* (I&EC)	D					
Fuel Cells* (ENFL)	D					
CO ₂ Conversion & Utilization* (ENFL)		D	D	D		
WCC 2016 Rising Stars Awards Symposium* (WCC)		D				
Nanomaterials for Energy Conversion & Storage* (ENFL)		P	D	A		
Application of Computational Chemistry for Energy & Fuel Production* (ENFL)			D	D	A	
Gabor A. Somorjai Award for Creative Research in Catalysis: Honoring Donna G. Blackmond* (ORGN)				A		
In Situ & Operando Characterization & Modeling of Reaction Kinetics* (ENFL)				D	A	
George A. Olah Award in Hydrocarbon or Petroleum Chemistry: Honoring Mieczyslaw M. Boduszynski* (ENFL)				P		

Division of Cellulose & Renewable C E L **Materials**

C. Frazier, Program Chair

Marriott Marquis San Diego Marina S M Tu W T									
Marriott Marquis San Diego Marina	S	М	Tu	W	Th				
Functional Lignocellulosics & Nanotechnology**	D	D	A	D					
Lignin Refining, Functionalization & Utilization	D	D	A						
Structure of Native Celluloses & Variety of Nanocelluloses that Can Be Formed from Them: Anselme Payen Award Symposium in Honor of Akira Isogai	D	D	D						
New Horizons in Sustainable Materials**	D	D							
Biomass & Polymer Extrusion, Composite & Reaction Technologies: New Insights, Future Potential & Principles to Practice**	D								
General Posters	Е								

Division of Cellulose & Renewable C E L Materials (continued)

C. Frazier, Program Chair Marriott Marquis San Diego Marina S M Tu W Th									
Marriott Marquis San Diego Marina	S	М	Tu	W	Th				
Valorization of Renewable Resources & Residuals into New Materials & Multiphase Systems		D	A	D	D				
Sci-Mix		Е							
Cellulose Nanocomposites: Processing, Development & Their Structure-Property Relations			A	D	D				
Biomedical & Drug Delivery Applications of Polysaccharide-Based Materials**				D	A				
Cellulose Nanocrystal Fundamentals				D	D				
Discussions with the President's Task Force on Employment* (PRES)	P								
My Experience with & Advice for Improving Diversity in Chemistry* (PRES)	Е								
My Comments to the President's Task Force on Employment* (PRES)	Е								
My Experiences in & Advice for Organic Chemistry Courses* (PRES)	Е								
Is There a Crisis in Organic Chemistry Education?* (PRES)		A							
Glycosylases: Inhibition & Therapeutic Applications* (CARB)		D							
Diversity-Quantification-Success?* (PRES)		P							
Carbohydrate Research at Predominantly Undergraduate Institutions* (CARB)			D						
Click Chemistry in Carbohydrate, Materials Science & Biomedicine: Honoring Professor Sharpless's 75th Birthday* (CARB)				D	A				

Division of Chemical Education

CHED

I. Levy, I. Black, D. Wicht, Program Chairs

Manchester Grand Hyatt San Diego	S	М	Tu	W	Th
Cottrell Scholars Collaborative: Innovating the Integration of Research & Teaching	A				
The Two-Year Guidelines: What's New**	A				
Fundamentals of Chemistry Outreach Education: From Program Design to Assessment**	D	A			
Undergraduate Research Papers**	D	D			

CHED **Division of Chemical Education** (continued) I. Levy, I. Black, D. Wicht, Program Chairs S M Tu W Th Manchester Grand Hyatt San Diego D Chemistry Education Research: Graduate Student Research Forum Fall 2015 InterCollegiate Cheminformatics D Course** cc D High School Program** NMR Spectroscopy in the Undergraduate D Curriculum Molecular Modeling at the Undergraduate Level** cc Perspectives on Climate Change Literacy & P Education: Local to International** General Posters E Strategies Promoting Success of Two-Year Α Α College Students ACS Award for Achievement in Research A for the Teaching & Learning of Chemistry: Honoring Avi Hofstein Chemistry Education Research D $D \mid D \mid A$ Chemists Helping Teachers Incorporate D Next Generation Science Standards (NGSS) into Their K-12 Classrooms GSSPC: Resolving the Big Picture: Bringing D Molecules into Focus** cc Communicating Chemistry through Social P Media** cc P Integration of STEM & the Liberal Arts P Research on Learning in the Lab P Undergraduate Research Posters** cc Е Potpourri of Polymer Projects: Take a Byte out of the NGSS** E Successful Student Chapters** Е Sci-Mix ACS-CEI Award for Incorporating A Sustainability into Chemistry Education** General Papers D Α D Advances in E-Learning** cc D George C. Pimentel Award in Chemical Education: Honoring Richard S. Moog D Green Chemistry: Theory & Practice** International & Multicultural Perspective** P

Division of Chemical Education (continued)

CHFD

I Low I Black D Wicht Program Chairs

I. Levy, I. Black, D. Wicht, Program Chairs							
Manchester Grand Hyatt San Diego	S	М	Tu	W	Th		
Teaching & Implementing Effective Data Analysis & Computational Approaches across the Undergraduate Chemistry Program** cc			P				
Homework: Past, Present & Future** cc				A			
Computer-Aided Data Analysis in Chemical Education Research (CADACER)** cc				D			
Curricular Innovations in Undergraduate Chemical Education Impacted by NSF				D			
Implementing Discovery-Based Research Experiences in Undergraduate Chemistry Courses				D			
Online Approaches in Chemical Education** cc				D			
Process Oriented Guided Inquiry Learning (POGIL)				D			
Citizens First!**				P			
Instructors & Researchers Advancing Graduate Student Education					A		
Supporting & Expanding Undergraduate Research in Chemistry					A		
Ethics 101* (PROF)	A						
$\label{thm:continuous} Undergraduate\ Teaching\ at\ the\ Frontiers\ of\ Inorganic\ Chemistry^*\ (INOR)$	ΑE	Р					
Going Global with International Scientific Training: An Undergraduate Perspective of International Research Experiences* (IAC)	D						
Safety Begins in the Classroom: Demonstrations, Awareness & Prelab Planning* (CHAS)	P						
Preceptors of Chemistry* (HIST)	P						
Discussions with the President's Task Force on Employment* (PRES)	P						
My Experience with & Advice for Improving Diversity in Chemistry* (PRES)	Е						

CC = Computers in Chemistry

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

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

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

^{**}Primary organizer of a cosponsored symposium.

Division of Chemical Education (continued)

CHED

I. Levy, I. Black, D. Wicht, Program Chairs

Manchester Grand Hyatt San Diego	s			Th
My Comments to the President's Task Force on Employment* (PRES)	E			
My Experiences in & Advice for Organic Chemistry Courses* (PRES)	Е			
Is There a Crisis in Organic Chemistry Education?* (PRES)		A		
Preparing for the Real World: Challenges Faced by Young Investigators* (MPPG)		D		
Diversity-Quantification-Success?*(PRES)		Р		
Successful REU Programs* (PROF)			A	
Developing, Implementing & Teaching Hazard Assessment Tools* (CHAS)			D	
Approaches for Engaging Students in Analytical Chemistry Courses* (ANYL)			Р	
James Bryant Conant Award in High School Chemistry Teaching: Honoring Julia Winter* (ORGN)			P	

Division of Chemical Health & Safety

CHAS

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

Hilton Gaslamp San Diego	S	М	Tu	W	Th
Ask Dr. Safety: Incident Reporting**	P				
Safety Begins in the Classroom: Demonstrations, Awareness & Prelab Planning**	P				
How Texas Tech & UCLA Have Affected Laboratory Safety Nationwide**		P			
Sci-Mix		Е			
Developing, Implementing & Teaching Hazard Assessment Tools**			D		
Chemical, Sample & Asset Management Tools**				D	
Cannabis: Exploring the Chemistry, History & Future* (SCHB)			A		

Division of Chemical Information

E. Davis, E. Alvaro, Program Chairs

E. Davis, E. Alvaro							
San Diego Convention Center	S	М	Tu	W	Th		
Tomayto versus Tomahto: Overcoming Incompatibilities in Scientific Data cc	A						
From Data to Prediction: Applying Structural Knowledge in Drug Discovery & Development cc	D						
Global Initiatives in Research Data Management & Discovery** cc	Р	D					
Data Mining: Searching Noncovalent Interactions in Chemical Databases** cc	Р						
CINF Scholarships for Scientific Excellence: Student Poster Competition cc	Е						
Beyond Digitized Paper: The Next Generation of ELNs cc		A					
Informatics & Quantum Mechanics: Combining Big Data & DFT in Pharma & Materials cc		D					
Chemical Information for Small Businesses & Start-ups** cc		Р					
Sci-Mix		Е					
Chemistry, Data & the Semantic Web: An Important Triple to Advance Science co			D	D	D		
Driving Change: Impact of Funders on the Research Data & Publications Landscape**			D				
Linking Big Data with Chemistry: Databases Connecting Genomics, Biological Pathways & Targets to Chemistry cc			D				
Reimagining Libraries as Innovation Centers: Enabling, Facilitating & Collaborating throughout the Research Life Cycle cc				D			
General Papers					Α		
From Synthesis to Design: Modeling Tools for Medicinal Chemists* (COMP)	A						
ata Mining: Searching Noncovalent teractions in Chemical Databases** cc NF Scholarships for Scientific teellence: Student Poster Competition cc ryond Digitized Paper: The Next teneration of ELNs cc formatics & Quantum Mechanics: ombining Big Data & DFT in Pharma & aterials cc memical Information for Small Businesses Start-ups** cc i-Mix memistry, Data & the Semantic Web: An aportant Triple to Advance Science cc riving Change: Impact of Funders on the esearch Data & Publications Landscape** mking Big Data with Chemistry: atabases Connecting Genomics, cological Pathways & Targets to memistry cc simagining Libraries as Innovation tenters: Enabling, Facilitating & collaborating throughout the Research Life ccle cc emeral Papers om Synthesis to Design: Modeling Tools of Medicinal Chemists* (COMP) hics 101* (PROF) Ill 2015 InterCollegiate Cheminformatics ourse* (CHED) scussions with the President's Task Force is Employment* (PRES) y Experience with & Advice for Improving is propertied.	A						
	D						
Discussions with the President's Task Force on Employment* (PRES)	Р						
My Experience with & Advice for Improving Diversity in Chemistry* (PRES)	Е						

Division of Chemical Information (continued)

E. Davis, E. Alvaro, Program Chairs

	, 1 '	Ug i	um	Gii	ли <i>э</i>
San Diego Convention Center	S	М	Tu	W	Th
My Comments to the President's Task Force on Employment* (PRES)	Е				
y Comments to the President's Task Force En Employment* (PRES) y Experiences in & Advice for Organic Inemistry Courses* (PRES) There a Crisis in Organic Chemistry ducation?* (PRES) reparing for the Real World: Challenges Ineed by Young Investigators* (MPPG) Imputers in Chemistry: Bridging the Gap Interest in Chemistry: B	Е				
		A			
Preparing for the Real World: Challenges Faced by Young Investigators* (MPPG)		D			
Computers in Chemistry: Bridging the Gap between Clients & Software* (SCHB)		Р			
Diversity-Quantification-Success?*(PRES)		P			
Computer-Aided Drug Design* (MPPG)			D	D	A
Chemical Imaging: Applications, Advances & Challenges* (ANYL)				D	A
Big Data & Small Data* (ANYL)				D	
Chemical, Sample & Asset Management Tools* (CHAS)				D	
Big Data Science* (MPPG)					D

Division of Chemistry & the Law

CHAL

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

San Diego Convention Center	S	М	Tu	W	Th
Strengthening Your Patent Rights in Light of Recent Federal Circuit Court Decisions	P				
Patenting Gene Sequences: What Is Patentable in Australia, Europe, Mexico & the U.S.	P				
Symposium on the Generic Drug User Fee Program (GDUFA) of 2012 & ANDA Review Process		A			
The Role of Scientific Patent Information in the Innovation Process		P			
Sci-Mix		Е			
Recent Developments in Chemical & Pharmaceutical Patent Law			D		
Building & Protecting Intellectual Property				A	
Chemistry of Peace				P	
The Many Faces of CHAL: Where Chemistry Meets the Law					A

Division of Colloid & Surface Chemistry

COLL

R. Nagarajan, Program Chair

K. Nagarajar	· ·	$\tilde{}$			$\overline{}$
San Diego Convention Center	S	М	Tu	W	Th
Colloids for Medical Imaging	D	D	A	A	
Biomembrane Synthesis, Structure, Mechanics & Dynamics	D	D	A	D	A
Nanomedicines: Targeting & Clearance	D	D	A	D	
Nanometal: Synthesis, Structure, Property & Application	D	D	A	D	
ACS Award in Colloid & Surface Chemistry: Honoring Nicholas L. Abbott	D	D	D		
Basic Research in Colloids, Surfactants & Nanomaterials	D	D		D	A
Frontier of the Interface of Materials & Biology: Protein-Based Nanomaterials	D	D			
Proteins & Polymers Under Confinement	P				
Fundamental Research in Colloids, Surfaces & Nanomaterials	Е				
Computational & Experimental Advances Toward Design of Energy-Efficient Catalysts		D	A		
Sci-Mix		Е			
Surface Characterization & Manipulation for Electronic Applications			A	D	A
Computational Modeling & Simulations in Colloid & Surface Chemistry cc			A	D	
Physical Chemistry of Complex Environmental Interfaces* (PHYS)	D	D	A	P	D
Applications of Polymer Surfaces & Interfaces* (POLY)	D	Р	DE	D	A
Environmental Interfaces* (GEOC)	P	D	D	DE	
Discussions with the President's Task Force on Employment* (PRES)	P				
My Experience with & Advice for Improving Diversity in Chemistry* (PRES)	Е				
My Comments to the President's Task Force on Employment* (PRES)	Е				

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

CC = Computers in Chemistry

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

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

^{**}Primary organizer of a cosponsored symposium.

Division of Colloid & Surface Chemistry (continued)

COLL

R. Nagarajan, Program Chair

ı		٠,	- 0			
	San Diego Convention Center	S	М	Tu	W	Th
	Elucidation of Mechanisms & Kinetics on Surfaces* (CATL)		P	D	D	D
	Diversity-Quantification-Success?* (PRES)		P			

Division of Computers in Chemistry

COMP

San Diego Convention Center	ock, Program Chair S M Tu W Th								
From Synthesis to Design: Modeling Tools	A	IVI	ıu	VV	111				
for Medicinal Chemists** cc	А								
Drug Discovery cc	D	D	D		D				
From Dynamics to Function & Back Again: Adventures in Simulating Biomolecules**	D	D		D					
Computational Materials Chemistry	D	D							
Structure, Dynamics & Reactivity at Complex Interfaces with Relevance in Renewable Energy & Environmental Applications**	D	D							
COMP Undergraduate Research & National Meeting Roundtable	Р								
Molecular Mechanics		D	D	D	D				
Sci-Mix		Е							
Materials Science			D	A					
Quantum Mechanics**			D	D	D				
ACS Award for Computers in Chemical & Pharmaceutical Research: Honoring Warren J. Hehre			D						
Chemical Computing Group Excellence Award for Graduate Students			Е						
NVIDIA GPU Award			Е						
OpenEye Outstanding Junior Faculty Award in Computational Chemistry			Е						
Poster Session			Е						
Know Your Unknowns: Estimating the Reliability of Individual Activity & Property Predictions**				A					
Advances in Computer-Aided Biologics Design cc				D					
Time-Dependent Dynamics & Electronic Excited States				Р	D				

Division of Computers in Chemistry (continued)

COMP

H. L. Woodcock, Program Chair San Diego Convention Center S M Tu W Th										
San Diego Convention Center	S	М	Tu	W	Th					
Peptide Modeling**				P						
Computational Materials & Nanoscience: Theory Meets Experiment* (MPPG)	A			P	Р					
Computational Chemistry across Catalysis* (CATL)	D	D	D	A						
Multiscales Chemistry* (MPPG)	D	D	D	P						
Global Initiatives in Research Data Management & Discovery* (CINF)	P	D								
Data Mining: Searching Noncovalent Interactions in Chemical Databases* (CINF)	P									
Trends in Computational Chemistry: Biophysical to Materials Chemistry* (SOCED)	P									
Preparing for the Real World: Challenges Faced by Young Investigators* (MPPG)		D								
WCC 2016 Rising Stars Awards Symposium* (WCC)		D								
Undergraduate Research Posters* (CHED)		P								
Computational Design of Advanced Materials* (COMSCI)			A							
Computer-Aided Drug Design* (MPPG)			D	D	A					
Opportunities & Progress in Computational Prediction of Contaminant Toxicity, Fate & Transport Properties* (ENVR)			P							
The History of Chemistry & Computing* $(MPPG)$				A						
Computational Materials & Nanoscience: Theory Meets Experiment* (MPPG)				D	D					
Big Data Science* (MPPG)					D					

Division of Energy & Fuels

ENFL

X. Wang, D. Heldebrant, Program Chairs

Wyndham San Diego Bayfront	S	М	Tu	W	Th
Advances in Methane Technology	D	A			
Solar Cells	D	D			
Advances in Chemistry of Energy & Fuels	D	D			
Fuel Cells**	D				

