

Technical Program Summary

Presidential Events

P R E S

E. Ann Nalley, ACS President

Moscone Center	S	M	Tu	W	Th
SWNTs From Synthesis to Application, From the Lab to the Fab: In Memory of Richard Smalley**	D	D	D	D	
Presidential Session Honoring Carl Djerassi for His Contributions to the Chemical Sciences, Arts, and Humanities	P				
Sustaining the Future of Global Scientific Excellence		A			
HHMI Society of Professors: New Directions in Science Education		D			
Science Communication: Essential Skills For All				A	
After Oil, What?*(ENVR)	A				
Health Materials and Techniques: Research and Development over the Past 25 Years: Investment in Basic Research Leading to Benefits for Society*(HIST)	A				
Entrepreneurship in Polymers and Technology*(POLY)	D	D	AE		
Challenges for the Hydrogen Economy*(FUEL)	D				
H. C. Brown Legacy Symposium*(ORGN)	P	A			
Awards Symposium*(CHAS)	P				
Challenges for the Hydrogen Economy: Unified Poster Session*(FUEL)	P				
Advances in Hydrogen Production*(FUEL)		D	D		
Progress in Computational and Experimental Studies of Materials for Hydrogen Storage*(FUEL)		D	D		
ChemCensus 2005: The Present and Future of Chemistry*(PROF)		D			
Fuel Cell Chemistry and Operation*(FUEL)		P	D	D	D
Keynote Address: David Schwartz, Director, NIEHS*(TOXI)		P			
Academic Employment Initiative*(AEI)		E			
Equipping the 2015 Chemical Technology Workforce*(TECH)			D		

Academic Employment Initiative

A E I

J. A. Bell, C. Kuniyoshi, M. Caserio, Program Chairs

Moscone Center	S	M	Tu	W	Th
Academic Employment Initiative (Sci-Mix)**		E			

Recovery from & Prevention of Natural Disasters

D S T R

R. A. Hathaway, Program Chair

Moscone Center	S	M	Tu	W	Th
Recovery from and Prevention of Natural Disasters**		P	D	D	D

Division of Agricultural & Food Chemistry

A G F D

A. M. Rimando, Program Chair

San Francisco Marriott	S	M	Tu	W	Th
Functional Foods and Health	D	D	D	D	
General Papers	D				
Molecular Cuisine		D	A		
Food Allergens		D		D	D
General Posters		P			
Sci-Mix		E			
Mycotoxins and Food Allergens Posters			A		
Mycotoxins			D	D	D
Heavy Metals in Food			P		
Sterling Hendricks Memorial Lectureship**				A	

Division of Agrochemicals

AGRO

L. L. McConnell, Program Chair

San Francisco Marriott	S	M	Tu	W	Th
Alternatives to the Use of Methyl Bromide in Pre-Plant Soil Fumigation and Stored Commodities	D	D			
Agrochemical Residue and Metabolism Chemistry	D				
Synthetic Pyrethroids and Surface Water Quality		D	A		
ACS International Award for Research in Agrochemicals: Symposium in Honor of Isamu Yamaguchi: Fungicides		D			
Sci-Mix		E			
Agricultural Impacts on Air Quality			D	D	A
Future Role of Pesticides in Agriculture			D		
Weed Resistance to Herbicides			P	A	
General Posters			P		
Plant Nutrient Issues Impacting Trade, Water, Air, and Soils				D	
Recent Advances in Immunochemistry and their Applications to Agrochemicals				P	D
Characterizing Natural Products as Pesticides, Repellents, or Biomarkers					P
Sterling Hendricks Memorial Lectureship* (AGFD)				A	

Division of Analytical Chemistry

ANYL

C. G. Enke, Program Chair

Moscone Center	S	M	Tu	W	Th
Analytical Approaches: Electroanalytical Chemistry	A				
Extreme Chromatography and Separations	A				
Honoring Andrew Ewing, Recipient of the Chemical Instrumentation Award	A				
Detection of Process-Induced Contaminants and Biohazards in Foods	P				
Honoring Neil Kelleher, Recipient of the Arthur F. Findeis Award	P				
NMR Then and Now: Honoring Ted Becker, Recipient of Analytical Chemistry Service Award Supported by Varian, Inc.	P				
The Essential Role of On-line Separations for Mass Spectrometry Based Proteomics	P				
General Papers	E				
Has Cavity-Enhanced Detection Come of Age?		A			

Division of Analytical Chemistry (continued)

ANYL

C. G. Enke, Program Chair

Moscone Center	S	M	Tu	W	Th
Development and Applications of Metabonomic/Metabolomic Methods of Analysis		D			
Remembering Ted Williams		D			
Characterization of Polymorphic Compounds and Mixtures		P	A		
Sci-Mix		E			
Bioanalytical Applications of Ion Mobility Mass Spectrometry			A		
Honoring Joe Wang, Recipient of the Electrochemical Analysis Award			A		
Honoring Mary Wirth, Recipient of the Spectrochemical Analysis Award ^{1**}			P		
Methods Development for Pharmaceutical Analysis			P		
New Directions and New Techniques in Separation Science and Biomarker Discovery			P		
Analytical Approaches: Sensors				A	D
Analytical Approaches: Spectroscopy				A	
Interfacing Biology with Lab-On-A-Chip Separations				A	
Analytical Approaches: Mass Spectrometry				P	A
Analytical Approaches: Separation Science				P	A
Honoring Alanah Fitch, Recipient of the J. Calvin Giddings Award for Excellence in Analytical Education ^{**}				P	
Analytical Approaches: Various Techniques and Applications					P
Analytical Approaches: Novel Materials					P
Chemistry of Wine* (YCC)	P				
Percy L. Julian: Scientist, Humanist, Educator, Entrepreneur, and Inspirational Trailblazer* (CMA)			D		
In Situ Spectroscopic Monitoring in Process Development and Production* (I&EC)				A	
Uncovering the Metabolome and Metabolic Defects* (BIOL)				A	

*Cospponsored symposium with primary organizer shown in parentheses.

**Primary organizer of a cospponsored symposium.

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PROGRAM SUMMARY

Division of Biochemical Technology

BIOT

T. A. Good, A. A. Shukla, Program Chairs

Hilton San Francisco	S	M	Tu	W	Th
Biophysical and Biomolecular Symposium: Protein Engineering	D	A			
Downstream Processing: Advances in Chromatographic Separations	D				
Emerging Technologies: Nanobiotechnology	D				
Upstream Processing: Metabolic Engineering	D				
Alan S. Michaels Award in the Recovery of Biological Products	P				
David Perlman Memorial Lecture	P				
Downstream Processing: Alternatives to Chromatographic Separations		A			
Industrial Biotechnology Award		A			
Upstream Processing: Biocatalysis		A			
Emerging Technologies: Systems Biology		D			
Biophysical and Biomolecular Symposium: Challenges to Membrane Protein Production and Characterization		P	A		
Upstream Processing: Cell Culture Process Development: Advances in Process Engineering		P	P		
Biophysical and Biomolecular Keynote Lecture		P			
FDA Symposium: Process Analytical Technology (PAT) Initiative		P			
Sci-Mix		E			
Emerging Technologies: Proteomics and Genomics: Applications and Developments			A		
FDA Symposium: Process Development and Validation			A		
Marvin Johnson Award			A		
Downstream Processing: Purification and Platform Case Studies			D		
Biophysical and Biomolecular Symposium: Protein-Protein Interactions			P	A	
FDA Keynote Address			P		
FDA Symposium: Follow-on Biologics: The Challenge of Establishing Comparability			P		
Biophysical and Biomolecular Symposium: Protein Misfolding and Aggregation				A	
Downstream Processing: Advances in Filtration and Membrane Separations				A	
Elmer Gaden Award				A	
Upstream Processing: Molecular and Cellular Approaches to Advances in Cell Culture and Fermentation				A	
Emerging Technologies: Design and Engineering of Novel Therapeutic Strategies				P	A
Biophysical and Biomolecular Symposium: Protein Folding and Posttranslational Modification					P

Division of Biochemical Technology (continued)

BIOT

T. A. Good, A. A. Shukla, Program Chairs

Hilton San Francisco	S	M	Tu	W	Th
BIOT Division Young Investigator Award				P	
Emerging Technologies: Combinatorial and High Throughput Analysis of Biological Systems					P
FDA Symposium: The Science Behind Process Transfer				P	
Poster Session				P	
Biophysical and Biomolecular Symposium: Biomolecule Instability, Formulation and Drug Delivery					A
Downstream Processing: Modeling to Facilitate Process Development, Validation and Troubleshooting					A
FDA Symposium: Case Studies for Therapeutic Antibodies					A
Biophysical and Biomolecular Symposium: New and Emerging Techniques for Protein Characterization					P
Economics of Biopharmaceutical Processes					P
Emerging Technologies: Stem Cells					P
Upstream Processing: Microbial Fermentation Process Development: Advances in Process Engineering					P
Protein Folding, Unfolding, and Misfolding* (BIOL)	A				
Protein Folding and Aggregation: From the Test Tube to the Cell* (BIOL)	P				
Chemical Approaches to Neuroscience and Other Complex Systems* (BIOL)			A		
Uncovering the Metabolome and Metabolic Defects* (BIOL)				A	