Division of Energy & Fuels ENFL (continued) X. Wang, D. Heldebrant, Program Chairs S M Tu W Th Wyndham San Diego Bayfront Р Heavy Oil Upgrading, Production & Characterization Research Opportunities for Future Energy Technologies D D CO2 Conversion & Utilization** D D D Novel Materials for Energy & Fuels D D D ENFL Distinguished Researcher Award: Honoring Stu Soled P D Α Nanomaterials for Energy Conversion & Storage** Ε Sci-Mix Application of Computational Chemistry D D A for Energy & Fuel Production** D D Α Batteries & Supercapacitors D Α In Situ & Operando Characterization & Modeling of Reaction Kinetics** Р George A. Olah Award in Hydrocarbon or Petroleum Chemistry: Honoring Mieczyslaw M. Boduszynski** Catalytic Materials for Methane DA Conversion* (CATL) Computational Chemistry across Catalysis* D D DA (CATL) Fundamental Surface Chemistry of Nonoxide Transition-Metal Ceramic Catalysts: Carbides, Nitrides, Sulfides, Phosphides, Selenides* (CATL) DDD Environmental Aspects of Unconventional Oil & Gas Production & Hydraulic Fracturing* (ENVR) D WCC 2016 Rising Stars Awards Symposium* (WCC) Condensed Phase Catalysis* (CATL) A P D Fischer-Tropsch Catalysis: From D Fundamentals to Industrial Practice* (CATL)

Computational Materials & Nanoscience:

Theory Meets Experiment* (MPPG)

Division of Environmental Chemistry

ENVR

S. Al-Abed, Program Chair

S. Al-Abed, Program Cha									
Omni San Diego Hotel	S	М	Tu	W	Th				
Characterization & Toxicity of Airborne Particulate Matters (PMs) in East Asia	D			Е					
Sources, Fate & Transport of Perfluorinated Alkyl Substances in the Environment: Theory, Practice & Innovation	D			Е					
Detection of Engineered Nanomaterials in Environmentally Relevant Media	D								
Flue Gas Cleaning & Climate Control	D								
New Challenges on Metals & Metalloids: Chemistry, Treatment & the Impacts on Water Quality	D								
Advances & Applications in Water-Sensing Technologies for Drinking Water, Reuse, Agri-Tech & Research**	D								
Water Treatment Technologies To Support Food-Energy-Water Nexus Water Conservation Needs**		P							
Carbonate & Sulfate Minerals: Nucleation, Growth & Control of Scale Formation** cc		D	A						
Per- & Polyfluoroalkyl Substances Associated with Aqueous Film-Forming Foams (AFFF): Chemistry, Remediation & Regulatory Issues		D	A						
Environmental Aspects of Unconventional Oil & Gas Production & Hydraulic Fracturing** cc		D	D	D	D				
Treatment of Contaminants of Emerging Concern & Their Transformation Products**		D	D	E					
Innovative Materials & Technologies for Water Purification		D	D						
Chemistry of Materials Management: Mitigation & Reuse for Sustainable Environment**		P							

CC = Computers in ChemistryA = AM AE = AM/EVE P = PM D = AM/PM

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

DD

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

^{**}Primary organizer of a cosponsored symposium.

Division of Environmental Chemistry (continued)

ENVR

S. Al-Abed, Program Chair

S. Al-Abed, Program Chair								
Omni San Diego Hotel	S	М	Tu	W	Th			
Sci-Mix		Е						
Chemistry & Application of Advanced Oxidation Processes for Water Purification, Treatment & Reuse			D	DE	A			
Science & Perception of Climate Change**			Р	Е				
Opportunities & Progress in Computational Prediction of Contaminant Toxicity, Fate & Transport Properties** cc			P					
ES&T @ 50: Award-Winning Researchers Past, Present & Future				A				
Aquatic Photochemistry**				DE	D			
Green Chemistry & the Environment**				DE				
Advances in In Situ Pollutant Destruction by Nanoscale Zero-Valent Iron & Other Engineered Nanoparticles				P	D			
Membrane Technology for Water-Energy Sustainability**				P	D			
General Posters				Е				
Analytical & Computational Isotope Geochemistry* (GEOC)	D							
Environmental Interfaces* (GEOC)	P	D	D	DE				
Francis P. Garvan-John M. Olin Medal: Honoring Annie Kersting* (NUCL)		D						
Earle B. Barnes Award for Leadership in Chemical Research Management: Honoring Henry E. Bryndza* (INOR)		P	A					
Elucidation of Mechanisms & Kinetics on Surfaces* (CATL)		Р	D	D	D			
Adsorption of Metals by Geomedia* (GEOC)		Р	D	DE	A			
Undergraduate Research Posters* (CHED)		P						
Greener Pathways to Organics & Nanomaterials: Sustainable Applications of Magnetic Nanocatalysts* (I&EC)				D	A			

Division of Fluorine Chemistry

FILLO

V. Petrov, Program Chair

v. Petrov, Program Gna									
Westin San Diego Gaslamp Quarter	S	М	Tu	W	Th				
ACS Award for Creative Work in Fluorine Chemistry: Honoring Steven H. Strauss	DE	DE							

Division of Geochemistry

GEOC

Y. Jun, Program Chair

Y. Jun, Program Chan					
Omni San Diego Hotel	S	М	Tu	W	Th
Geochemical Reactivity of Nanoparticles, Aggregates, Coatings & Organo- Nanoparticulate Flocculates	A			Е	
Closing the Human Phosphorus Cycle: Biogeochemistry, Sustainable Phosphorus Recovery, Speciation, Detection & Reuse	A			Е	
Analytical & Computational Isotope Geochemistry**	D				
Frontiers in Microscopic Techniques & Applications to Geochemical Reactions	P	A			
Environmental Interfaces**	P	D	D	DE	
Adsorption of Metals by Geomedia**		Р	D	DE	A
Sci-Mix		Е			
General Geochemistry			Α	Е	
Environmental Consequences of Resource Development				ΑE	
Applied Geochemical Modeling** cc				Е	D
Discussions with the President's Task Force on Employment* (PRES)	Р				
My Experience with & Advice for Improving Diversity in Chemistry* (PRES)	Е				
My Comments to the President's Task Force on Employment* (PRES)	Е				
My Experiences in & Advice for Organic Chemistry Courses* (PRES)	Е				
Is There a Crisis in Organic Chemistry Education?* (PRES)		A			
Carbonate & Sulfate Minerals: Nucleation, Growth & Control of Scale Formation* (ENVR)		D	A		
Environmental Aspects of Unconventional Oil & Gas Production & Hydraulic Fracturing* (ENVR)		D	D	D	D
Undergraduate Research Posters* (CHED)		Р			
Diversity-Quantification-Success?* (PRES)		Р			
Aquatic Photochemistry* (ENVR)				DE	D

Division of the History of Chemistry

S. Rasmussen, Program Chair

2.1 (continuo en 1 1 0 g 1 cm 2 cm 2									
Hilton San Diego Bayfront	S	М	Tu	W	Th				
HIST Tutorial & General Papers	A		A						
Preceptors of Chemistry**	P								
The Posthumous Nobel Prize in Chemistry: Correcting the Errors & Oversights of the Nobel Prize Committee		D							
Sci-Mix		Е							
Memorial Symposium Honoring Karen J. Brewer* (INOR)			D	D					
The History of Chemistry & Computing* $(MPPG)$				A					

Division of Industrial & **Engineering Chemistry**

I&EC

P. Smith, E. Rosenhurg, Program Chair

P. Smith, E. Rosenburg, Program Chai										
Marriott Marquis San Diego Marina	S	М	Tu	W	Th					
ACS Award in Separations Science & Technology: Honoring Steven M. Cramer**	A									
Alpha-Olefin Catalysis: Production & Transformations**	D									
Industrial & Engineering Fellow: Honoring Bala Subramaniam	P									
New Reality of the Chemical Enterprise: Traditional & Nontraditional Career Paths**		D	D							
Industrial & Engineering Fellow: Honoring Mark B. Shiflett		D								
Sci-Mix		Е								
ACS Award in Industrial Chemistry: Honoring Ted C. Germroth**			A							
Separations for the Nuclear Fuel Cycle in the 21st Century Revisited**			P	D						
General Posters			Е							
Greener Pathways to Organics & Nanomaterials: Sustainable Applications of Magnetic Nanocatalysts**				D	A					
General Papers					D					
Discussions with the President's Task Force on Employment* (PRES)	Р									
My Experience with & Advice for Improving Diversity in Chemistry* (PRES)	Е									

Division of Industrial & **Engineering Chemistry** (continued)

1 & E C

P. Smith, E. Rosenberg, Program Chair

Marriott Marquis San Diego Marina	S	М	Tu	W	Th
My Comments to the President's Task Force on Employment* (PRES)	Е				
My Experiences in & Advice for Organic Chemistry Courses* (PRES)	Е				
Is There a Crisis in Organic Chemistry Education?* (PRES)		A			
Undergraduate Research Posters* (CHED)		Р			
Diversity-Quantification-Success?*(PRES)		P			
Green Chemistry: Theory & Practice* (CHED)			D		

Division of Inorganic Chemistry

N. Radu, S. Koch, Program Chairs

N. Kaaa, S. Koch	, []	ugr	um	Gni	uii s
San Diego Convention Center	S	М	Tu	W	Th
Lanthanide & Actinide Chemistry	A		Е	A	A
Coordination Chemistry	ΑE		Е		D
Chemistry of Materials	ΑE	Р		D	D
Undergraduate Teaching at the Frontiers of Inorganic Chemistry**	ΑE	Р			
Bioinorganic Chemistry	ΑE		PE	D	A
Organometallic Chemistry	DE		DE	D	D
Harry Gray Award for Creative Work in Inorganic Chemistry by a Young Investigator: Honoring Eric J. Schelter	D	P	A		
ACS Award in Inorganic Chemistry: Honoring Mercouri G. Kanatzidis	D	Р	A		
ACS Award in Organometallic Chemistry: Honoring Karen I. Goldberg**	D	Р			
ACS Award for Distinguished Service in the Advancement of Inorganic Chemistry: Honoring Vincent L. Pecoraro	DE	P			

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

CC = Computers in Chemistry

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

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

^{**}Primary organizer of a cosponsored symposium.

Division of Inorganic Chemistry (continued) INOR

N. Radu, S. Koch	, Pr	ogr	am	Cho	airs
San Diego Convention Center	S	М	Tu	W	Th
Alfred Bader Award in Bioinorganic or Bioorganic Chemistry: Honoring Edward I. Solomon	Р	P	A		
F. Albert Cotton Award in Synthetic Inorganic Chemistry: Honoring François P. Gabbaï	P	P	D		
ACS Award in Pure Chemistry: Honoring Jonathan S. Owen	P	Р			
Inorganic Catalysts	P		Е	A	
Nanoscience	P		Е		P
ExxonMobil Solid State Chemistry Faculty Fellow Award: Honoring Mircea Dincă	P				
Undergraduate Research at the Frontiers of Inorganic Chemistry	PE		D		
Main-Group Chemistry	Е			A	Р
ACS Awards in Inorganic Chemistry: Plenary Session		A			
Earle B. Barnes Award for Leadership in Chemical Research Management: Honoring Henry E. Bryndza**		P	A		
Organometallic Compounds & Catalysts: Influence on Polymer Science & Synthesis		P	A		
Frontiers in Heavy-Element Inorganic Chemistry**		P	D		
Sci-Mix		Е			
Memorial Symposium Honoring Karen J. Brewer**			D	D	
Transition-Metal Chemistry in DNA & RNA Regulation			DE	A	
Supramolecular Chemistry: A Crown & Anchor Approach**			DE		
Metal-Oxygen Oxidants in Synthesis & Biology: Beyond Metal-Oxo Species			PE	A	
Environmental & Energy-Related Inorganic Chemistry			PE		A
Solid-State Inorganic Chemistry			PΕ		A
Interplay of Structure & Transport Properties in Materials for Energy			Е	D	
Electrochemistry			Е	P	
Inorganic Spectroscopy			Е	P	

Division of Inorganic Chemistry (continued)

San Diego Convention Center	S	М	Tu	W	Tŀ
Computational Materials & Nanoscience: Theory Meets Experiment* (MPPG)	A			Р	P
Nobel Laureate Signature Award for Graduate Education in Chemistry: Symposium in Honor of Matthew J. Polinski & Thomas E. Albrecht-Schmitt* (NUCL)	A				
Alpha-Olefin Catalysis: Production & Transformations* (I&EC)	D				
Industrial Research at the Interface of Inorganic Chemistry & Polymer Science* (POLY)	P		Е		
Discussions with the President's Task Force on Employment* (PRES)	P				
My Experience with & Advice for Improving Diversity in Chemistry* (PRES)	Е				
My Comments to the President's Task Force on Employment* (PRES)	Е				
My Experiences in & Advice for Organic Chemistry Courses* (PRES)	Е				
Is There a Crisis in Organic Chemistry Education?* (PRES)		A			
Frontiers in Inorganic Chemistry* (SOCED)		A			
Undergraduate Research Posters* (CHED)		Р			
Diversity-Quantification-Success?* (PRES)		Р			
Heavy-Element Inorganic Chemistry: A Tribute to Al Sattelberger* (NUCL)				D	A
Supramolecular Chemistry* (ORGN)				D	

Division of Medicinal Chemistry

MEDI

W. Young, Program Chair

San Diego Convention Center	S	М	Tu	W	Th
Bromodomain Inhibition: BETs & Beyond	A				
General Oral	D		P	P	
Medicinal Chemists' Toolbox: Recent Strategies & Tactics for Resolving Off- Target Liabilities	P				
General Poster	Е			Е	

Division of Medicinal Chemistry MEDI (continued) W. Young, Program Chair S M Tu W Th San Diego Convention Center Medicinal Chemistry Challenges in the A Development of Countermeasures to Highly Lethal Chemicals & Biologicals A Neuroactive Steroids: New Drugs with Old Scaffolds Young Investigator Symposium Α Р Design of Radioligands & Molecular Probes Р Discovery, Pharmacology & Medicinal Chemistry of Rapidly Acting Antidepressants P Medicinal Chemistry Driven by Phenotypic Assays Е Sci-Mix MEDI Award Symposium Α Α Progress & New Approaches in the Ongoing Battle against Multidrug-Resistant Bacteria P Advances in the Development of Type II Kinase Inhibitors P Blood-Brain Barrier in Drug Discovery Accelerating Medicinal Chemistry by Α Trusting Genetics D First-Time Disclosures From Synthesis to Design: Modeling Tools for Medicinal Chemists* (COMP) Global Initiatives in Research Data PD Management & Discovery* (CINF) Discussions with the President's Task Force P on Employment* (PRES) My Experience with & Advice for Improving E Diversity in Chemistry* (PRES) My Comments to the President's Task Force E on Employment* (PRES) E My Experiences in & Advice for Organic Chemistry Courses* (PRES) Is There a Crisis in Organic Chemistry A Education?* (PRES) P Undergraduate Research Posters* (CHED) P LGBT Chemists' Symposium on Chemical Biology* (PROF) Diversity-Quantification-Success?* (PRES) P Computer-Aided Drug Design* (MPPG) $D \mid D$

Division of Medicinal Chemistry (continued)		M	Ε	D	
W. Young	g, P	rog	ran	ı Ch	ıair
San Diego Convention Center	S	М	Tu	W	Th
Driving Change: Impact of Funders on the Research Data & Publications Landscape* (CINF)			D		
From mAb to ADCs: Tailored Antibodies & Dedicated Chemistry Technologies for Site-Specific ADCs* (CARB)				A	
Big Data Science* (MPPG)					D

Division of Nuclear Chemistry & Technology		V I	U (C I	_				
A. Hixon, Program Chai									
San Diego Convention Center	S	М	Tu	W	Th				
Nobel Laureate Signature Award for Graduate Education in Chemistry: Honoring Matthew J. Polinski & Thomas E. Albrecht-Schmitt**	A								
Tackling the Challenging Electronic Structure of Actinides: Honoring Richard Martin cc	P	D	A						
Francis P. Garvan-John M. Olin Medal: Honoring Annie Kersting**		D							
Young Investigators in Nuclear & Radiochemistry**			D	A					
Heavy-Element Inorganic Chemistry: A Tribute to Al Sattelberger**				D	A				
General Topics in Nuclear & Radiochemistry					P				
Adsorption of Metals by Geomedia* (GEOC)		Р	D	DE	A				
Frontiers in Heavy-Element Inorganic Chemistry* (INOR)		Р	D						
Separations for the Nuclear Fuel Cycle in the 21st Century Revisited* (I&EC)			P	D					

CC = Computers in Chemistry

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

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

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

^{**}Primary organizer of a cosponsored symposium.

ORGN **Division of Organic Chemistry** R. Broene, M. McIntosh, Program Chairs S M Tu W Th San Diego Convention Center Α Е Peptides, Proteins & Amino Acids ΑE Nanomaterials Е DA Biologically Related Molecules & Processes $D \mid D$ D AE New Reactions & Methodology D Е Metal-Mediated Reactions & Syntheses DE A Asymmetric Reactions & Syntheses Р ACS Award for Creative Work in Synthetic Organic Chemistry: Honoring Scott J. Miller Lewis Base-Catalyzed Asymmetric P Transformations ED Α Physical Organic Chemistry: Calculations, Mechanisms, Photochemistry & High-**Energy Species** P Total Synthesis of Complex Molecules Е D Е P Flow Chemistry & Continuous Processes Materials, Devices & Switches Е P Е Chemistry & Computers Elias J. Corey Award for Outstanding A Original Contribution in Organic Synthesis by a Young Investigator: Honoring Phil S. Baran ACS Award for Affordable Green A Chemistry: Honoring Martin D. Johnson, Joseph R. Martinelli & Shannon S. Stahl P DE Molecular Recognition & Self-Assembly P Ernest Guenther Award in the Chemistry of Natural Products: Honoring Eric Block Frontiers in Molecular Recognition P Green Chemistry: Enhancing Organic P Synthesis in Pharma Sci-Mix Е ACS Award for Research at an A Undergraduate Institution: Honoring Thomas E. Goodwin Josef Michl ACS Award in Photochemistry: Α Honoring Frederick D. Lewis Chemical Methods To Investigate Protein D

Posttranslational Modifications

Division of Organic Chemistry	(C	? (31	1
(continued)					
R. Broene, M. McIntosh	, <i>Ρ</i> γ	<u> </u>	$\overline{}$	$\overline{}$	
San Diego Convention Center	S	М	Tu	W	Th
Herbert C. Brown Award for Creative Research in Synthetic Methods: Honoring Alois Fürstner			P		
James Bryant Conant Award in High School Chemistry Teaching: Honoring Julia Winter** cc			P		
Chemistry of Fullerenes, Carbon Nanotubes & Graphene				A	
Gabor A. Somorjai Award for Creative Research in Catalysis: Honoring Donna G. Blackmond**				A	
Supramolecular Chemistry**				D	
Heterocycles & Aromatics				DE	
Ralph F. Hirschmann Award in Peptide Chemistry: Honoring Ronald T. Raines				P	
Discussions with the President's Task Force on Employment* (PRES)	P				
My Experience with & Advice for Improving Diversity in Chemistry* (PRES)	Е				
My Comments to the President's Task Force on Employment* (PRES)	Е				
My Experiences in & Advice for Organic Chemistry Courses* (PRES)	Е				
Start-up Businesses in Drug Discovery* (SCHB)		A			
Is There a Crisis in Organic Chemistry Education?* (PRES)		A			
Earle B. Barnes Award for Leadership in Chemical Research Management: Honoring Henry E. Bryndza* (INOR)		P	A		
Computers in Chemistry: Bridging the Gap between Clients & Software* (SCHB)		Р			
LGBT Chemists' Symposium on Chemical Biology* (PROF)		Р			
Diversity-Quantification-Success?* (PRES)		Р			
Cannabis: Exploring the Chemistry, History & Future* (SCHB)			A		
Driving Change: Impact of Funders on the Research Data & Publications Landscape* (CINF)			D		
Supramolecular Chemistry: A Crown & Anchor Approach* (INOR)			DE		

ORGN **Division of Organic Chemistry** (continued) R. Broene, M. McIntosh, Program Chairs S M Tu W Th San Diego Convention Center $D \mid D$ Computational Materials & Nanoscience: Theory Meets Experiment* (MPPG)

Division of Physical Chemistry		PHYS			S
G. Enge	ol P	$r \cap \sigma$	ran	ı Cl	nair
San Diego Convention Center	S	<u> </u>		_	Th
Decoding the Spectroscopic Signatures of Large-Amplitude Motions: Challenges & Opportunities for Theory & Experiment cc	D	A		D	D
Toward Predictive Calculations in Strongly Correlated Molecules & Materials cc	D	D	A	A	D
Structure & Dynamics in Enzymatic Catalysis across Multiple Timescales: Experiment & Theory**	D	D	A	A	
Computer Simulations of Thermodynamics & Long time Kinetics of Molecular Events cc	D	D	A	D	D
Frontiers in Solar Light-Harvesting Processes	D	D	A	D	D
Physical Chemistry of Complex Environmental Interfaces**	D	D	A	Р	D
Electrochemistry at Solid-Liquid Interfaces	D	D	A		
Supramolecular Aggregates: Fundamentals & Applications of Soft Self-Assembled Materials		D	A	D	A
Physical Principles in Functional Nanoscience: Honoring Mostafa A. El-Sayed		P	A	D	D
Sci-Mix		Е			
PHYS Division National Awards Symposium			Р		
Electronic Structure & Dynamics of Metastable States cc				D	D
Poster Session				Е	
Multiscales Chemistry* (MPPG)	D	D	D	Р	
From Dynamics to Function & Back Again: Adventures in Simulating Biomolecules* (COMP)	D	D		D	

Division of Physical Chemistry (continued)

G. Engel, Program Cha							
San Diego Convention Center	S	М	Tu	W	Th		
Structure, Dynamics & Reactivity at Complex Interfaces with Relevance in Renewable Energy & Environmental Applications* (COMP)	D	D					
Global Initiatives in Research Data Management & Discovery* (CINF)	P	D					
Discussions with the President's Task Force on Employment* (PRES)	P						
E. Bright Wilson Award in Spectroscopy: Honoring Robert G. Griffin* (BIOL)	P						
My Experience with & Advice for Improving Diversity in Chemistry* (PRES)	Е						
My Comments to the President's Task Force on Employment* (PRES)	Е						
Advances in Chemical Imaging: Ultra- Resolution to Single Molecules* (SOCED)		A					
Protein Structure & Folding: From Solution to the Gas Phase* (ANYL)		D					
Preparing for the Real World: Challenges Faced by Young Investigators* (MPPG)		D					
Elucidation of Mechanisms & Kinetics on Surfaces* (CATL)		P	D	D	D		
Nonlinear Spectroscopy & Modeling* (ANYL)		P					
Diversity-Quantification-Success?* (PRES)		P					
Computational Design of Advanced Materials* (COMSCI)			A				
Frank H. Field & Joe L. Franklin Award for Outstanding Achievement in Mass Spectrometry: Honoring Albert J. R. Heck* (ANYL)			A				
Computer-Aided Drug Design* (MPPG)			D	D	A		
Quantum Mechanics* (COMP)			D	D	D		
The History of Chemistry & Computing *(MPPG)				A			
Big Data Science* (MPPG)					D		

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

CC = Computers in Chemistry

^{**}Primary organizer of a cosponsored symposium.

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

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

POLY **Division of Polymer Chemistry** M. Jeffries-El, T. White, C. Lipscomb, Program Chairs S M Tu W Th Marriott Marquis San Diego Marina A A AE PA General Topics: New Synthesis & Characterization of Polymers Polymer Applications & Characterization in A A Medical Devices Industry D D AE A Responsive Nanostructures & Nanocomposites DDAE Sustainable Polymers, Processes & Applications** D P DE D A Applications of Polymer Surfaces & Interfaces** D Polymer Additive Manufacturing: Materials, Processes & Simulation Kathryn C. Hach Award for Entrepreneurial D Success: Honoring Scott D. Allen, Geoffrey W. Coates & Anthony R. Eisenhut** P Industrial Research at the Interface of Е Inorganic Chemistry & Polymer Science** Paul J. Flory Polymer Education Award: P Honoring Kenneth B. Wagener Frederic Stanley Kipping Award in Silicon A Chemistry: Honoring Michael A. Brook** Excellence in Graduate Polymer Research** D DE ACS Award in Polymer Chemistry: D Honoring Edmund M. Carnahan P DE D A Supramolecular Polymers: From Structure to Advanced Functionality P Industrial Innovation in Polymer Chemistry: Sustainable Polymerization Feedstocks & Process Technology** Е Sci-Mix DE Undergraduate Research in Polymer Science PE D Α Anionic Polymerization: Still Living After 60 Years** PE D Click Reactions for Producing Advanced A Materials PE D 13th International Symposium on Α Biorelated Polymers Controlled Depolymerization D

POLY/PMSE Plenary Lecture & Awards

Reception**

Division of Polymer Chemistry (continued)		Р (0	L`	Y
M. Jeffries-El, T. White, C. Lipscomb	, Pγ	ogr	am	Ch	airs
Marriott Marquis San Diego Marina	S	М	Tu	W	Th
New Horizons in Sustainable Materials* (CELL)	D	D			
Biomass & Polymer Extrusion, Composite & Reaction Technologies: New Insights, Future Potential & Principles to Practice* (CELL)	D				
Discussions with the President's Task Force on Employment* (PRES)	P				
My Experience with & Advice for Improving Diversity in Chemistry* (PRES)	Е				
My Comments to the President's Task Force on Employment* (PRES)	Е				
My Experiences in & Advice for Organic Chemistry Courses* (PRES)	Е				
Is There a Crisis in Organic Chemistry Education?* (PRES)		A			
ACS Award for Creative Invention: Honoring Antonio Facchetti* (PMSE)		D	D		
ACS Award in Applied Polymer Science: Honoring Thomas P. Russell* (PMSE)		D			
Earle B. Barnes Award for Leadership in Chemical Research Management: Honoring Henry E. Bryndza* (INOR)		P	A		
Undergraduate Research Posters* (CHED)		P			
Diversity-Quantification-Success?* (PRES)		P			
Potpourri of Polymer Projects: Take a Byte out of the NGSS* (CHED)		Е			
ACS Award in Industrial Chemistry: Honoring Ted C. Germroth* (I&EC)			A		
Computational Materials & Nanoscience: Theory Meets Experiment* (MPPG)				D	D

Division of Polymeric Materials: Science & Engineering	PMSE							
A. Tsou, B. Olsen, C. Stafford, X. Jia, C. Soles, Program Chairs								
Marriott Marquis San Diego Marina	S	М	Tu	W	Th			
Directed Polymer Assembly	D	A						
Flow-Induced Crystallization of Polymers	D	A						
Clay/Polymer Composites: Nanoclays & Other Natural Nanoparticles	D	D	A					

Е

Division of Polymeric Materials: Science & Engineering (continued)

PMSE

A. Tsou, B. Olsen, C. Stafford, X. Jia, C. Soles		_		_	_
Marriott Marquis San Diego Marina	S	М	Tu	W	Th
Bioresponsive & Biomimetic Synthetic Polymers & Materials	D	D			
Dynamic & Tunable Biomaterials	D	D			
James V. Crivello Memorial Symposium	D				
ACS Award for Creative Invention: Honoring Antonio Facchetti**		D	D		
ACS Award in Applied Polymer Science: Honoring Thomas P. Russell**		D			
Hybrid Polymers & Nanocomposites		P	D	D	A
General Papers/New Concepts in Polymeric Materials		P	P	D	A
Sci-Mix		Е			
Cooperative Research Award: Honoring Brian Benicewicz & Gordon Calundann			A		
Polymer-Related Energy Conversion & Storage			D	D	A
Polyethylene**			D	D	
Computation & Cheminformatics in Polymers Research			Р	D	A
Joint PMSE/POLY Poster Session			Е		
Sustainable Polymers, Processes & Applications* (POLY)	D	D	ΑE		
Applications of Polymer Surfaces & Interfaces* (POLY)	D	P	DE	D	A
Biomass & Polymer Extrusion, Composite & Reaction Technologies: New Insights, Future Potential & Principles to Practice* (CELL)	D				
Discussions with the President's Task Force on Employment* (PRES)	Р				
My Comments to the President's Task Force on Employment* (PRES)	Е				
Frederic Stanley Kipping Award in Silicon Chemistry: Honoring Michael A. Brook* (POLY)		A			
WCC 2016 Rising Stars Awards Symposium* (WCC)		D			
Undergraduate Research Posters* (CHED)		Р			
Potpourri of Polymer Projects: Take a Byte out of the NGSS* (CHED)		Е			

Division of Polymeric Materials: Science & Engineering (continued)

PMSE

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

Marriott Marquis San Diego Marina	S	М	Tu	W	Th
Anionic Polymerization: Still Living After 60 Years* (POLY)			PE	D	A
POLY/PMSE Plenary Lecture & Awards Reception* (POLY)				Е	

Division of Professional Relations

R. D. Libby, Program Chair

K.D. Libby, Frogram Cit								
Marriott Marquis San Diego Marina	S	М	Tu	W	Th			
Ethics 101**	A							
Enough to be Dangerous: A Chemist's Handbook to Cross-Functional Development**	P							
Women in Innovation: Science & Technology**		A						
LGBT Chemists' Symposium on Chemical Biology**		Р						
Successful REU Programs**			A					
Chemical Angel Network**			P					
Kathryn C. Hach Award for Entrepreneurial Success: Honoring Scott D. Allen, Geoffrey W. Coates & Anthony R. Eisenhut* (POLY)	D							
Going Global with International Scientific Training: An Undergraduate Perspective of International Research Experiences* (IAC)	D							
Discussions with the President's Task Force on Employment* (PRES)	Р							
My Experience with & Advice for Improving Diversity in Chemistry* (PRES)	Е							
My Comments to the President's Task Force on Employment* (PRES)	Е							
My Experiences in & Advice for Organic Chemistry Courses* (PRES)	Е							

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

CC = Computers in Chemistry

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

^{**}Primary organizer of a cosponsored symposium.

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

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

R. D. Libby, Program Chair

К. Б. Бю	,, <u> </u>	<u>, 08</u>		<i>i</i> 0,,	
Marriott Marquis San Diego Marina	S	М	Tu	W	Th
How To Foster Diversity in the Chemical Sciences: Lessons Learned & Taught from the Stories of Recipients of the Stanley C. Israel Award* (PRES)		A			
Is There a Crisis in Organic Chemistry Education?* (PRES)		A			
Excellence in Graduate Polymer Research* (POLY)		D	DE		
GSSPC: Resolving the Big Picture: Bringing Molecules into Focus* (CHED)		D			
Diversity-Quantification-Success?*(PRES)		P			

Rubber Division		₹ (JE	3 E	3
T. DeLapo	а, Р	rog	ran	ı Ch	air
Located with Primary Sponsor	S	М	Tu	W	Th
Potpourri of Polymer Projects: Take a Byte out of the NGSS* (CHED)		Е			
Anionic Polymerization: Still Living After 60 Years* (POLY)			PE	D	A

Division of Small Chemical Businesses

SCHB

J. Sabol, Program Chair

J. 5000	٠, ـ	108		- 011	
Marriott Marquis San Diego Marina	S	М	Tu	W	Th
Entrepreneurs' Poster Session		A			
Start-up Businesses in Drug Discovery**		A			
Computers in Chemistry: Bridging the Gap between Clients & Software** cc		Р			
Sci-Mix		Е			
Cannabis: Exploring the Chemistry, History & Future**			A		
Kathryn C. Hach Award for Entrepreneurial Success: Honoring Scott D. Allen, Geoffrey W. Coates & Anthony R. Eisenhut* (POLY)	D				
Discussions with the President's Task Force on Employment* (PRES)	P				
My Comments to the President's Task Force on Employment* (PRES)	Е				

Division of Small Chemical Businesses (continued)

SCHB

J. Sabol, Program Chair

	_	_	$\overline{}$	_	
Marriott Marquis San Diego Marina	S	М	Tu	W	Th
Cannabis: Exploring the Chemistry, History & Future* (AGFD)		D			
Chemical Information for Small Businesses & Start-ups* (CINF)		P			
Chemical Angel Network* (PROF)			Р		

Committee on Chemical Safety

E. Howson, Program Chair

E. 110 wson, 1 rogram Gin					
Located with Primary Sponsor	S	М	Tu	W	Th
Ask Dr. Safety: Incident Reporting* (CHAS)	P				
Safety Begins in the Classroom: Demonstrations, Awareness & Prelab Planning* (CHAS)	P				
How Texas Tech & UCLA Have Affected Laboratory Safety Nationwide* (CHAS)		Р			
Developing, Implementing & Teaching Hazard Assessment Tools* (CHAS)			D		
Chemical, Sample & Asset Management Tools* (CHAS)				D	

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

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

Committee on Divisional Activities

R. Bennett, Program Chair

Located with Primary Sponsor	S	М	Tu	W	Th
New Horizons in Sustainable Materials* (CELL)	D	D			
Discussions with the President's Task Force on Employment* (PRES)	P				

Committee on Divisional Activities (continued) R. Bennett, Program Chair S M Tu W Th **Located with Primary Sponsor** My Experience with & Advice for Improving E Diversity in Chemistry* (PRES) My Comments to the President's Task Force E on Employment* (PRES) My Experiences in & Advice for Organic Chemistry Courses* (PRES) Is There a Crisis in Organic Chemistry Α Education?* (PRES) Diversity-Quantification-Success?*(PRES) P

Committee on Environmental

Improvement		<u> </u>		-	
C. Middlecam	v, P	rog	ran	ı Cl	ıair
Located with Primary Sponsor	S	Ť		$\overline{}$	Th
Perspectives on Climate Change Literacy & Education: Local to International* (CHED)	Р				
Water Treatment Technologies To Support Food-Energy-Water Nexus Water Conservation Needs* (ENVR)		A			
Environmental Aspects of Unconventional Oil & Gas Production & Hydraulic Fracturing* (ENVR)		D	D	D	D
Treatment of Contaminants of Emerging Concern & Their Transformation Products* (ENVR)		D	D	Е	
Innovative Materials & Technologies for Water Purification* (ENVR)		D	D		
WCC 2016 Rising Stars Awards Symposium* (WCC)		D			
Undergraduate Research Posters* (CHED)		P			
Chemistry of Materials Management: Mitigation & Reuse for Sustainable Environment* (ENVR)		P			
ACS-CEI Award for Incorporating Sustainability into Chemistry Education* (CHED)			A		
Green Chemistry: Theory & Practice* (CHED)			D		
Science & Perception of Climate Change* (ENVR)			Р	Е	

Committee on Environmental Improvement (continued) C. Middlecamp, Program Chair S M Tu W Th **Located with Primary Sponsor** DE Green Chemistry & the Environment* (ENVR) Membrane Technology for Water-Energy P D Sustainability* (ENVR) P Citizens First!* (CHED)

Committee on Ethics		I	Ξ.	۲ŀ	1(2
	K. Vitens	e, P	rog	ran	ı Ch	ıair
Located with Primary Sponsor		S	М	Tu	W	Th
Ethics 101* (PROF)		A				

Committee on Local Section Activities		LSAC					
M. Rud	M. Rudd, Program Cho						
Located with Primary Sponsor	S	М	Tu	W	Th		
Fundamentals of Chemistry Outreach Education: From Program Design to Assessment* (CHED)	D	A					

Committee on Minority Affairs	(2	M	1	4					
J. Sarquis, Program Chair										
Located with Primary Sponsor	S	М	Tu	W	Th					
How To Foster Diversity in the Chemical Sciences: Lessons Learned & Taught from the Stories of Recipients of the Stanley C. Israel Award* (PRES)		A								
Successful REU Programs* (PROF)			A							

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

CC = Computers in Chemistry

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

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

^{**}Primary organizer of a cosponsored symposium.