Division of Biological Chemistry

BIOL

K. N. Allen, Program Chair

Moscone Center	S	M	Tu	W	Th
Alfred Bayer Award Symposium: Protein Folding, Unfolding, and Misfolding**	A				
Francis P. Garvan-John M. Olin Medal Symposium: Protein Folding and Aggregation: From the Test Tube to the Cell**	P				
Protein Structure and Folding	P				
Enzyme Mechanisms		A			
Chemical Biology		P			
Sci-Mix		E			

Division of Biological Chemistry **BIOL** (continued)

K. N. Allen, Program Chair

Moscone Center	S	M	Tu	W	Th
Eli Lilly Award Symposium: Chemical Approaches to Neuroscience and Other Complex Systems**			A		
Chemistry and Metabolism			P		
Pfizer Award Symposium: Structure and Function of Macromolecular Assemblies			P		
Uncovering the Metabolome and Metabolic Defects**				A	
Repligen Award Symposium: Enzymatic Catalysis and Transition States**				P	
Enzymes				P	
Frontiers in Single-Molecule Biophysical Chemistry and Imaging* (PHYS)	D	D	D	P	D

Division of Business Development & Management **BMGT**

J. L. Bryant, Program Chair

San Francisco Marriott	S	M	Tu	W	Th
Executive Overview of Energy Programming for the San Francisco Meeting	A				
Entrepreneurship in Polymers and Technology* (POLY)	D	D	AE		
Equipping the 2015 Chemical Technology Workforce* (TECH)			D		

Division of Carbohydrate Chemistry **CARB**

M. Manoharan, Program Chair

Hilton San Francisco	S	M	Tu	W	Th
Nucleosides, Nucleotides, and Oligonucleotides**	A				
Melville L. Wolfrom/Horace S. Isbell New Investigator Awards Symposium	P				
Chemical Glycobiology Symposium		D	DE		
Sci-Mix		E			
General Posters			E		
General Contributed Papers: Synthesis				D	A

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Division of Cellulose & Renewable Materials **CELL**

P. Gatenholm, Program Chair

Palace	S	M	Tu	W	Th
Industrial Products from Renewable Materials: Molecular to Macroscopic Scale	D	D			
Poster Session	P				
Fifth Tannins Conference		P	D	D	D
Sci-Mix		E			

Division of Chemical Education **CHED**

C. Middlecamp, B. L. Earl, J. L. March, Program Chairs

San Francisco Marriott	S	M	Tu	W	Th
Teaching Chemistry and Biochemistry to Nurses: GOBs of Information, So Little Time	A				
Community College Programs Designed To Help Students Transition to Four-Year Colleges and Universities**	D				
High School Program: Inquiring Minds Want To Know	D				
Hiring and Promotion in Chemical Education**	D				
NSF Partnership for Research and Education in Materials**	D				
Symposium in Honor of Sylvia Ware: An Educational Leader and Visionary**	P				
General Posters	E				
Chemical Information and Chemical Information Education in the Electronic Age**		A			
Chemical Education Research		D	A		
In Remembrance of Doris Kasey Kolb: An Anthology**		D			
Process-Oriented Guided Inquiry Learning		D			
Revision of the ACS Guidelines for Undergraduate Chemistry Programs**		P			
Undergraduate Poster Session		P			
Sci-Mix		E			
Successful Student Affiliates Chapter Poster Session**		E			
Nuclear Chemistry in Context**			A		
A Decade of Peer-Led Team Learning			D		
Using Pharmaceuticals To Teach Chemistry: Educational Innovations for Majors and Nonmajors			D		
Teaching Quantum Concepts in Chemistry**			P		
Theoretical Frameworks for Research in Chemistry Education			P		
Pseudoscience: What It Is and What It Is Not				A	
Computational Chemistry Investigations for Undergraduates**				D	

PROGRAM SUMMARY

Division of Chemical Education
(continued)