Committee on Patents & Related **Matters**

CPRM

S. Shah, Program Chair

Located with Primary Sponsor	S	М	Tu	W	Th
Chemical Information for Small Businesses		P			
& Start-ups* (CINF)					

Committee on Science

M. Berman	п, Р	rog	ran	ıGr	ıaır
San Diego Convention Center	S	М	Tu	W	Th
Computational Design of Advanced Materials** cc			A		
Discussions with the President's Task Force on Employment* (PRES)	Р				
My Experience with & Advice for Improving Diversity in Chemistry* (PRES)	Е				
My Comments to the President's Task Force on Employment* (PRES)	Е				
Diversity-Quantification-Success?*(PRES)		Р			

Committee on Technician Affairs

K. Allen, Program Chair

Located with Primary Sponsor	S	М	Tu	W	Th
New Reality of the Chemical Enterprise: Traditional & Nontraditional Career Paths* (I&EC)		D	D		

International Activities Committee

E. Conti	s, P	rog	ran	ı Ch	air
Hilton San Diego Bayfront	S	М	Tu	W	Th
Going Global with International Scientific Training: An Undergraduate Perspective of International Research Experiences**	D				
Eli Pearce Memorial Symposium			A		
Discussions with the President's Task Force on Employment* (PRES)	P				
My Comments to the President's Task Force on Employment* (PRES)	Е				
International & Multicultural Perspective* (CHED)			Р		

Society Committee on Education

S. Emory, Program Cha					ıair
San Diego Convention Center/Marriott Marquis San Diego Marina	s	М	Tu	w	Th
Trends in Computational Chemistry: Biophysical to Materials Chemistry** cc	P				
Frontiers in Inorganic Chemistry**		A			
Advances in Chemical Imaging: Ultra- Resolution to Single Molecules**		A			
Eminent Scientist Lecture: Richard N. Zare, Stanford University		P			
The Two-Year Guidelines: What's New* (CHED)	A				
Fundamentals of Chemistry Outreach Education: From Program Design to Assessment* (CHED)	D	A			
Undergraduate Research Papers* (CHED)	D	D			
High School Program* (CHED)	D				
New Reality of the Chemical Enterprise: Traditional & Nontraditional Career Paths* (I&EC)		D	D		
$ Excellence in Graduate Polymer Research^* \\ (POLY) $		D	DE		
$UndergraduateResearchPosters^*(CHED)$		Р			
Successful Student Chapters* (CHED)		Е			
Green Chemistry: Theory & Practice* (CHED)			D		

Women Chemists Committee

K. Woznack, A. Debaillie, Program Chairs

Hilton San Diego Bayfront	S	М	Tu	W	Th
WCC 2016 Rising Stars Awards Symposium**		D			
ACS Award for Encouraging Women into Careers in the Chemical Sciences: Honoring Carol A. Fierke**			A		
Catalysis at the Subnanometer Scale* (CATL)	D	A			
Computational Chemistry across Catalysis* (CATL)	D	D	D	A	
ACS Award in Organometallic Chemistry: Honoring Karen I. Goldberg* (INOR)	D	P			

PROGRAM SUMMARY

Women Chemists Committee (continued)

WCC

K. Woznack, A. Debaillie, Program Chairs

Hilton San Diego Bayfront	S	М	Tu	W	Th		
Discussions with the President's Task Force on Employment* (PRES)	P						
My Experience with & Advice for Improving Diversity in Chemistry* (PRES)	Е						
My Comments to the President's Task Force on Employment* (PRES)	Е						
Women in Innovation: Science & Technology* (PROF)		A					
LGBT Chemists' Symposium on Chemical Biology* (PROF)		P					
Diversity-Quantification-Success?* (PRES)		P					
Polyethylene* (PMSE)			D	D			
Gabor A. Somorjai Award for Creative Research in Catalysis: Honoring Donna G. Blackmond* (ORGN)				A			

Younger Chemists Committee M. Druelinger, T. Matos, Program Chairs S M Tu W Th Hilton San Diego Bayfront Starting a Successful Research Program at a P Predominantly Undergraduate Institution Fundamentals of Chemistry Outreach D Α Education: From Program Design to Assessment* (CHED) Going Global with International Scientific D Training: An Undergraduate Perspective of International Research Experiences* (IAC) Enough to be Dangerous: A Chemist's P Handbook to Cross-Functional Development* (PROF) Excellence in Graduate Polymer Research* D DE (POLY) D Preparing for the Real World: Challenges Faced by Young Investigators* (MPPG) Young Investigators in Nuclear & DA Radiochemistry* (NUCL)

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

**Primary organizer of a cosponsored symposium.

CC = Computers in Chemistry A = AM AE = AM/EVE P = PM D = AM/PME = EVE DE = AM/PM/EVE PE = PM/EVE

GENERAL MEETING INFORMATION

YOUR MEETING REGISTRATION entitles you to a wide range of programming, including more than 12,000 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

EARLY REGISTRATION: UP TO JAN. 24

charge. Certain workshops, short courses,

and ticketed events require a separate en-

try fee, as indicated in this program.

STANDARD REGISTRATION: **JAN. 25-MARCH 17**

ON-SITE ATTENDEE REGISTRATION: San Diego Convention Center, Lobby D

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. Attendees within the U.S. who register prior to Jan. 24 will receive their badge credentials by mail before the meeting. International registrants must pick up their badge credentials at ACS Attendee Registration (this includes Canada and Mexico).

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

Registration Changes. Attendees can modify their existing registration or generate a receipt from the registration website by following the instructions in their confirmation message. Attendees can also

contact the ACS National Meeting Registration Center before March 11 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/ sandiego2016 until March 17. A valid credit card is required to register online, and online registrations are real-time transactions.

Telephone. Call the ACS National Meeting Registration Center by March 17 at (800) 251-8629 (U.S./Canada only) or (508) 743-0192 (international), Monday through Friday, 9 AM to 5 PM ET.

Fax/Mail. Submit the registration form (page 83) by fax, (508) 743-9604, or mail, ACS Registration, c/o CDS, 107 Waterhouse Rd., Bourne, MA 02532. Mailed registrations will be accepted until March 17.

On-site. Register during the meeting at ACS Attendee Registration at standard registration rates. ACS Attendee Registration will be open at the San Diego Convention Center, Lobby D, on Saturday, 3 to 6 PM; Sunday, 7:30 AM to 7:30 PM; Monday, 7:30 AM to 9 PM; Tuesday, 7:30 AM to 5 PM; Wednesday, 7:30 AM to 4 PM; and Thursday, 7:30 AM to 1 PM.

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

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

Registration Cancellations/Refunds.

All cancellations and refund requests must be submitted in writing by Feb. 8 to guarantee the registrant a full refund less a \$50 administrative fee. Refund requests made after Feb. 8 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 to (508) 743-9604 (save your fax confirmation sheet).

Social Event Ticket Cancellations/ Refunds. Social event cancellations received by Feb. 8 entitle the registrant to a full refund. Refund requests made after Feb. 8 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.

	F	EE
REGISTRATION CATEGORY	EARLY BY JAN. 24	STANDARD JAN. 25
MEMBERS		
ACS member or	\$415	\$500
society affiliate		
Postdoctoral member	415	500
Emeritus or retired member	210	255
50-year member	No fee	No fee
Unemployed member (Dues waiver required)	No fee	No fee
Precollege teacher	105	105
Graduate student	210	210
Undergraduate	105	105
One-day registrant	210	255
NONMEMBERS		
Chemical scientist	\$730	\$880
Postdoctoral scientist	730	880
Visitor: Nonchemical scientist or chemical	415	500
technician		
Precollege teacher	105	105
Graduate student	415	415
Undergraduate	210	210
One-day registrant	415	500
Guest of registrant ^a	45	45
EXPOSITION-ONLY VISITORS		
Adult, exposition only	\$50	\$50
Student, exposition only	25	25

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



251st American Chemical Society National Meeting & Exposition March 13-17, 2016 San Diego, CA

OFFICIAL HOTEL RESERVATION FORM • RESERVATION DEADLINE: FEBRUARY 12, 2016

JUNIA	ACT INFORMATION			
FIRS	T NAME	LAST NAME		
COM	PANY			
MAIL	ING ADDRESS	CITY	STATE/PROVIDENCE	ZIP CODE/COUNTRY
EMA	L ADDRESS	PHONE NUMBER	FAX NUMBER	
нотеі	SELECTION: Please list 4 choices in order of	preference. Please reference th	ne Official Hotels listing document.	
1.		2.		
3.		4.		
Arrival	Date: D	eparture Date:		
ist nar	TYPE Single (1 bed/1 person) Double (1 bed nes of all room occupants: 1	2 4	ersons) Triple (2 beds/3 persons) Quad (2	beds/4 persons) - -
	Requests:			_
•	NOTE: Your preference will be honored based on	availability. There is no guarantee.		
MPOR	TANT INFORMATION			
All re must \$25	OSIT/CANCELLATION POLICY: servations require a credit card guarantee. If paying by cre be made at least 72 hours prior to scheduled date of arriva- cancellation fee for any cancellations made on or after Feb CK PAYMENT POLICY: Checks may include the first nigh	al at the hotel for refund of one night's ruary 22, 2016. Should you cancel, this	room and tax deposit. In addition to this cancellation p s charge will appear on your credit card statement as "	olicy, the housing bureau, ConferenceDirect, will charge a 'ConferenceDirect LLC."
list th	ne names and acknowledgment numbers corresponding to e ges to the room(s).	ach reservation that the check applies t	o. When paying by check, remember to bring a cree	dit card or cash to the hotel to cover incidental
•	BY FEBRUARY 4 TH : Make all checks payable to ACS/C 4 TH , 2016.	onferenceDirect and mail to: 5600 Sev	venty Seven Center Drive, Suite 240, Charlotte, NC	28217. CHECKS MUST BE RECEIVED BY FEBRUARY
•	February 5 th THROUGH FEBRUARY 25 TH : Make all ch ConferenceDirect Acknowledgement Number on the che your check, make sure you have guaranteed your re FEBRUARY 25 TH TO ALLOW TIME FOR PROCESSING	ck, and attach your acknowledgement servation(s) with a credit card. PLEA	/invoice indicating the names corresponding to each re	eservation. Until the hotel has received
CREDI	T CARD AUTHORIZATION			
	, , ,	rican Express		
Car	d #		Exp. Date	
Car	dholder Name (Please Print)			
	dholder Signature_ ir hotel reserves the right to charge this card a deposit	agual to one night's room and tay f	or each reconvation made on or after February 12	2016
100		-	-	
HOUSI	RETURN COMPLETE NG BUREAU CONTACT INFORMATION:	D FORM TO CONFEREN	CEDIRECT at acshousing@confe	rencedirect.com
	AIL: acshousing@conferencedirect.com	PHONE: (844)293-7040 U	S Toll-Free or (704)837-4855 International	
	IL: ConferenceDirect	MOŃ-FRI 8:30ar	m – 9:00pm EST	
	5600 Seventy-Seven Center Drive, Suite 240 Charlotte, NC 28217	FAX: (704)927-1439		



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), service@acs.org.

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

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

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

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

CAREER FAIR EMPLOYER REGISTRA-

TION. ACS Career Fair Employer registration is handled exclusively through ACS Careers at www.acs.org/careers.

TICKETED EVENTS

A VARIETY of social and special events will be held by event organizers during the meeting. Event participation is open to all interested registrants. View an updated listing of social and special events, including event locations, at www.acs.org/meetings.

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 Feb. 8. No tickets will be refunded after that date.

SUNDAY, MARCH 13

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

(Included at no charge with high school teacher registration.)

Noon to 1 PM

CTA (Committee on Technician Affairs) National Technician Award Luncheon/ SE-02/\$45

1 to 3 PM

International Welcome Reception/ SE-03/no charge

(International attendees only) 5:30 to 7:30 PM

MONDAY, MARCH 14

YCC (Younger Chemists Committee) 5K Fun Run/SE-04/\$25 (regular)/ SE-04A/\$15 (student)

6:45 to 8:30 AM

WCC Women Chemists Enterprise Breakfast/SE-05/\$40 (regular)/ **SE-05A/\$20** (student)

7:30 to 9 AM

(A limited number of student tickets are available. Students may purchase regular tickets if student tickets are sold out.)

Diversity Women Chemist of Color

Networking Event/SE-06/no charge 10:30 AM to noon

Committee on Minority Affairs Luncheon/SE-07/\$50 (regular)/ **SE-07A/\$25** (student)

11:30 AM to 1:30 PM

CHAL (Chemistry & the Law) Drug and Power Luncheon/SE-08/\$40

Noon to 1:30 PM

Purdue University Chemistry Luncheon/ SE-09/\$10

Noon to 2 PM

Chinese American Chemical Society Dinner Banquet/SE-10/\$35

6 to 9 PM, Panda Inn Mandarin Cuisine, 506 Horton Plaza

CARB (Division of Carbohydrate Chemistry) Award Dinner/SE-11/\$60 6:30 to 9:30 PM, Rockin' Baja Lobster

Gaslamp, 310 5th Ave.

TUESDAY, MARCH 15

Senior Chemists Committee Breakfast/ SE-12/\$20

7:30 to 9:30 AM

University of Minnesota Alumni & Friends Breakfast/SE-13/\$5.00

7:30 to 9:30 AM

CINF (Chemical Information Division) Luncheon/SE-14/\$20 (regular member)/ **SE-14A/\$25** (nonmember)/**SE-14B/\$15** (student)

Noon to 1:30 PM

COLL (Division of Colloid & Surface Chemistry) Luncheon/SE-18/\$45

Noon to 1:30 PM

WCC (Woman Chemists Committee) Luncheon/SE-15/\$50 (regular)/ **SE-15A/\$25** (student)

Noon to 1:30 PM

ENFL (Division of Energy & Fuels) Dinner/SE-16/\$60

6 to 9 PM

ACS National Awards Banquet Ceremony & General Meeting of the Society/ SE-17/\$130

6 to 10 PM



Book your hotel for the American Chemical Society 251st National Meeting & Exposition March 13-17, 2016 in San Diego, CA



HOUSING OPENED DECEMBER 14, 2015

Enter the ACS San Diego, CA Housing Drawing by Staying at a Hotel Booked Through ConferenceDirect! The official ACS housing bureau is **ConferenceDirect**. ACS does not endorse any other housing company.

Top 6 Reasons To Book **Through ConferenceDirect:**

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

1st Prize - iPad 2nd Prize - Kindle

Prize Drawing Rules: All winners will be determined on the basis of a random drawing conducted on or about March 31, 2016. Complete details at www.acs.org/sandiego2016.

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

acs.org/sandiego2016 or 1-844-293-7040

Monday - Friday, 8:30am - 9:00pm EST. Housing will close February 19, 2016.

Rooms are limited, so make your reservation today.

Conference Direct®

ACCOMMODATIONS

ACS HAS CONTRACTED a wide selection of hotel rooms with competitive rates for the national meeting in San Diego. ConferenceDirect is the official housing bureau. ACS does not endorse booking hotel reservations through any other source. Reserve your hotel room directly through ConferenceDirect by Feb. 19. A listing of official hotels with their guaranteed ACS rates and amenities is on page 68. All attendees who make reservations through ConferenceDirect will receive complimentary Internet access in their rooms and are automatically entered in the ACS Housing Drawing (see ad on page 66 for details).

Late Housing. Some hotels may have rooms available after Feb. 19. A listing of these hotels will be posted on the ACS meeting website at www.acs.org/ sandiego2016.

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

RESERVATION METHODS. All registrants will receive confirmation for reservations made directly through ConferenceDirect.

ONSITE PROGRAM BOOK NO LONGER FREE

Printed copies of the Onsite Program Book will no longer be available for free. The Onsite Program Book will now be available at the advance fee of \$10 until Jan. 24 and at the standard/on-site fee of \$20 after Jan. 24. Orders can be made during registration and on-site at several locations. Limited quantities will be available on-site.

In support of ACS's sustainability efforts, we encourage our meeting attendees to download the ACS San Diego mobile app in early March or access the Digital Meeting Program in mid-March at www.acs.org/ sandiego2016. The ACS San Diego mobile app and Digital Meeting Program will provide quick access to the full technical program along with special features so you can easily build your schedule. Learn more about ACS national meetings sustainability efforts at www.acs.org/greenermeetings.

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

Published ACS rates apply to hotel stays between March 5 and March 22. To extend your stay beyond these dates, you must reserve additional nights directly through the hotel.

Internet. Reserve online at www.acs. org/sandiego2016. 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 ConferenceDirect at (844) 293-7040 (U.S./Canada only) or (704) 837-4855 (international), Monday through Friday, 8:30 AM to 9 PM ET. 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 (page 64 and available online) with your valid credit card information to (704) 927-1439 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 ACS/ConferenceDirect and mail to ConferenceDirect, 5600 Seventy-Seven Center Dr., Suite 240, Charlotte, NC 28217. Faxed and mailed reservations will be processed on a first-come, first-served basis and require 10 to 14 days to be confirmed. If your requested hotel is no longer available, we will attempt to honor your indicated preference according to cost and location.

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

Jan. 18 through Feb. 4: Make all checks payable to ACS/ConferenceDirect and mail to 5600 Seventy-Seven Center Dr., Suite

240, Charlotte, NC 28217. Checks must be received by Feb. 4.

Feb. 5 through Feb. 25: Make all checks payable to the hotel and mail them directly to the hotel where your reservation is being held. Be sure to include "ACS" and your ConferenceDirect Acknowledgment Number on the check, and attach your acknowledgment/invoice indicating the names corresponding to each reservation. Until the hotel has received your check, make sure you have guaranteed your reservation(s) with a credit card. Please make sure you have sent your check directly to the hotel by Feb. 25 to allow time for processing.

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

Although a valid credit card or check deposit for one night's room and tax is required to confirm a reservation, a payment will not be charged by ConferenceDirect. If paying by credit card, this will be reflected on your credit card statement as early as Feb. 14 or soon after. All hotel rooms are subject to 12.77% room and occupancy tax (subject to change without notice).

Reservation modifications and cancellations can be made with the housing bureau until Feb. 21. After this date, you will need to contact your hotel directly to make any new reservations, modifications, and/or cancellations.

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

In addition to this cancellation policy, the housing bureau, ConferenceDirect, will charge a \$25 cancellation fee for any cancellations made on or after Feb. 22. Should

MEETING INFO ON THE WEB

Registration, housing, technical programming, special events, participating exhibitors, and other meeting details are available at www.acs.org/ sandiego2016.

PRELIMINARY PROGRAM



PARTICIPATING HOTEL LIST

American Chemical Society

251st National Meeting and Exposition - March 13-17, 2016 - San Diego, CA For best rates and availability, make your reservation at www.acs.org/sandiego2016 Or by phone at (Toll-Free) 844-293-7040 or (International) 704-837-4855

All ACS Sleeping Rooms Include Complimentary Internet

Room rates listed below do not include applicable tax and assessments which are between 12.5% and 12.77% per room per night, which are subject to change *Additional fees may apply if: A rollaway bed is required, if there are pets in quest rooms, and if smoking occurs in quest rooms (all rooms are nonsmoking rooms)

	*Hotels	Single	Double	Triple	Quad	*Maximum Occupants	Child Free		On ACS Shuttle	Per Day	Room Service	*Pets	Fitness	Swimming
	1101013	(1 person)	(2 persons)	(3 persons)	(4 persons)	Per Room	Under Age			Parking	Available	Allowed	Center	Pool
1	Embassy Suites San Diego Bay Downtown	\$258	\$258	\$278	\$298	6	18	No	Yes	\$42	Yes	Service	Yes	Yes
2	Hard Rock Hotel	\$239	\$239	\$259	\$279	4	18	No	Walkable	\$45	Yes	Service	Yes	Yes
За	Hilton Gaslamp Quarter – Standard Room	\$264	\$264	\$284	\$304	4	18	No	Walkable	\$45	Yes	Yes	Yes	Yes
3b	Hilton Gaslamp Quarter – Premium View Rooms	\$284	\$284	\$304	\$324	4	18	No	Walkable	\$45	Yes	Yes	Yes	Yes
4a	Hilton San Diego Bayfront – Port/Coronado View Room	\$265	\$265	\$285	\$305	4	18	No	Yes	\$32/\$42	Yes	Yes	Yes	Yes
4b	Hilton San Diego Bayfront – Bay/Skyline View	\$285	\$285	\$305	\$325	4	18	No	Yes	\$32/\$42	Yes	Yes	Yes	Yes
5	Horton Grand	\$210	\$210	\$230	\$250	4	18	Yes	Walkable	\$35	Yes	Service	No	No
6	Hotel Indigo San Diego Gaslamp Quarter	\$210	\$210	\$230	\$250	4	18	Yes	Yes	\$41	Yes	Yes	Yes	No
7	Hotel Solamar	\$239	\$239	\$264	\$289	4	18	Yes	Walkable	\$45	Limited	Yes	Yes	Yes
8a	Manchester Grand Hyatt – City View Room	\$265	\$265	\$290	\$340	4	18	Yes	Yes	\$32/\$47	Yes	Yes	Yes	Yes
8b	Manchester Grand Hyatt – Bay View Room	\$285	\$285	\$310	\$360	4	18	Yes	Yes	\$32/\$47	Yes	Yes	Yes	Yes
9a	Marriott Marquis San Diego Marina – City View Room	\$268	\$268	\$293	\$318	4	18	No	Walkable	\$30/\$45	No	No	Yes	Yes
9b	Marriott Marquis San Diego Marina – Bay View Room	\$288	\$288	\$313	\$338	4	18	No	Walkable	\$30/\$45	No	No	Yes	Yes
10	Omni San Diego Hotel	\$259	\$279	\$299	\$309	4	18	Yes	Walkable	\$42	Yes	Yes	Yes	Yes
11	Renaissance San Diego Downtown Hotel	\$239	\$239	\$259	\$279	4	18	Yes	Yes	\$42	Yes	Yes	Yes	Yes
12	Residence Inn San Diego Downtown Gaslamp Quarter	\$225	\$225	\$225	N/A	3	18	Yes	Walkable	\$40	No	Yes	Yes	Yes
13	The Westin San Diego Gaslamp Quarter	\$239	\$239	\$259	\$279	4	18	Yes	Yes	\$42	Yes	Yes	Yes	Yes
14	US Grant Hotel	\$209	\$209	\$234	\$259	4	18	Yes	Yes	\$42	Yes	Yes	Yes	No
15	Westgate Hotel	\$219	\$219	\$254	\$289	4	12	Yes	Yes	\$36	Yes	Service	Yes	Yes
16	Westin San Diego	\$245	\$245	\$265	\$285	4	18	Yes	Yes	\$44	Yes	Yes	Yes	Yes
17	Wyndham San Diego Bayside	\$169	\$169	\$189	\$209	4	18	No	Yes	\$26/\$34	Yes	Yes	Yes	Yes



you cancel, this charge will appear on your credit card statement as "ConferenceDirect LLC."

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

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

ECONOMICAL ALTERNATIVES. The following hotels are not part of the official ACS housing block but may be of interest to attendees on a restricted budget. Make your reservations directly with the hotels, and ask for the listed ACS rate. Properties are not included on the ACS shuttle route: therefore, daily transportation costs are the responsibility of the attendee.

Sheraton San Diego Hotel & Marina

\$169 per night, single/double occupancy Direct—(619) 291-2900

Hampton Inn San Diego-Downtown

\$159-\$169 per night, single/double occupancy Direct-(800) 916-4339

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 whenever possible, and reserve your hotel room through ConferenceDirect at www.acs.org/ sandiego2016.

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, convention center, and our hotel and vendor partners to reduce our environmental footprint and raise the bar with

regard to industry sustainability practices.

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

For our efforts, ACS has been recognized as a sustainable event leader and received the 2014 Trade Show Executive's Gold 100 Award for the Show with the Most Commendable Green Initiatives and was highlighted in Convene magazine's Best in Show edition for corporate social responsibility initiatives. Here are a few reasons why:

- ACS partners with conservation nonprofit American Forests to indirectly offset emissions (staff travel, staff and attendee accommodations, show management freight, and venue energy) through regional tree-planting efforts. In 2015, ACS and its attendees planted 7,739 trees (totaling 9,086 trees since the beginning of the program in 2014).
- ACS's offset partners, along with attendees who opted to offset their footprint by donating \$1.00 to the treeplanting program, reached total indirect offsets for 2015 equal to 3,788 metric tons of carbon dioxide (equivalent to not



251st ACS National Meeting & Exposition

March 13 - 17, 2016 | San Diego, CA

www.acs.org/sandiego2016 | #acsSanDiego

SHUTTLE SERVICE SCHEDULE

HOURS OF OPERATION

Sunday, March 13

7:00 AM - 10:00 AM... .15 minute service 10:00 AM - 4:00 PM30 minute service 4:00 PM - 7:00 PM... .15 minute service 7:00 PM - 11:00 PM30 minute service

Monday, March 14

7:00 AM - 10:00 AM 15 minute service 10:00 AM - 4:00 PM30 minute service 4:00 PM - 11:00 PM 15 minute service

Tuesday, March 15

7:00 AM - 10:00 AM 15 minute service 10:00 AM - 4:00 PM30 minute service 4:00 PM - 11:00 PM 15 minute service

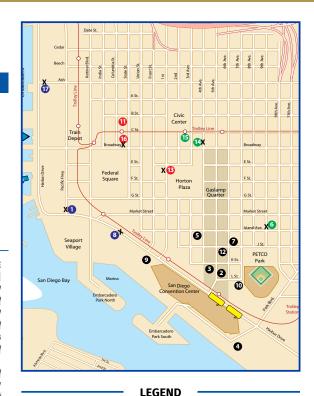
Wednesday, March 16

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

Thursday, March 17

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

MAP#	HOTEL	SHUTTLE BOARDING LOCATION	ROUTE
1	Embassy Suites San Diego Bay-Downtown	Curbside on Pacific Highway	1
2	Hard Rock Hotel	Walk to San Diego Convention Center	W
3	Hilton Gaslamp Quarter	Walk to San Diego Convention Center	W
4	Hilton San Diego Bayfront	Walk to San Diego Convention Center	W
5	Horton Grand	Walk to San Diego Convention Center	W
6	Hotel Indigo San Diego Gaslamp Quarter	Curbside on 9th Avenue	3
7	Hotel Solamar	Walk to San Diego Convention Center	W
8	Manchester Grand Hyatt San Diego	Curbside on Harbor Drive	1
9	Marriott Marquis San Diego Marina	Walk to San Diego Convention Center	W
10	Omni San Diego Hotel	Walk to San Diego Convention Center	W
11	Renaissance San Diego Downtown Hotel	Walk to Westin San Diego; On Broadway	2
12	Residence Inn San Diego Downtown Gaslamp Quarter	Walk to San Diego Convention Center	W
13	The Westin San Diego Gaslamp Quarter	Curbside on First Avenue	2
14	US Grant Hotel	4th Avenue	3
15	Westgate Hotel	Walk to US Grant Hotel; 4th Avenue	3
16	Westin San Diego	Outside Main Lobby on Broadway	2
17	Wyndham San Diego Bayside	Curbside on Ash Street	1









For all shuttle inquiries and wheel chair accessible transportation (please allow 30 minutes for pickup), call 1-866-439-8564.



Shuttles manageu & operated 2, Transportation Management Services





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

driving 14,514,750 km in an average passenger vehicle).

- ACS performed on-site walkthroughs for 58% of our hotel room block properties in 2015, nearly 100% of hotels recycle and 50% of hotels participate in food composting programs.
- ACS designates Sci-Mix as a "zero waste" event to raise awareness around responsible waste generation and disposal.

MAKE THE GREENER MEETING PLEDGE TO SUPPORT OUR EFFORTS!

I pledge to

- 1. Take advantage of linen reuse initiatives at my hotel, decline delivery of unread newspapers, and turn off the lights when away from your hotel room.
- 2. Responsibly dispose of recyclable materials (paper, plastic, glass, aluminum) in the convention center and hotels.
- 3. Use the meeting mobile app and digital program instead of the printed on-site program.

- 4. Use the ACS carbon-offset shuttle service when walking isn't an option.
- 5. Bring a reusable water bottle to avoid the cost and waste associated with disposable, petroleum-based plastic water bottles.

If you did not pledge during the registration process, you can log into your attendee registration account using your badge number and pledge today. At the end of the meeting, you will have an opportunity to submit your personal sustainability story. Greener Meeting All-stars are eligible to win fun prizes for going above and beyond. Don't forget to stop by the Greener Meetings & Mobile App Lounge in Lobby C/D Saturday (2 to 6 PM), Sunday (8 AM to 3 PM), Monday (8 AM to 3 PM), Tuesday (8 AM to 3 PM), and Wednesday (8 AM to noon). Prize giveaways, such as water bottles, T-shirts, and edible cups from Loliware will happen daily.

Come take your picture in our photo booth lounge. The best social media posts using the hashtag #ACSGreenerMeetings will win additional prizes.

Got feedback? Please e-mail your suggestions to greenermeetings@acs.org.

TRAVEL & TRANSPORTATION

AIRPORT GROUND TRANSPORTATION

Taxis. Many companies provide taxicab service at San Diego International Airport. If you need a taxi, simply follow the signs leading to the transportation plazas. A transportation coordinator will place you with the first available taxi unless you specify a particular taxicab company. Base fare and rates are displayed on the meter and include a flag drop charge plus a per-mile and/or a perhour charge. If you are traveling from the airport, they will also add \$1.50 to your final total. Visit http://goo.gl/ujXue8 for more information on taxi rates in San Diego.

SuperShuttle. SuperShuttle service to and from the hotel can be arranged at www.supershuttle.com/default.

aspx?GC=MFPQQ. The shared ride shuttle discount is \$1.00 one way, \$2.00 round trip. You can also book sedans. To reserve by phone, call (800) bluevan (258-3826) and use the discount code MFPQQ.

AIRLINES:

Delta

(800) 328-1111 Discount code: NMMMK

United Airlines

(800) 426-1122

Discount code: ZWFB960724

Southwest Airlines

swabiz.com (online only) Discount code: 99331750

TRAIN:

Amtrak

amtrak.com; (800) 872-7245 Discount code: Xo₃V-₉18

RENTAL CARS

Δvis

(800) 331-1600 Discount code: B923099

Hertz

(800) 654-2240 Discount code: CV# 02UZ0015

TRAVELING TO MEETING VENUES

The San Diego Convention Center is located at 111 West Harbor Dr., San Diego, CA 92101.

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

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 Lobby D near registration in the San Diego Convention Center and is open Saturday, March 12, 3 to 6 PM; Sunday, March 13, 7:30 AM to 7:30 PM; Monday, March 14, 7:30 AM to 9 PM; Tuesday, March 15, 7:30 AM to 5

TIPS FOR A SAFE STAY IN SAN DIEGO

- 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
- 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.

PM; Wednesday, March 16, 7:30 AM to 4 PM; and Thursday, March 17, 7:30 AM to 1 PM.

ONLINE SOCIAL NETWORKING TOOLS.

Start discussions and connect with other attendees on the ACS Network and the ACS Facebook page. Follow ACS national meetings on Twitter.

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.

BUSINESS CENTER. The FedEx store. located in Hall D, offers in-store and online printing, notary services, document finishing, packing and shipping, and a variety of other services tailored to help you make the best of the convention.

MEMBER INSURANCE PROGRAM.

Exposition Booth 427. The ACS Member

Insurance Program offers coverage and policies for every stage of life, from college student to young professional, from raising a family to enjoying retired life and everything in between. Stop by the Member Insurance Booth to learn how you can sign up for Life & International Life Insurance, Auto & Homeowners, Disability Income, Long-Term Care, Medicare Supplement, Medical Discount Cards, Pet Insurance, and Professional Liability.

Also learn more about our newest policy available to ACS educators: Chemical Educators Legal Liability Insurance. Visit the booth for a complimentary 15-minute consultation, and learn how this policy provides the unique coverage necessary for chemistry educators. To learn more about the insurance plans available to you, visit www.acs.org/insurance.

ON-SITE MEETING **ARRANGEMENTS**

ADA-COMPLIANT MEETING. The San Diego Convention Center provides service ramps to entrances and elevated areas, braille instructions and directions throughout the building, and pay phones on each level of the facility with

(TDD) hearing-impaired functions. More information is available at visits andiego.

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; fax: (202) 872-

THANK YOU

The society thanks the many volunteers of the San Diego local section who are contributing to the 251st 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.

6128; or phone: (202) 872-6111 by Jan. 28 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 information clerks will be positioned throughout the convention center 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 Room 14B. 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/sandiego2016. Use the Meeting Mail terminals located in the San Diego Convention Center. Telephone messages left at the ACS Information Booth will be conveyed to attendees via the electronic message center, but ACS 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, March 13, through Thursday, March 17. At Camp ACS, children two (and potty-trained) to 16 years of age can participate in ageappropriate activities, including arts and crafts and active games, while you enjoy

the meeting. To ensure your child's participation, register online by Feb. 26 at www. acs.org/sandiego2016. 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.

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

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

EMERGENCIES DURING ACS MEETING

EVENTS. ACS will place detailed instructions 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 ACS San Diego local section and its members in handling local arrangements. Volunteers have planned many interesting activities; the Host Local Section booth will be located in the San Diego Convention Center, Lobby D.

INTERNATIONAL REGISTRANTS. Many international visitors are required to hold a visa to be admitted to the U.S. 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/sandiego2016.

INTERNET & COMPUTER SERVICES.

Use our electronic communication services before, during, and after the meeting. Once you get to the meeting, you can ac-

cess your e-mail and the Internet as well as your personal Meeting Mail mailbox from Meeting Mail terminals, which will be located throughout the San Diego Convention Center.

LITERATURE & PRODUCT DISTRIBU-

TION. 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 except the ACS Operations Office is authorized to place any promotional items in public meeting space 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.

MEETING OFFICES. The following ACS offices will be located in the San Diego Convention Center:

Attendee Registration: Lobby D

Career Fair: Hall A

Exhibitor Registration: Lobby C

Exposition: Halls B–C
Finance Office: Box Office E
Host Local Section: Lobby D
Member Services: Lobby D
Press Center: Room 16B
Shuttle Desk: Box Office A

The following offices are located at the identified properties:

Operations Offices: San Diego Convention Center, Embassy Suites San Diego Bay— Downtown, Hilton San Diego Bayfront, Hilton San Diego Gaslamp Quarter, Manchester Grand Hyatt San Diego, Omni San Diego Hotel, Marriott Marquis San Diego Marina, U.S. Grant Hotel, the Westin San Diego Gaslamp Quarter, Westin San Diego, Westgate Hotel, Wyndham San Diego Bayside Governance Office: Hilton San Diego

Bayfront **Society Programs:** Hilton San Diego Bayfront

MOTHERS ROOM. For your convenience and privacy, ACS will provide a room for nursing mothers at the San Diego Convention Center. Please see the Operations Office in Room 14B 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 maps. 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 maps@acs.org and contact your symposium organizer immediately.