CHED

C. Middlecamp, B. L. Earl, J. L. March, Program Chairs

San Francisco Marriott	S	M	Tu	W	Th
Green Chemistry: State-of-the-Art Symposium for Chemical Educators				D	
Writing in the Undergraduate Chemistry Curriculum**				D	
Lives in Science as Illustrations of Scientific Practice**				P	
Distance Learning and the Chemistry Laboratory					A
General Papers					D
NSF-Catalyzed Innovations in the Undergraduate Curriculum					D
Defining Outcomes and Preparing for Departmental Reviews: Maintaining a Healthy Department**					P
Health Materials and Techniques: Research and Development over the Past 25 Years: Investment in Basic Research Leading to Benefits for Society* (HIST)	A				
Classic Chemistry Books of the Twentieth Century: Organic Chemistry* (HIST)	P				
Patent Issues in Academe and the Petroleum Research Fund (PRF) Grants* (CHAL)		A			
ChemCensus 2005: The Present and Future of Chemistry* (PROF)		D			
Percy L. Julian: Scientist, Humanist, Educator, Entrepreneur, and Inspirational Trailblazer* (CMA)		D			
Recovery from and Prevention of Natural Disasters* (DSTR)		P	D	D	D
Strategies for Being a Successful Ph.D. Student* (YCC)		P			
Academic Employment Initiative* (AEI)		E			
Equipping the 2015 Chemical Technology Workforce* (TECH)			D		
Teaching Medicinal Chemistry to B.S. Undergraduate Chemistry Majors* (COMP)			D		

Division of Chemical Health & Safety

CHAS

S. Wawzyniecki, D. M. Decker, Program Chairs

San Francisco Marriott	S	M	Tu	W	Th
Awards Symposium**	P				
A Focus on Laboratory Biosafety		A			
Lab Ventilation		P			
Sci-Mix		E			
Water, Water Everywhere, But Does it Work? A Challenge to the Water Decontamination Procedure			D		
Recovery from and Prevention of Natural Disasters* (DSTR)		P	D	D	D

Division of Chemical Information

CINF

T. Wright, Program Chair

Moscone Center	S	M	Tu	W	Th
Advances in Virtual High-Throughput Screening**	D				
Cyberinfrastructure in Chemistry, Information, and Education: New Emerging Technologies	D				
Library Watch: Hot New Areas in Entrepreneurship Chemistry		A			
Challenges in Structure Searching		D			
Entrepreneurship in Chemical Informatics**		P			
Sci-Mix		E			
Herman Skolnik Award Symposium			D		
Materials Informatics				A	
Rediscovery of Older Information				D	
Chemical Information and Organic Chemistry: The Road Ahead**					P
General Papers					D
Careers for Computational Chemists in Pharma, Biotech, Patent Law, Software Vendors, and the National Institutes of Health* (COMP)		A			
Chemical Information and Chemical Information Education in the Electronic Age* (CHED)			A		
Chemical Information and Organic Chemistry: The Road Ahead* (ORGN)					A

Division of Chemical Technicians

TECH

L. R. Dillard, Program Chair

SF Downtown Courtyard by Marriott	S	M	Tu	W	Th
General Papers		P			
Sci-Mix		E			
Equipping the 2015 Chemical Technology Workforce**			D		
Great Technicians in History**					A

Division of Chemical Toxicology TOXI

T. M. Penning, Program Chair

Moscone Center	S	M	Tu	W	Th
DNA Alkylation by Natural Products: Reactions, Repair, Mutagenesis, and Chemotherapy	A				
Division Named Lecturer: Cecil B. Pickett	P				
Protein Modification by Electrophiles	P				
Milestones in Chemical Research in Toxicology		D			
Keynote Address: David Schwartz, Director, NIEHS**		P			
Sci-Mix		E			
General Papers: Young Investigator Session**			A		
Drug Toxicity & Safety Prediction**			P		
Poster Presentations and Awards			E		
General Papers				A	
Metal Carcinogenesis: New Concepts				P	
Frontiers in Chemical Toxicology					A

Division of Chemistry & the Law CHAL

J. J. Hasford, Program Chair

Moscone Center	S	M	Tu	W	Th
The Many Faces of CHAL: Where Chemistry Meets the Law	A				D
Protection of Chemical and Pharmaceutical Intellectual Property: Patents and Trade Secrets	P				
Patent Issues in Academe and the Petroleum Research Fund (PRF) Grants**		A			
Disasters and Recovery		P			
The Lawyer Is In: CHAL's Legal Assistance Network**		P			
Sci-Mix		E			
Alternative Dispute Resolution (ADR) for the Chemist			D		
Regulating Nanotechnology: Developing Stakeholder Consensus for Future Rule-making by EPA, FDA, and OSHA			D		
Recent U.S. Supreme Court Cases in Patent Law				A	
Best Practices in Identifying, Protecting, and Managing Your Intellectual Property Portfolio				P	
Protecting Chemical Intellectual Property from Bench to Bench				P	