TECHNICAL SESSION EQUIPMENT.

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

SPEAKER READY ROOMS & AUDIO-VISUAL SERVICE CENTERS. Presenters may use the speaker ready rooms to preview their presentation, ensure compatibility with our LCD projectors, or fulfill last-minute audiovisual equipment orders. We strongly recommend that all presenters come to the speaker ready room the day before their presentation to check for connectivity and resolution. The hours of operation will be from 3 to 5 PM Saturday and 7 AM to 6 PM Sunday through Thursday. Visit the ACS Operations Office at any ACS property for speaker ready room locations. Speaker ready rooms are not equipped with copy machines. There is a FedEx Office located in the Hall D lobby of the convention center that provides a range of services including computer access and copying, faxing, 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, and 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 check in before entering the hall. After exiting, presenters will not be permitted to reenter the hall until the ses-

ABSTRACTS & PREPRINTS

sion begins at 8 PM.

ONLINE TECHNICAL PROGRAM. The technical program for the 251st national meeting is now available at www.acs.org/sandiego2016. You can search by divisions or committees, symposia, speakers, or keywords from abstracts as well as presidential events and the multidisciplinary theme of "Computers in Chemistry."

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 by Jan. 24 or on-site in San Diego from March 13 to 17. 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 San Diego Convention Center. You can have a USB flash drive shipped to you if you place your order by Jan. 24, 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 proceedings.com/2256.html.

Polymer Chemistry.

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



PRESIDENTIAL EVENTS

ACS PRESIDENT DONNA NELSON wel-

comes attendees to the 251st ACS National Meeting. The presidential programming promises excellent science as well as opportunities to become involved in discussions and community efforts to address member concerns. This direct solicitation for member feedback is unprecedented in presidential programming, so please participate if you want to see it continued.

Three presidential sessions address ACS member concerns about employment in the chemical sciences, demographic data and their applications to diversity in chemistry, and changes in organic chemistry as a prerequisite. In order to facilitate members voicing their concerns, each symposium will be a panel discussion including participation by the audience. In addition to these three presidential sessions, there will be two traditional sessions featuring past Stanley C. Israel Award winners and the current Dreyfus Prize recipient.

The first presidential symposium, titled "Discussions with the President's Task Force on Employment," will take place on Sunday, March 13, from 1:30 to 4 PM. Speak-

ers will be members of the president's task force, representing academe, government, and industry. Task force members were charged with examining (1) issues broadly related to employment of chemistry professionals in the U.S., (2) the plight of demographic subgroups and people at different education and experience levels, and (3) different sectors of employment reflecting the situation of all chemical professionals, not just ACS members. They will report the results of their first year of efforts on topics pertinent to unemployment in the chemical sciences, such as supply and demand in the chemical workforce, career opportunities for undergraduate professionals, professional certificates, preparing graduates for industrial jobs, challenges of unemployment, and global factors influencing employment.

The second session addressing member concerns is titled "Is There a Crisis in Organic Chemistry?" Representatives from publishers of comprehensive undergraduate organic chemistry textbooks will speak. Cengage, Elsevier, McGraw-Hill, Macmillan, Pearson, and Wiley will discuss changes in organic chemistry as a prerequisite, current teaching methods, and responses of organic chemistry programs, professors, and requirements. This symposium will take place Monday, March 14, from 9 to 11:30 AM.

The third session on member concerns, "Diversity—Quantification—Success," will address the use of data to drive activities diversifying the chemical sciences.

Researchers will present their demographic data, disaggregated by race and gender, on various sectors of the chemical sciences. Madeleine Jacobs, Valerie Kuck, Sibrina Collins, Rigoberto Hernandez, and Dontarie Stallings will speak on Monday, March 14, from 1:30 to 4 PM.

A new method will be tried for encouraging community efforts to address member concerns in these three areas via contributed presidential poster sessions at this meeting. The topics will correspond to the oral sessions described above. View the posters Sunday, March 13, from 8 to 10 PM, and Monday evening during Sci-Mix. The panel discussions and contributed poster sessions are opportunities for ACS communities to grow together via teamwork and improve our Society. Please attend these trial activities and voice your ideas.

In addition, "How To Foster Diversity in the Chemical Sciences: Lessons Learned and Taught from the Stories of Recipients of the Stanley C. Israel Award" will be held Monday, March 14, from 8:30 AM to noon. Building on symposia of the same name at previous national meetings, this symposium promises ideas and inspiration for increasing diversity in our communities.

Finally, the Dreyfus Prize Symposium will honor the most recent recipient of this award, Krzysztof Matyjaszewski, by focusing its content on his area of research, "Making Molecules & Materials." Supporting talks will be delivered Tuesday, March 15, from 9 to 11:45 AM, and 2 to 4:30 PM.

Details of these presidential events and other recommended symposia can be found at www.acs.org/sandiego2016.

2016 NATIONAL AWARDS

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

This year's event will be held on the evening of Tuesday, March 15, at the Manchester Grand Hyatt San Diego Hotel. Dinner begins at 7:30 PM, and the general meeting begins at 8:30 PM. Mostafa A. El-Sayed will deliver the Priestley Medal Address at the general meeting. See Ticketed Events on pages 65 for ticket information.

Several awards, such as the Arthur C. Cope Scholar Awards and the Arthur C. Cope Award, will be presented at the Arthur C. Cope Symposium in conjunction with the 252nd ACS National Meeting in Philadelphia in August.

ACS Award for Achievement in Research for the Teaching and Learning of Chemistry, sponsored by Pearson Education, **Avi Hofstein**, Weizmann Institute of Science. Address to be presented before the Division of Chemical Education.

ACS Award for Affordable Green Chemistry, sponsored by Dow Chemical and endowed by Rohm and Haas, Martin D. Johnson and Joseph R. Martinelli, Eli Lilly & Co., and Shannon S. Stahl, University of Wisconsin, Madison. Address to be presented before the Division of Organic Chemistry.

ACS Award for Computers in Chemical & Pharmaceutical Research, sponsored by the ACS Division of Computers in Chemistry,

Warren J. Hehre, Wavefunction and the University of California, Irvine, (emeritus). Address to be presented before the Division of Computers in Chemistry.

ACS Award for Creative Advances in Environmental Science and Technology, sponsored by the ACS Division of Environmental Chemistry and ACS journals Environmental Science & Technology and Environmental Science & Technology Letters, Bruce E. Logan, Pennsylvania State University. Address to be presented before the Division of Environmental Chemistry.

ACS Award for Creative Invention, sponsored by ACS Corporation Associates,

Antonio Facchetti, Polyera Corp. and
Northwestern University. Address to be
presented before the Division of Polymeric
Materials: Science & Engineering.

ACS Award for Creative Work in Fluorine Chemistry, sponsored by the Juhua Group Technology Center (China), **Steven H. Strauss**, Colorado State University. Address to be presented before the Division of Fluorine Chemistry.

ACS Award for Creative Work in Synthetic Organic Chemistry, sponsored by the Aldrich Chemical, **Scott J. Miller**, Yale University. Address to be presented before the Division of Organic Chemistry.

ACS Award for Distinguished Service in the Advancement of Inorganic Chemistry, sponsored by Strem Chemicals, Vincent L. Pecoraro, University of Michigan, Ann Arbor. Address to be presented before the Division of Inorganic Chemistry.

ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences, sponsored by the Camille & Henry Dreyfus Foundation, **Luis A. Colón,** University at Buffalo, SUNY. Address to be presented before the Division of Analytical Chemistry.

ACS Award for Encouraging Women into Careers in the Chemical Sciences, sponsored by the Camille & Henry Dreyfus Foundation, Carol A. Fierke, University of Michigan. Address to be presented before the ACS Women Chemists Committee and the ACS Division of Biological Chemistry.

ACS Award for Research at an Undergraduate Institution, sponsored by Research Corporation for Science Advancement, **Thomas**

PRELIMINARY PROGRAM

E. Goodwin, Hendrix College. Address to be presented before the Division of Organic Chemistry.

ACS Award for Team Innovation, sponsored by ACS Corporation Associates, Matthew F. Brown and Mark E. Flanagan, Pfizer; Chakrapani Subramanyam, Pfizer Worldwide Medicinal Chemistry; Paul S. Changelian, Confluence Life Sciences; and Michael J. Munchhof, Michael J. Munchhof LLC. Address to be presented before the Division of Medicinal Chemistry.

ACS Award in Analytical Chemistry, sponsored by the Battelle Memorial Institute, William R. Heineman, University of Cincinnati. Address to be presented before the Division of Analytical Chemistry.

ACS Award in Applied Polymer Science, sponsored by Eastman Chemical, Thomas P. Russell, University of Massachusetts, Amherst. Address to be presented before the Division of Polymeric Materials: Science & Engineering.

ACS Award in Chromatography, sponsored by MilliporeSigma, Harold M. McNair, Virginia Tech. Address to be presented before the Division of Analytical Chemistry.

ACS Award in Colloid & Surface Chemistry, sponsored by Colgate-Palmolive, Nicholas L. Abbott, University of Wisconsin, Madison. Address to be presented before the Division of Colloid & Surface Chemistry.

ACS Award in Industrial Chemistry, sponsored by the ACS Division of Industrial & Engineering Chemistry, Ted C. Germroth, Eastman Chemical. Address to be presented before the Division of Industrial & Engineering Chemistry.

ACS Award in Inorganic Chemistry, sponsored by Aldrich Chemical, Mercouri G. Kanatzidis, Northwestern University and Argonne National Laboratory. Address to be presented before the Division of Inorganic Chemistry.

ACS Award in Organometallic Chemistry, sponsored by the Dow Chemical Co. Foundation, Karen I. Goldberg, University of Washington. Address to be presented before the Division of Inorganic Chemistry.

ACS Award in Polymer Chemistry, sponsored

by ExxonMobil Chemical, **Edmund M.** Carnahan, Dow Chemical. Address to be presented before the Division of Polymer Chemistry.

ACS Award in Pure Chemistry, sponsored by the Alpha Chi Sigma Fraternity and the Alpha Chi Sigma Educational Foundation, Jonathan S. Owen, Columbia University. Address to be presented before the Division of Inorganic Chemistry.

ACS Award in Separations Science & Technology, sponsored by Waters Corp., **Steven M.** Cramer, Rensselaer Polytechnic Institute. Address to be presented before the Division of Industrial & Engineering Chemistry Separations Science & Technology Symposium.

ACS Award in the Chemistry of Materials, sponsored by E. I. du Pont de Nemours & Co., Jean-Luc Brédas, King Abdullah University of Science & Technology, Thuwal, Saudi Arabia. Address to be presented before the Division of Physical Chemistry.

ACS Award in Theoretical Chemistry, sponsored by ACS, Roberto Car, Princeton University. Address to be presented before the Division of Physical Chemistry.

Award for Volunteer Service to the American Chemical Society, sponsored by ACS, H. N. Cheng, U.S. Department of Agriculture. Address to be presented before the ACS ChemLuminary Awards at the ACS fall national meeting in Philadelphia.

Alfred Bader Award in Bioinorganic or Bioorganic Chemistry, sponsored by the Alfred R. Bader Fund, Edward I. Solomon, Stanford University and SLAC National Accelerator Laboratory. Address to be presented before the Division of Inorganic Chemistry.

Earle B. Barnes Award for Leadership in Chemical Research Management, sponsored by the Dow Chemical Co. Foundation, Henry E. Bryndza, DuPont. Address to be presented before the Division of Inorganic Chemistry.

Ronald Breslow Award for Achievement in Biomimetic Chemistry, sponsored by the Ronald Breslow Award Endowment, Thomas W. Muir, Princeton University. Address to be presented before the Division of Biological Chemistry at the ACS fall national meeting in Philadelphia.

Herbert C. Brown Award for Creative Research in Synthetic Methods, sponsored by the Purdue Borane Research Fund and the Herbert C. Brown Award Endowment, Alois Fürstner, Max Planck Institute for Coal Research. Address to be presented before the Division of Organic Chemistry.

Alfred Burger Award in Medicinal Chemistry, sponsored by Gilead Sciences, Richard Di-Marchi, Indiana University. Address to be presented before the Division of Medicinal Chemistry.

James Bryant Conant Award in High School Chemistry Teaching, sponsored by Thermo Fisher Scientific, Julia Winter, Alchemie Games and Detroit Country Day School, Beverly Hills, Mich. Address to be presented before the Division of Organic Chemistry.

Arthur C. Cope Award, sponsored by the Arthur C. Cope Fund, Eric Jacobsen, Harvard University. Address to be presented before the Division of Organic Chemistry at the ACS fall national meeting in Philadelpha.

Arthur C. Cope Scholar Awards, sponsored by the Arthur C. Cope Fund, Takahiko Akiyama, Gakushuin University, Japan; Kristi S. Anseth, University of Colorado, Boulder; Geert-Jan Boons, University of Georgia and Utrecht University, the Netherlands; Luis M. Campos, Columbia University; Seth M. Cohen, University of California, San Diego; Matthew J. Gaunt, University of Cambridge, England; Marc M. Greenberg, Johns Hopkins University; Thomas Kodadek, Scripps Research Institute, Florida; Lawrence T. Scott, University of Nevada, Reno, and Boston College; and David A. Spiegel, Yale University. Address to be presented before the Division of Organic Chemistry at the ACS fall national meeting in Philadelphia.

Elias J. Corey Award for Outstanding Original Contribution in Organic Synthesis by a Young Investigator, sponsored by the Pfizer Endowment Fund, Phil S. Baran, Scripps Research Institute, California. Address to be presented before the Division of Organic Chemistry.

F. Albert Cotton Award in Synthetic Inorganic Chemistry, sponsored by the F. Albert Cotton Endowment Fund, François P. Gabbaï, Texas A&M University. Address to be

presented before the Division of Inorganic Chemistry.

Peter Debye Award in Physical Chemistry, sponsored by E. I. du Pont de Nemours & Co., **Mark A. Ratner**, Northwestern University. Address to be presented before the Division of Physical Chemistry.

Frank H. Field & Joe L. Franklin Award for Outstanding Achievement in Mass Spectrometry, sponsored by Waters Corp., Albert John Roeland Heck, Netherlands Proteomics Centre and Utrecht University, the Netherlands. Address to be presented before the Division of Analytical Chemistry.

Francis P. Garvan-John M. Olin Medal, sponsored by the Francis P. Garvan-John M. Olin Medal Endowment, **Annie B. Kersting**, Lawrence Livermore National Laboratory. Address to be presented before the Division of Nuclear Chemistry & Technology.

James T. Grady-James H. Stack Award for Interpreting Chemistry for the Public, sponsored by ACS, **Peter Atkins**, University of Oxford, England. Address to be presented before the ACS Office of Public Affairs.

Harry Gray Award for Creative Work in Inorganic Chemistry by a Young Investigator, sponsored by the Gray Award Endowment, **Eric J. Schelter,** University of Pennsylvania. Address to be presented before the Division of Inorganic Chemistry.

Ernest Guenther Award in the Chemistry of Natural Products, sponsored by Givaudan, **Eric Block**, University at Albany, SUNY. Address to be presented before the Division of Organic Chemistry.

Kathryn C. Hach Award for Entrepreneurial Success, sponsored by the Kathryn C. Hach Award Fund, Scott D. Allen and Anthony R. Eisenhut, Novomer, and Geoffrey W. Coates, Cornell University. Address to be presented before the Division of Polymer Chemistry.

Joel Henry Hildebrand Award in the Theoretical & Experimental Chemistry of Liquids, sponsored by ExxonMobil Research & Engineering, **Kenneth Schweizer**, University of Illinois, Urbana-Champaign. Address to be presented before the Division of Physical Chemistry.

Ralph F. Hirschmann Award in Peptide Chem-

istry, sponsored by Merck Research Laboratories, **Ronald T. Raines**, University of Wisconsin, Madison. Address to be presented before the Division of Organic Chemistry.

Ipatieff Prize, sponsored by the Ipatieff Trust Fund, **Aditya Bhan**, University of Minnesota. Address to be presented before the Division of Catalysis Science & Technology.

Frederic Stanley Kipping Award in Silicon Chemistry, sponsored by Dow Corning, Michael A. Brook, McMaster University. Address to be presented before the Division of Polymer Chemistry and U.S.-based Silicon Symposium.

Irving Langmuir Award in Chemical Physics, sponsored by GE Global Research and the ACS Division of Physical Chemistry, **George C. Schatz**, Northwestern University. Address to be presented before the Division of Physical Chemistry.

Josef Michl ACS Award in Photochemistry, sponsored by the Josef Michl Award Endowment, **Frederick D. Lewis**, Northwestern University. Address to be presented before the Division of Organic Chemistry.

E. V. Murphree Award in Industrial & Engineering Chemistry, sponsored by ExxonMobil Research & Engineering, Michael Thackeray, Argonne National Laboratory. Address to be presented before the Division of Industrial & Engineering Chemistry at the ACS fall national meeting in Philadelphia.

Nobel Laureate Signature Award for Graduate Education in Chemistry, sponsored by Avantor Performance Materials, **Matthew J. Polinski** (student), Bloomsburg University of Pennsylvania, and **Thomas E. Albrecht-Schmitt** (preceptor), Florida State University. Address to be presented before the Division of Nuclear Chemistry & Technology.

James Flack Norris Award in Physical Organic Chemistry, sponsored by the ACS Northeastern Section, J. C. (Tito) Scaiano, University of Ottawa, Ontario. Address to be presented before the Division of Catalysis Science & Technology.

George A. Olah Award in Hydrocarbon or Petroleum Chemistry, sponsored by the George A. Olah Award Endowment, **Mieczyslaw M. Boduszynski**, Chevron Energy Technology

(retired). Address to be presented before the Division of Energy & Fuels.

George C. Pimentel Award in Chemical Education, sponsored by Cengage Learning and the ACS Division of Chemical Education, **Richard S. Moog,** Franklin & Marshall College and The POGIL Project. Address to be presented before the Division of Chemical Education.

Priestley Medal, sponsored by ACS, Mostafa A. El-Sayed, Georgia Institute of Technology. Address to be presented at the ACS National Awards Banquet Ceremony & General Meeting of the Society at the ACS spring national meeting in San Diego.

Glenn T. Seaborg Award for Nuclear Chemistry, sponsored by the ACS Division of Nuclear Chemistry & Technology, **E. Philip Horwitz**, Eichrom Technologies. Address to be presented before the Division of Nuclear Chemistry & Technology.

Gabor A. Somorjai Award for Creative Research in Catalysis, sponsored by the Gabor A. & Judith K. Somorjai Endowment Fund, **Donna G. Blackmond,** Scripps Research Institute, California. Address to be presented before the Division of Organic Chemistry.

George & Christine Sosnovsky Award for Cancer Research, sponsored by the George & Christine Sosnovsky Endowment Fund, **Juswinder Singh,** Ankaa Therapeutics. Address to be presented before the Division of Medicinal Chemistry.

E. Bright Wilson Award in Spectroscopy, sponsored by the ACS Division of Physical Chemistry, **Robert G. Griffin**, Massachusetts Institute of Technology. Address to be presented before the Division of Physical Chemistry.

Ahmed Zewail Award in Ultrafast Science & Technology, sponsored by the Ahmed Zewail Endowment Fund established by Newport Corp., Andrei Tokmakoff, University of Chicago. Address to be presented before the Division of Physical Chemistry.

National Fresenius Award, sponsored by Phi Lambda Upsilon, the National Chemistry Honor Society, **Douglas A. Mitchell**, University of Illinois, Urbana-Champaign. Address to be presented before the Division of Biological Chemistry at the ACS fall national meeting in Philadelphia.

STUDENT & EDUCATOR ACTIVITIES

EDUCATION-FOCUSED programs and specialty activities are being held for undergraduate students, graduate students, high school teachers, faculty at two- and four-year colleges, and chemical professionals. Explore these opportunities in depth at www.acs.org/sandiego2016.

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 Richard Zare from Stanford University will discuss his life with lasers.

SUNDAY. MARCH 13

Undergraduate Hospitality Center, $8\,\mathrm{AM}$ to $5\,\mathrm{PM}$

Undergraduate Research Papers (Oral) (sponsored by CHED), 8:30 AM to 5 PM **Making the Most of Your First ACS**

Meeting, 9 to 9:45 AM
Graduate School Reality Check, Step I:

Getting In (cosponsored by YCC), 10 to 11:15 AM

Chem Demo Exchange, 11 AM to 12:30 PM Graduate School Reality Check, Step II: You're In—Now What? (cosponsored by YCC), 11:15 AM to 12:15 PM

Technical Symposium: Trends in Computational Chemistry (cosponsored by COMP), 1 to 2:30 PM

Networking Social with Graduate School Recruiters, 1 to 5 PM

Workshop: Effective Chemistry Demos for Community Outreach, 2:45 to 4 PM Workshop: Networking 101 (cosponsored by PROF and YCC), 4 to 5:30 PM

Student Chapter Awards Ceremony, 7 to 8:30 PM

Undergraduate Social, 8:30 to 11 PM

MONDAY, MARCH 14

Undergraduate Hospitality Center, $8\,\mathrm{AM}$ to $5\,\mathrm{PM}$

Symposium: Realities of the Chemistry Industry: Career Opportunities & Paths

(sponsored by I&EC), 8:30 AM to 5 PM **Undergraduate Research Papers (Oral)** (sponsored by CHED), 8:30 AM to 5 PM

Technical Symposium: Advances in Chemical Imaging: Ultra-Resolution to Single Molecules (cosponsored by ANYL and PHYS), 9 to 10:30 AM

Technical Symposium: Frontiers in Inorganic Chemistry (cosponsored by INOR), 9:30 to 11:30 AM

Workshop: Chemists Celebrate Earth Day Outreach Ideas (sponsored by CCA), 9:45 to 11 AM

Undergraduate Research Poster Session (sponsored by CHED), Noon to 2 PM Eminent Scientist Lecture: "My Life with Lasers," with Richard Zare, Stanford University (cosponsored by ANYL and

Student Speed Networking with Chemistry Professionals, 3:45 to 5:15 PM Sci-Mix/Successful Student Chapter Posters. 8 to 10 PM

PHYS), 2:30 to 3:30 PM

TUESDAY. MARCH 15

Realities of the Chemical Industry: Career Paths and Opportunities (cosponsored by I&EC), 8:30 AM to 5 PM

Chemistry & the Environment Film Series, Noon to 2 PM

All events are sponsored or cosponsored by the Society Committee on Education's Undergraduate Programs Advisory Board. Chair: Michael R. Adams, Xavier University of Louisiana, New Orleans. Program Chair: Steven Emory, Western Washington University, Bellingham. For more information, go to www.acs.org/undergrad or contact the ACS Undergraduate Programs Office at (800) 227-5558 ext. 4480.

GRADUATE & POSTDOCTORAL SCHOL-

ARS OFFICE. With support from the Graduate Education Advisory Board, this office provides and promotes programs and resources for graduate students and postdoctoral scholars. All events will take place at the San Diego Convention Center.

SUNDAY, MARCH 13

Faculty & Postdoc Afternoon Networking Coffee Break, 3 to 5 PM

MONDAY, MARCH 14

Student Speed Networking with Chemistry Professionals, 3:45 to 5:15 PM

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

TUESDAY, MARCH 15

ChemIDP Workshop: A New Career Planning Tool, 10 AM to noon

For more information about this reception and other ACS programs offered to graduate students and postdocs, visit www.acs. org/grad or contact the ACS Graduate & Postdoctoral Scholars Office at graded@acs.org.

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 and demonstrations on current pedagogies, resources, and activities that align with the meeting theme, "Computers in Chemistry." 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, MARCH 13

High School Teachers Program, $8:30 \,\mathrm{AM}$ to $4:30 \,\mathrm{PM}$.

MONDAY, MARCH 14

Potpourri of Polymer Projects: Take a Byte Out of the NGSS, (cosponsored by POLY), 4 to 8:30 PM

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

WORKSHOPS

THE ACS DIVISION OF CHEMICAL **HEALTH & SAFETY (CHAS) WORK-**

SHOPS are scheduled for the Friday and/ or Saturday prior to a national meeting. Workshops begin at 8:30 AM and finish around 4 PM, with a 1 hour (no host) lunch break. Coffee is available starting at 8 AM. Register online at dchas.org.

Laboratory Waste Management. Friday, March 11, 8:30 AM to 4 PM. San Diego Convention Center. CHAS offers this workshop to assist participants with the various regulatory requirements that apply to laboratories that generate hazardous waste, as well as provide insight into the options for on-site management and off site disposal. Focus will include recycling and reclamation techniques, economical handling of waste, and liability issues.

Laboratory Safety. Friday, March 11, 8:30 AM to 4 PM. San Diego Convention Center. The Laboratory Safety Institute and CHAS present an intensive one-day introduction to effective lab safety programs and the fundamentals of lab safety. Through a combination of discussion, video, activities, and instructor presentations, the participants learn ways to identify hazards and convince others that lab safety is important. They learn about the critical components in a lab safety program and techniques for program evaluation.

How To Be A More Effective Chemical Hygiene Officer (CHO). Saturday, March 12, 8:30 AM to 4 PM. San Diego Convention Center. CHAS offers this workshop to provide participants with a detailed analysis of the CHO position and to prepare for the CHO certification exam to be held the next day. Participants receive a clear perspective on safety issues in the laboratory, focusing on what a CHO does and how to do it better. The workshop covers all of the content areas of the certification exam, including a sample test in the same format as the real one. Whether you are a new CHO or an experienced one, you will find something to put to real use in this fast-paced presentation.

LOCATION	CHAS MEMBER REGISTRATION FEE	NON-CHAS REGISTRATION FEE
San Diego, March 2016	\$300 early registration \$375 after Jan. 15	\$350 early registration \$425 after Jan 15
K-12 science teachers who are members of AACT	\$99 registration at any time	

NOTE: Need-based scholarships covering both registration and membership for any workshop are available for K-12 Science Teachers. Contact scholarships@labsafetyinstitute.org for more information.

Reactive Chemical Management for Laboratories & Pilot Plants. Saturday, March 12, 8:30 AM to 4 PM. San Diego Convention Center. Chemical reactivity hazards contribute to a significant number of incidents in laboratories and pilot plants. This workshop will provide participants with the knowledge and skill to screen processes for potential hazards, recognize when reactive hazards are present, and implement appropriate controls to reduce the risk of an incident. Workshop attendees will review case studies of actual incidents and work 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.

Cannabis Extraction & Analysis. Saturday, March 12, 8:30 AM to 4 PM. San Diego Convention Center. CHAS and CANN (Cannabis Chemistry Subdivision) present a comprehensive review of current methodologies and best practices in the analysis of cannabis products and extraction/ processing of cannabis. Participants will learn the latest developments in extraction technologies, how to comply with testing standards, and how to operate safely.

Meeting New Chemical Safety Expectations in Instructional Laboratories. Saturday, March 12, 8:30 AM to 4 PM. San Diego Convention Center. The 21st-century chemistry laboratory curriculum includes discovery-based, research-style lab work in addition to traditional "cookbook" procedures. To ensure a safe working environment in this emerging pedagogy, laboratory safety practices must evolve away from a strict focus on safety rules toward riskassessment and risk-management practices. This transition is outlined in ACS's guidelines for bachelor's degree programs and in the new National Fire Protection Association (NFPA) 45-2015 safety standards. This workshop will flesh out these ideas in the cultural context of lab safety

and then review and provide practice with Job Hazard Analysis and Control Banding tools, as described in ACS's Identifying & Evaluating Hazards in Research Laboratories document. Finally, we will address how these tools can be used to address the new NFPA requirements for a documented hazard/risk assessment and a safety briefing to students in instructional laboratories.

COACh: Leadership & Advanced Negotiations Skills. Saturday, March 12, 8:30 AM to 5 PM. Hilton San Diego Gaslamp Quarter. This academic leadership seminar is designed for university faculty or other academic administrators who are anticipating, considering, or fulfilling academic leadership roles. The advanced negotiations section builds on the basics of negotiations and adds a leadership assessment, as well as advanced skills in negotiating difficult conversations. Participants will also learn how to differentiate types of leadership approaches to change, identify the stages of resistance to change, and learn how to use their network in leading change. The group will be given a model for how to form a high-performance task force to deal with challenging issues, as well as processes for giving feedback. Participants will practice a number of skills to strengthen understanding of the techniques above. As a final exercise, volunteer participants will practice a case study.

Standard Methods. Materials & **Databases for Surface Complexation** Measurements. Wednesday, March 16, 5:30 to 7 PM, Omni San Diego Hotel. When combined with chemical equilibrium modeling, the measurement of complexation reactions between material surfaces and target chemical species can result in the calculation of discrete reactive surface site concentrations and intrinsic thermodynamic equilibrium constants. These parameters are critical when modeling and predicting chemical processes associated with industrial separations, water

treatment and remediation, and the reactive transport of contaminants in natural geochemical systems. This workshop, sponsored in part by the National Institute of Standards & Technology, will explore the need for standardized experimental and modeling methods and standard reference materials for surface complexation measurements, as well as their capacity to promote the development and availability of internally consistent datasets.



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 better-informed decisions.

Opportunities abound at the ACS national meeting in San Diego 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 System course that gives you skills that can be immediately applied in school or on the job. If you are an ACS member, stop by the ACS Career Fair in the 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 Diego.

ACS CAREER FAIR

JOB SEEKERS, are you looking to jumpstart 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, March 13, 9 AM to 5 PM; Monday, March 14, 9 AM to 5 PM; Tuesday, March 15, 9 AM to 5 PM; and Wednesday, March 16, 8:30 AM to 12:30 PM (workshops only) in the San Diego Convention Center. The career fair is the place where the best talent and the best employers in chemistry meet.

LET ACS HELP YOU REACH YOUR CA- REER 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 20 career-related workshops

Job seekers must be ACS members, be registered for the national meeting, and complete career fair registration at careerfair. acs.org (pick up a career fair registration badge beginning Sunday, March 13).

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

ONE-ON-ONE CAREER CONSULTING.

Individual 30-minute appointments with career consultants are available both on-site and online. These consults can help you strengthen your résumé, improve your interviewing skills, and design a job search or comprehensive professional growth strategy. Please bring a copy of your résumé or CV to all appointments. All one-on-one on-site career consulting sessions will take place in the Résumé Review/Mock Interview area. Sign-up begins at 9 AM on Sunday, March 13, on a first-come, first-served basis.

CAREER AND PROFESSIONAL DEVELOPMENT WORKSHOPS. More than 20

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 careerfair.acs.org for location.

SUNDAY, MARCH 13

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
New Technology to Find Jobs & Manage
Your Career, 10 to 11:30 AM
Soup to Nuts of Entrepreneurship, Noon
to 1:30 PM

Foreign National Scientist Obtaining a Job in the U.S., 1:30 to $3~\mathrm{PM}$ Writing Excellent Proposals, 3:30 to $5~\mathrm{PM}$

MONDAY, MARCH 14

Working for Yourself, 8:30 AM to 12:30 PM Working in Higher Education, 8:30 AM to 12:30 PM

Working in Government, 8:30 AM to 12:30 PM

Acing the Interview, 1:30 to 5:30 PM Working in Industry, 1:30 to 5:30 PM Finding Your Path, 1:30 to 5:30 PM

TUESDAY, MARCH 15

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 in Higher Education, 1:30 to 5:30 PM

WEDNESDAY, MARCH 16

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

EMPLOYERS, ACS HAS THE TALENT YOU ARE LOOKING FOR. 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 recruiters seeking to fill positions in all facets of chemistry, pharmaceuticals, and biotechnology.

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

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

ACS CAREER FAIR AND THE ACS EXPOSITION TEAM HAVE JOINED FORCES.

Employers can purchase booth space inside the exposition hall, enabling your company to maximize its ability to showcase products and services and connect with job seekers. Employers can sign up for the ACS Career Fair Recruiters Row package by contacting Kimberly Mallory at (202) 452-8918 (U.S./Canada only) or email k_mallory@acs.org.

Employers will receive an e-mail confirmation and must visit the ACS Career Fair Information Booth in the Convention Center to pick up their blue badge. For more information, please visit careerfair.acs.org or contact Kimberly Mallory (see above).

ACS SHORT COURSES

REFRESH YOUR SKILLS or branch into new areas with an ACS Short Course. Held in conjunction with ACS national meeting in San Diego, courses taught by our expert instructors give you the opportunity to stay on top of new technology, growing trends in the industry, and the skills you need to advance your career. ACS member, advanced 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 Diego or to register, visit proed.acs.org/sandiego. If you have questions, call (202) 872-4508, fax (202) 872-6336, or e-mail proed@acs.org.

ANALYTICAL

1-D & 2-D NMR Spectroscopy: Structure Determination of Small Molecule Organic Compounds, March 11-12 Practical Applications of Mass Spectrometry for Small Molecules, March 11–12

BIOLOGICAL/MEDICINAL

Applications of Pharmacokinetic & Safety Pharmacology for Chemists in Drug Development, March 11–12 Druglike Properties: Optimizing Pharmacokinetics & Safety in Drug Development, March 11–12 Essentials of Medicinal Chemistry &

Structure Based Drug Design, March 11–12

COMPUTERS/STATISTICS/ ENGINEERING

Pharmacology, March 11-12

Experimental Design for Productivity & Quality in Research & Development, March 11–13

ORGANIC/PHYSICAL

1-D & 2-D NMR Spectroscopy: Structure Determination of Small Molecule Organic Compounds, March 11–12 Dispersions in Liquids: Suspensions, Emulsions & Foams, March 11–12 Mastering the Art of Writing Reasonable Organic Reaction Mechanisms, March 11–12

Organic Synthesis: Methods & Strategies for the 21st Century Chemist, March 11–12

POLYMERS

Polymeric Coatings, March 11–12 Polymer Science & Technology, March 12–13

PROFESSIONAL DEVELOPMENT Effective Supervision of Scientists & Technical Staff, March 11–12

Effective Technical Writing, March 11–12 Project Management for Technical Professionals, March 11–12

REGULATORY/ENVIRONMENTAL

Write Your Own Patent Applications, halfday course, March 13 Intellectual Property Strategies for

Technical Professions, half-day course, March 13

2016 LEADERSHIP DEVELOPMENT COURSE OFFERINGS

WHETHER YOU ARE A manager, experienced professional, or new to the workforce, we invite you to attend an ACS Leadership Development System course held at

the ACS national meeting. The following four-hour facilitated courses require a fee of \$150 each for ACS members and \$300 each for nonmembers. Register for these courses when you register for the meeting. For more information and full course descriptions, visit www.acs.org/leadershipdevelopment.

Leading Without Authority. Sunday, March 13, 1 to 5 PM. We've all been in situations where we are leading projects or teams and need to direct everyone's effort but don't have complete control of the project's resources, including the people. Learn practical tools to help you gain cooperation without formal authority and motivate your colleagues or volunteers.