Division of Colloid & Surface Chemistry COLL

R. Nagarajan, Program Chair

Grand Hyatt San Francisco	S	M	Tu	W	Th
Surface Chemistry Symposium in Honor of Gabor Somorjai**	D	D	A	D	D
Dynamics of Single Atoms, Molecules, and Clusters on Surfaces**	D	D	D	D	D
Advanced Vibrational Spectroscopy Studies on Organic, Polymer, and Biological Surfaces	D	DE	A		
Advances in Nanomedicine**	D	DE	A		
Environmental Interfaces**	D	DE	D	D	
Structure, Interactions, and Reactivity at Microbial Surfaces	D	E			
Correlation of Single Crystal Studies Using Surface Science Techniques to Industrial Catalysts**	D				
Water at Interfaces**		D	D	D	
Chirality and Enantioselectivity at Surfaces	PE	D			
Chemistry at Membrane Interfaces		E		D	D
Fundamental Research in Surface and Colloid Chemistry		E			
Langmuir Lectures			P		
Nano-Scale Science and Technology in Biomolecular Catalysis**				D	D
Operando Spectroscopy of Working Catalysts				D	D
Physical and Computational Characterization of Nanostructured Electrocatalysts					D
Fundamentals of Metal Oxide Catalysis* (PHYS)	D	A	A	D	D
Physical Chemistry of Soil and Aquifer Systems: A Symposium in Honor of Garrison Sposito* (GEOC)	D	D	D	D	
SWNTs From Synthesis to Application, From the Lab to the Fab: In Memory of Richard Smalley* (PRES)	D	D	D	D	
Multicompartiment Micelles: Higher Order Self-Assembly of Block Copolymers* (POLY)	D	D	E		
Organic Approaches to Nanotechnology* (ORGN)			D		
The Structure and Reactivity of Nanoparticles in the Environment* (GEOC)				D	D

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PROGRAM SUMMARY

Division of Computers in Chemistry

COMP

W. D. Cornell, J. D. Madura, Program Chairs

Moscone Center	S	M	Tu	W	Th
General Oral: Drug Discovery	A	A			D
Careers for Computational Chemists in Pharma, Biotech, Patent Law, Software Vendors, and the National Institutes of Health**	A				
General Oral: Molecular Mechanics and Simulation	D	D		D	P
Beyond Michael Dewar's Legacy: Modern Semiempirical MO Theory	D		D	D	
Structure-Based Design and Development of Estrogen Receptor Modulators**	D				
General Oral: Quantum Chemistry	P	D			D
DFTB, An Approximate DFT Method: Theory and Applications			D	D	D
Molecular Similarity and Indexing Methods		D			
Emerging Technologies in Computational Chemistry		P			
Sci-Mix		E			
ADME and Physical Property Prediction			D	D	A
Current Trends in Molecular Docking and Virtual Screening			D	D	
Teaching Medicinal Chemistry to B.S. Undergraduate Chemistry Majors**			D		
Poster Session			E		
Free Energy Computations in Drug Discovery					D
Advances in Virtual High-Throughput Screening* (CINF)	D				
Cyber Science, Chemistry* (PHYS)			P	D	D
Chemical Information and Organic Chemistry: The Road Ahead* (ORGN)				A	
Computational Chemistry Investigations for Undergraduates* (CHED)					D

Division of Environmental Chemistry

ENVR

G. Coimbatore, Program Chair

Moscone Center	S	M	Tu	W	Th
After Oil, What? **	A				
Catalysis for Water Purification and Remediation	D	D	A	E	
Ferrates: Synthesis, Properties, and Applications in Water and Wastewater Treatment**	D	D			
Microbially Mediated Redox Dynamics in the Shallow Subsurface	P			E	
Persistent, Bioaccumulative, Toxic Chemicals		D	D	DE	D
Sci-Mix		E			

Division of Environmental Chemistry (continued)

ENVR

G. Coimbatore, Program Chair

Moscone Center	S	M	Tu	W	Th
Environmental Chemistry Awards**			P		
Digital Resources for Environmental Chemistry					D
General Papers				E	
Understanding and Controlling Biofouling in Aquatic Systems					D
Physical Chemistry of Soil and Aquifer Systems: A Symposium in Honor of Garrison Sposito* (GEOC)	D	D	D	D	
SWNTs From Synthesis to Application, From the Lab to the Fab: In Memory of Richard Smalley* (PRES)	D	D	D	D	
Recovery from and Prevention of Natural Disasters* (DSTR)		P	D	D	D

Division of Fluorine Chemistry

FLUO

G. K. S. Prakash, Program Chair

Moscone Center	S	M	Tu	W	Th
General Papers	P				
Fluorinated Heterocycles		D			

Division of Fuel Chemistry

FUEL

R. H. Hurt, Program Chair

Palace	S	M	Tu	W	Th
Green Chemistry for Fuel Synthesis and Processing	D	D	A	D	
Challenges for the Hydrogen Economy**	D				
Transformation and Capture of Mercury and Trace Metals from Combustion Sources	D				
Challenges for the Hydrogen Economy: Unified Poster Session**	P				
Advances in Hydrogen Production**		D	D		
Progress in Computational and Experimental Studies of Materials for Hydrogen Storage**			D	D	
Fuel Cell Chemistry and Operation**		P	D	D	D
Sci-Mix		E			
Chemistry and Applications of Carbon Nanotubes and Nanoparticles					D A
Advances in Solid and Liquid Fuel Chemistry				P	D

Division of Fuel Chemistry (continued)

FUEL

R. H. Hurt, Program Chair

Palace	S	M	Tu	W	Th
Ultraclean Transportation Fuels					D
SWNTs From Synthesis to Application, From the Lab to the Fab: In Memory of Richard Smalley* (PRES)	D	D	D	D	
Fuel Processing for Hydrogen Production* (PETR)			P	D	
Clean Fuels from Biomass* (PETR)			P	D	

Division of Geochemistry

GEOC

M. Schoonen, Program Chair

Moscone Center	S	M	Tu	W	Th
Physical Chemistry of Soil and Aquifer Systems: A Symposium in Honor of Garrison Spoto**	D	D	D	D	
Frontiers in Geochemistry: Commemorating the 25th Anniversary of the Division	D	D			
General Poster Session	E				
Sci-Mix		E			
The Structure and Reactivity of Nanoparticles in the Environment**				D	D
Environmental Interfaces* (COLL)	D	DE	D	D	
Water at Interfaces* (COLL)		D	D	D	
Recovery from and Prevention of Natural Disasters* (DSTR)		P	D	D	D

Division of the History of Chemistry

HIST

J. S. Jeffers, Program Chair

San Francisco Marriott	S	M	Tu	W	Th
Health Materials and Techniques: Research and Development over the Past 25 Years: Investment in Basic Research Leading to Benefits for Society**	A				
Classic Chemistry Books of the Twentieth Century: Organic Chemistry**	P				
Celebrating a Legacy: Fifty Years of the Dexter and Edelstein Awards		D			
Edelstein Award Symposium Honoring Peter Morris			A		
General Papers			P		
History of the FDA in its Hundredth Year			P		

Division of the History of Chemistry (continued)

HIST

J. S. Jeffers, Program Chair

San Francisco Marriott	S	M	Tu	W	Th
Percy L. Julian: Scientist, Humanist, Educator, Entrepreneur, and Inspirational Trailblazer* (CMA)		D			
Fifty Years of Electron Transfer and RRKM Theories* (PHYS)		P	D	D	D
Great Technicians in History* (TECH)				A	
Lives in Science as Illustrations of Scientific Practice* (CHED)				P	

Division of Industrial & Engineering Chemistry

I & EC

M. A. Gonzalez, Program Chair

Moscone Center	S	M	Tu	W	Th
High-Performance Composites, Sponsored by Advanced Materials and Nanotechnology Subdivision	A				
Molecular Containers, Sponsored by Separation Science and Technology Subdivision	D	D			
Membrane Materials and Applications, Sponsored by Separation Science and Technology Subdivision	P				
Green Chemistry and Engineering Poster Session**	E				
Poster Session	E				
Computational Material Design in Chemical Industries, Sponsored by Novel Chemistry with Industrial Applications Subdivision**			D	A	
Sci-Mix		E			
Process Intensification, Sponsored by Novel Chemistry with Industrial Applications Subdivision**				D	
Separation of f-Elements, Sponsored by Separation Science and Technology Subdivision**				P	D
In Situ Spectroscopic Monitoring in Process Development and Production, Sponsored by Novel Chemistry with Industrial Applications Subdivision**					A