Engaging Colleagues in Dialogue. Monday, March, 14, 8 AM to noon. Communication underlies everything we do and has a direct correlation to the success of a project. It is one of the most important skills we need to be successful in school, on the job, and in volunteer situations. This hands-on, interactive course helps develop your one-to-one communication skills. You will learn how to improve both sides of the communication exchange: first, working to understand how to better communicate your messages and second, working on listening and acknowledging others' messages. You will have an opportunity to assess your own communication skills through conversations with colleagues.

Fostering Innovation. Monday, March 14, 1 to 5 PM. Keeping pace in an environment of constant change requires continuous innovation. Whether you are in 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 personal and organizational success. But coming up with new ideas is challenging, and few of us have the tools and skills. This course teaches a proven, systematic process to generate ideas. You will gain understanding and tools to help you tap into your own innovation style and learn how to stimulate innovative thinking among team members and colleagues.

Coaching & Feedback. Tuesday, March 15, 8 AM to noon. Most managers will tell you that coaching is important, and yet they avoid actually coaching anyone. Some who try find it harder than expected. The reason? Most managers lack the skills and confidence to be effective in the coaching

role. But good coaching is central to your success as a leader and to the success of your team members, employees, and volunteers on ACS committees. Coaching will help you increase performance, expand your team's capabilities, and improve relationships and morale. This course provides leaders with a proven process, practical tools, and a hands-on opportunity to coach volunteers and employees more effectively.

Strategic Planning. Tuesday, March 15, 1 to 5 PM. Among the responsibilities of a leader, none is more critical than setting goals and direction. Whether you are leading at the level of a local section, division, or national committee, your members look to you to establish the strategic plan that will guide the group's activities. This course will help you improve your understanding of the planning process while giving you the opportunity to start developing a strategic plan.

EXPOSITION

SEE WHAT'S NEW INSIDE THE EXPO-

SITION. Visit the ACS National Exposition at the San Diego Convention Center, Halls B/C, from Sunday, March 13, through Tuesday, March 15. 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/ sandiego2016 to learn more about exhibiting companies and to download product information that meets your needs.

Free Exhibitor Workshops. Free workshops will be hosted by exhibitors on the exposition floor and in private rooms inside the San Diego Convention Center. These

workshops will introduce new products and services, build skills with specific tools and techniques, and highlight innovative applications that may improve your productivity. Exhibitor workshop registration is now available at www.acs.org/sandiego2016.

Presentations & Special Events. Don't forget to join us on Sunday from 6 to 8:30 PM for the Attendee Welcome Reception. Also, visit the Town Center inside the exposition for poster sessions and to connect with colleagues during afternoon breaks.

Internet & Technology. Use free Internet access and leave messages for one another at the Meeting Mail terminals located inside the Town Center. Enjoy free Wi-Fi service at designated areas in the San Diego Convention Center.

Admission Requirements & Expo-Only **Registration.** Exposition admission is complimentary for all national meeting registrants; however, you are required to wear your badge. Individuals who want to visit the exhibits without registering for the technical component of the national meeting can obtain an expo-only badge for \$60. Students with school identification can obtain an expo-only badge for \$30. Registration can be handled online, by mail, or in person at ACS Attendee Registration, San Diego Convention Center, Lobby C/D.

GOVERNANCE **MEETINGS**

For the complete list of committee meetings and agendas, please consult www.acs.org/sandiego2016 or the onsite program distributed during the

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 San Diego Convention Center from noon to 1 PM on Sunday, March 13.

ACS COUNCIL. The ACS Council meeting will begin at 8 AM, Wednesday, March 16, at the San Diego Hilton Bayfront. 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 both ex officio and elected councilors may attend; active 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

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

> Open Meeting Saturday, March 12, 8 AM to noon San Diego Hilton Bayfront

CHEMICAL SAFETY

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

Open Executive Session Monday, March 14, 8:30 to 11:30 AM San Diego Hilton Bayfront

CHEMISTRY & PUBLIC AFFAIRS

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

Open Meeting Saturday, March 12, 3 to 4 PM San Diego Hilton Bayfront

CHEMISTS WITH DISABILITIES

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

Combined Open and Executive Meeting Sunday, March 13, 8:30 AM to 4:30 PM San Diego Hilton Bayfront

COUNCIL POLICY COMMITTEE

The Council Policy Committee will open the floor during its meeting at 11 AM on Tuesday, March 15, 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/sandiego2016 or the on-site program distributed during the meeting.

COMMITTEES

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

> Open Session Monday, March 14, 1:30 to 2 PM San Diego Hilton Bayfront

COMMUNITY ACTIVITIES

Michael B. McGinnis, chair; mmcginni@norwich.edu

> Open Executive Session Sunday, March 13, 7:45 AM to noon San Diego Hilton Bayfront

CCA/LSAC Joint Open Meeting Tuesday, March 15, 2 to 3:30 PM San Diego Hilton Bayfront

CONSTITUTION & BYLAWS

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

Open Meetings Sunday, March 13, 1:15 to 1:45 PM San Diego Hilton Bayfront

Executive Session (Closed) Sunday, March 13, 9 AM to noon San Diego Hilton Bayfront

Executive Session Sunday, March 13, 1:45 to 4:30 PM San Diego Hilton Bayfront

CORPORATION ASSOCIATES

Open Meeting Monday, March 14, 8 AM to noon San Diego Hilton Bayfront

COUNCIL POLICY

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

Open Meeting Tuesday, March 15, 9:30 AM to noon San Diego Hilton Bayfront

DIVISIONAL ACTIVITIES

Rodney Bennett, chair: rodbennettdac@gmail.com

Open Session

Sunday, March 13, 8 AM to noon San Diego Hilton Bayfront

ECONOMIC & PROFESSIONAL AFFAIRS

Rick Ewing, chair; william.ewing@bms.com

Executive Session

Saturday, March 12, 8 AM to 3 PM San Diego Convention Center

Open Executive Session Saturday, March 12, 3 to 5:30 PM San Diego Convention Center

EDUCATION

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

> Executive Session Friday, March 11, 1 to 5:30 PM San Diego Convention Center

Open Meeting Monday, March 14, 3 to 4 PM San Diego Hilton Bayfront

ENVIRONMENTAL IMPROVEMENT

Anthony M. Noce, chair; anoce@haleyaldrich.com

> Open Executive Session Monday, March 14, 7:45 to 9 AM **Manchester Grand Hyatt**

ETHICS

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

Open Executive Session Sunday, March 13, 9 AM to 4:30 PM San Diego Hilton Bayfront

INTERNATIONAL ACTIVITIES

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

Open Meeting
Saturday, March 12, 1 to 3 PM
San Diego Hilton Bayfront

LOCAL SECTION ACTIVITIES

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

LSAC/CCA Joint Open Meeting Tuesday, March 15, 2 to 3:30 PM San Diego Hilton Bayfront

Open Executive Session

Sunday, March 13, 8 AM to noon
San Diego Hilton Bayfront

MEETINGS & EXPOSITIONS

John Pochan, chair; johnpochan@gt.org

Open Executive Session

Sunday, March 13, 7 AM to noon
San Diego Convention Center

MEMBERSHIP AFFAIRS

James M. Landis Jr., chair; jim.landis@gt.org

Open Session Monday, March 14, 1 to 2 PM San Diego Hilton Bayfront

MINORITY AFFAIRS

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

Executive Session
Sunday, March 13, 8 AM to 12:30 PM
San Diego Hilton Bayfront

Open Session
Sunday, March 13, 12:30 to 2 PM
San Diego Hilton Bayfront

NOMENCLATURE, TERMINOLOGY & SYMBOLS

Michael Mosher, chair; Professor and Chair, Department of Chemistry & Biochemistry, Ross Hall 3480, Campus Box 98, University of Northern Colorado, Greeley, CO 806395

Open Session

Monday, March 14, 2 to 5 PM

San Diego Hilton Bayfront

NOMINATIONS & ELECTIONS

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

Open Executive Session

Monday, March 14, 11:30 AM to noon
San Diego Hilton Bayfront

PATENTS & RELATED MATTERS

Sadiq Shah, chair; sadiq@utpa.edu

Open Meeting
Saturday, March 12, 9 AM to 5 PM
San Diego Hilton Bayfront

PROFESSIONAL TRAINING

Thomas J. Wenzel, chair; cpt@acs.org

Open Meeting
Sunday, March 13, noon to 1 PM
Marriott Marquis

PROJECT SEED

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

Open Session

Sunday, March 13, 9:30 to 10:30 AM Omni San Diego Hotel

Executive Session

Saturday, March 12, 10:30 AM to 5 PM Omni San Diego Hotel

PUBLICATIONS

Nicole S. Sampson, chair; nicole.sampson@stonybrook.edu

Open Meeting
Friday, March 11, 4:30 to 5 PM
San Diego Hilton Bayfront

Executive Session

Friday, March 11, 1 to 5 PM

(Closed Executive Session until 4:30 PM) San Diego Hilton Bayfront

SCIENCE

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

Open Meeting

Saturday, March 12, 8 AM to 4:30 PM San Diego Hilton Bayfront

SENIOR CHEMISTS

Thomas R. Beattie, chair; beattietr@aol.com

Open Meeting

Monday, March 14, 8 AM to noon San Diego Hilton Bayfront

TECHNICIAN AFFAIRS

Kara Allen, chair; cta@acs.org

Closed Executive Session

Sunday, March 13, 8:30 AM to 12:30 PM San Diego Hilton Bayfront

Open Session

Sunday, March 13, Noon to 1 PM San Diego Hilton Bayfront

WOMEN CHEMISTS

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

Executive Session

Saturday, March 12, 8 AM to 5 PM San Diego Hilton Bayfront

YOUNGER CHEMISTS

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

Open Session

Sunday, March 13, 8 AM to noon San Diego Hilton Bayfront

Executive Session

Sunday, March 13, noon to 1 PM San Diego Hilton Bayfront

ADVANCE REGISTRATION FORM



AMERICAN CHEMICAL SOCIETY • 251st NATIONAL MEETING & EXPOSITION MARCH 13 - 17, 2016 · SAN DIEGO, CA

4 ways to register: (see Registration Procedures)

Online: http://www.acs.org/sandiego/2016 (credit cards only).

Phone: 508-743-0192 or 800-251-8629, Monday - Friday, 9 AM to 5 PM EST (credit cards only) by March 17, 2016.

Mail completed form with payment to: ACS Registration of CDS, 107 Waterhouse Road, Bourne, MA 02532 by January 24, 2016.

Fax completed form with payment to: 508-743-9604 (credit cards only) by March 17, 2016.

- REGISTRANT INFORMATION -			
□ Dr. □ Prof. □ Mr. □ Ms. □ Mrs.	ACS Membership #	(Require	d 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 a		gular text messaging rat	les may apply. I has l'accept or I No I do not accept
How would you like to receive your meeting and exhibitor promotion			
Do you require special services or auxiliary aids in order to participate in		The same of the sa	
		ODIES A FEES	ACCOUNT FUELUT FEED
— DEMOGRAPHICS —	The state of the s		SOCIAL EVENT FEES
Professional Affiliation (check one)	ACS Members	EARLY STANDARD	Event No. Oty \$/Ticket \$TOTAL
☐ (a) Academia ☐ (b) Government ☐ (c) Industry ☐ (d) Student☐ (e) Other	ACS member or Society affiliate		
2. Highest Degree Received (check one)	☐ Postdoctoral	\$415 \$500	
□ (A) A.S./A.A.S. (Associate Degree) □ (B) B.S./B.A. (Baccalaureate D	egree) Emeritus or retired	\$210 \$255 No Fee No Fee	9. Social Event Subtotal S
□ (C) M.S. □ (D) Ph.D. □ (E) Still in school (degree not completed)	50-year Unemployed	No Fee No Fee	If you register belons the social event source are available, you can later
(F) Other	(dues waiver required)		parchase year takets by contacting the Customer Service office, at 508-743-0190 or 1-800-051-8600, if you are paying by check or receive. If you are paying by credit rand, you raw update your registration ordine by using
Professional Concentration (check all that apply)	☐ Graduate student	\$210 \$210	None disagraphous unsuped
☐ (A) Aerospace/Transportation ☐ (S) Inorganic	☐ Undergraduate Student ☐ Precollege teacher	\$105 \$105 \$106 \$106	- ABSTRACT FEES
☐ (B) Agriculture & Food ☐ (T) Law/Legal Affairs ☐ (C) Analytical ☐ (U) Lubricants/Oils	☐ One day member registrant	\$210 \$255	ACS Memery Non-Memery
☐ (D) Biochemistry ☐ (V) Marketing/Sales/Bus	TARLES AND THE PARTY OF THE PARTY.	1000 1000	Flash Drive (pick up) @\$85 ea @\$90 ea.
☐ (E) Biotechnology ☐ (W) Materials	Charles and the country of the count		Flash Drive (ship) 6\$73 ea 6\$98 ea.
☐ (F) Chemical Education ☐ (X) Metals/Metal Produc	Non-Members Chemical scientist	\$730 \$880	10. Abstract Subtotal \$
☐ (G) Chemical Information ☐ (Y) Nuclear	☐ Postdoctoral scientist	\$730 \$880	Abstracts artisted by January 24, 2016, will be skipped for solivery prior in the receiving All other abeliants, will be available for pick-up oracler at
☐ (H) Clinical Diagnostic ☐ (Z) Organic ☐ (I) Colloids & Surlaces ☐ (AA) Paint/Coatings	□ Visitor: Non-chemical scientist	\$415 \$500	Alterdee Parjutration. ACS will not be requireable for abstracts not picked up during the meeting. Abstract flash drives will only be shipped to U.S.
☐ (J) Combinatorial Chemistry ☐ (BB) Personal Care/Cos	metics Visitor: Chemical technician	\$415 \$500	street addresses (no P.O. lowes)
☐ (K) Computing Molecular Modeling ☐ (CC) Pharmaceutical/Molecular	Sindulation Students	\$415 \$415 \$210 \$210	- GRAND TOTAL -
☐ (L) Electronics/Semiconductors ☐ (DD) Physical	☐ Pre-College Teacher	\$105 \$105	11. Grand Total of 8-10 \$
☐ (M) Energy/Fuels ☐ (EE) Polymers/Plastics	☐ One-day registrant	\$415 \$500	Registrant Procedures: U.S. attendess who register by January 34, 2016. will receive their registration predentals and tokets vis real prior to the
□ (N) Environmental □ (FF) Pulp/PaperWood □ (O) Forensics □ (GG) Rubber	OSU OM OTU OW OTh		meeting Unions on international attendor free provided a U.S. making address on their registration from, their conductats must be picked-up coate at the
☐ (P) Geochemistry ☐ (HH) Scap/Detergent/Cl	Bainers (1) Guest of Registrant (1) (1) Guest Registration - A Spoote or tamily me	\$45 \$45	Attendor Hightration (this includes Canada and Mesco), After January 24, 2016, registrations will continue to be accepted at the election rate on-line and by phone or tax (weds one) payment only) until March 17, 2016.
☐ (Q) Glass/Ceramics/Composites ☐ (II) Textities/Fiber	having no attiliation with the field of chemical	of edigle ion al bea somice in	
☐ (R) Health & Safety ☐ (JJ) Toxicology	become a member of the ACE. Only one guest one-day registration.	st registration allowed per full or	Registration Caecostation/Returnd Policy: By saltering to the following cancellation procedure, cancellations received by Petrniary 8, 2016, are entitled to a full ryland, loss a 500 administrative les. Registrante must
□ (KK) Other	Güest Name		return a copy of the registration confirmation along with the original registration credentials before payment will be posted to the account.
4. Is this your first ACS National Meeting? □ Ves □ No			All solution are issued use the some method used to payment. Flaturels are processed within 30 days after the conclusion of the condens.
5. What's your primary reason for attending this meeting?	Exposition Visitors Adult	\$50 \$50	Submit your written canostation to the ACS Regulation Customer Sension Center by real, but or e-mail by February 8, 2016.
☐ Present a paper of poster	☐ Student	\$25 \$25	2. Rotan your unused residentian credentials to ACS by Fabruary &
☐ Network with other scientists	12.12.12.11.2.12.12.12.12.1	6	2016. If you cancel Switzer receiving your regulation condendate, contact the ACS Registration Contament Service Center for further instructions. 3. Refund registers made after February 8, 2016, will not be incorred. 4. No connoblation or refund for Abstract flash follows and/or goodings.
☐ Investigate research or technical topics	B. Registration Subtotal	\$	 No concellation or refund for Attribut flush trives and/or postage charges for making will be made.
☐ Research or buy products inside Exposition ☐ Search for a job in Career Services	- PAYMENT -		1.000
☐ Obtain new skills and hand-on experience		nes by submitting this register	tion to participate in the ACS National Meeting & Exposition.
☐ Participate in ACS governance activities	The state of the s	able in U.S. dollars to Ame	
☐ Work during the meeting (staff/exhibitors)	Credit Card Type: UNSA U	MasterCard Americ	an Express Diners
□ Other	The state of the s		under to participate in the 251st ACS National Maeting in San Diego, CA.
6. Where are you staying (or planning to stay) during the meeting?	Credit Card Number		Exp Date
Hotel Other	Credit Card Billing Address & Zip		
7. What mode of transportation will you take to attend the meeting?	Carlo Data Carlo C		
□ Plane □ Train □ Car □ Other	Card Holder Signature		

This was of any device to capture inveges (a.g., comment & comman phones) or sound (a.g., keye and digital incontrage) or to attemn, upload, or rebroadced species or presentations in strictly prohibbed at all official ACS ownfrage and events without argument without argument within consent from the ACS.