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PROGRAM SUMMARY

Division of Industrial & Engineering Chemistry (continued)

I & E C

M. A. Gonzalez, Program Chair

Moscone Center	S	M	Tu	W	Th
SWNTs From Synthesis to Application, From the Lab to the Fab: In Memory of Richard Smalley* (PRES)	D	D	D	D	
Advances in Nanomedicine* (COLL)	D	DE	A		
Fuel Cell Chemistry and Operation* (FUEL)		P	D	D	D
Equipping the 2015 Chemical Technology Workforce* (TECH)			D		

Division of Inorganic Chemistry

I N O R

B. T. Donovan-Merkert, D. C. Crans, Program Chairs

Moscone Center	S	M	Tu	W	Th
Nanoscience: Synthesis	A	A	A	A	A
Organometallic: Catalysis	A	A	A	A	
Radical Metal Complex Chemistry	A	D	A		
5th International Symposium on Chemistry and Biological Chemistry of Vanadium	D	D	D	D	A
Materials: Synthesis	A				A
Coordination Chemistry: Characterization and Applications	A			P	
Main Group	A			P	
Bioinorganic and Organometallic Catalysis: What is the Connection?	P	D	A		
Nanoscience: Applications	P		P		P
Coordination Chemistry: Synthesis	P			A	P
Lanthanides and Actinides	P				A
Organometallic: Synthesis	P				A
Bioinorganic Chemistry of Vanadium Compounds	P				
Young Investigator Symposium	P				
Poster Session	E		E		
Solid State and Solid State Materials		A		P	
Polyfunctional Organoboranes: From Molecules to Materials**		D	D		
Organometallics		P	P	P	P
Nanoscience: Characterization		P		P	
Electrochemistry		P			
Sci-Mix		E			
Theoretical Inorganic Chemistry			D		
Bioinorganic Chemistry			P	A	A
ExxonMobil Solid State Chemistry Faculty Fellow Award Symposium			P		
Radical Metal Complex Chemistry			P		
Inorganic Catalysts				A	A
Computational Chemistry				A	
Bioinorganic Modeling				P	P
Materials: Applications				P	
Materials: Characterization					A

Division of Inorganic Chemistry (continued)

I N O R

B. T. Donovan-Merkert, D. C. Crans, Program Chairs

Moscone Center	S	M	Tu	W	Th
Environmental					P
General					P
Transition Metals					P
SWNTs From Synthesis to Application, From the Lab to the Fab: In Memory of Richard Smalley* (PRES)	D	D	D	D	
Ferrates: Synthesis, Properties and Applications in Water and Wastewater Treatment* (ENVR)	D	D			
H. C. Brown Legacy Symposium* (ORGN)	P	A			
Progress in Computational and Experimental Studies of Materials for Hydrogen Storage* (FUEL)			D	D	
Fuel Cell Chemistry and Operation* (FUEL)		P	D	D	D

Division of Medicinal Chemistry

M E D I

D. P. Rotella, Program Chair

Moscone Center	S	M	Tu	W	Th
General Oral Session	A		P		D
Telomerase: An Emerging Target for the Development of Anticancer Agents	A				
Small-Molecule Activators of Apoptosis as Anticancer Agents	P				
General Poster Session	E				E
Designing Multiple Ligands		A			
Hepatitis C Inhibitors		A			
Reverse Pharmacology: The Role of Medicinal Chemistry in Novel Target Identification		P			
Sci-Mix		E			
Medicinal Chemistry Award Symposium				A	
Gamma and Beta Secretase				P	
Neuropeptide GPCRs					A
Parallel Medicinal Chemistry					A
Antagonists of TRP Channels and Vanilloid Receptors					P
Medicinal Chemistry of Rare Diseases					P
Health Materials and Techniques: Research and Development over the Past 25 Years: Investment in Basic Research Leading to Benefits for Society* (HIST)	A				

Division of Medicinal Chemistry **MEDI**

D. P. Rotella, Program Chair

Moscone Center	S	M	Tu	W	Th
Nucleosides, Nucleotides and Oligonucleotides* (CARB)	A				
Advances in Nanomedicine* (COLL)	D	DE	A		
Advances in Virtual High-Throughput Screening* (CINF)	D				
Structure-Based Design and Development of Estrogen Receptor Modulators* (COMP)	D				
Peptide Bond Isosteres* (ORGN)		A			
Percy L. Julian: Scientist, Humanist, Educator, Entrepreneur, and Inspirational Trailblazer* (CMA)		D			
Tetrahedron Prize for Creativity in Organic Chemistry* (ORGN)		P			
Drug Toxicity and Safety Prediction* (TOXI)			P		
Uncovering the Metabolome and Metabolic Defects* (BIOL)				A	
Enzymatic Catalysis and Transition States* (BIOL)				P	

Division of Nuclear Chemistry & Technology **NUCL**

J. D. Robertson, H. Nitsche, Program Chairs

Moscone Center	S	M	Tu	W	Th
Investing in the Future: Radiochemistry Education Award Program	A				
30 Years of Projectile Fragmentation	D	A			
Analytical Chemistry in Nuclear Technology	P	D	D	D	
Radioisotopes for Microbatteries and MEMS		P			
Recent Advances in Molecular Imaging				D	D
Nuclear Chemistry in Context* (CHED)			A		
Separation of f-Elements* (I&EC)			P	D	D
The Structure and Reactivity of Nanoparticles in the Environment* (GEOC)				D	D

Division of Organic Chemistry **ORGN**

R. D. Larsen, Program Chair

Moscone Center	S	M	Tu	W	Th
Metal-Mediated Reactions and Syntheses	A	D			
Asymmetric Reactions and Syntheses	D	D	D		
Materials, Devices, and Switches	D				
Physical Organic Chemistry: Calculations, Mechanisms, Photochemistry, and High-Energy Species	D				
Young Investigators Symposium	D				
H. C. Brown Legacy Symposium**	P	A			
Asymmetric Reactions and Syntheses, Metal-Mediated Reactions, Combinatorial, Parallel, and Solid-Phase Chemistry	E				
Materials, Molecular Recognition, and Self-Assembly		A			
Peptide Bond Isosteres**		A			
Molecular Recognition and Self-Assembly		P	A		
Organocatalysis		P			
Tetrahedron Prize for Creativity in Organic Chemistry**		P			
Sci-Mix		E			
New Reactions and Methodology			D	D	D
Arthur C. Cope Award and Arthur C. Cope Scholar Awards			D		
Organic Approaches to Nanotechnology**			D		
Process R&D and Practical Syntheses of Medicinal Agents			P		
Modern Acetylene Chemistry			E	D	
New Reactions and Methodology, Heterocycles and Aromatics, Bioorganic Chemistry			E		
Chemical Information and Organic Chemistry: The Road Ahead**				A	
Total Synthesis of Complex Molecules				D	D
Technical Achievements in Organic Chemistry Awards				D	
Lipids, Nucleotides, and Mimetics				P	
Total Synthesis, Materials, Molecular Recognition, Process R&D, and Physical Organic Chemistry				E	
Combinatorial, Parallel, and Solid-Phase Chemistry					A
Heterocycles and Aromatics					D
Proteins, Peptides, Amino Acids, and Enzyme Inhibitors					D

*Cosponsored symposium with primary organizer shown in parentheses.

**Primary organizer of a cosponsored symposium.

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PROGRAM SUMMARY

Division of Organic Chemistry
(continued)

ORGN

R. D. Larsen, Program Chair

Moscone Center	S	M	Tu	W	Th
Nucleosides, Nucleotides, and Oligonucleotides* (CARB)	A				
SWNTs From Synthesis to Application, From the Lab to the Fab: In Memory of Richard Smalley* (PRES)	D	D	D	D	
Advances in Nanomedicine* (COLL)	D	DE	A		
Undergraduate Research Poster Session: Organic Chemistry* (CHED)		P			
Chemical Information and Organic Chemistry: The Road Ahead* (CINF)				P	

Division of Petroleum Chemistry

PETR

Y. Wang, J. D. Allison, Program Chairs

Palace	S	M	Tu	W	Th
7th International Symposium on Advances in Fluid Cracking Catalysts (FCCs)	D	D	A		
2nd International Symposium on Hydrotreating/Hydrocracking Technologies	D	D	D		
General Poster Session		A			
Fuel Processing for Hydrogen Production**			P	D	
Clean Fuels from Biomass**			P	D	
Characterization, On-Line Monitoring, and Sensing of Petroleums and Petrochemicals					D
Chemistry of Petroleum and Emerging Technologies					D
Computational Material Design in Chemical Industries* (I&EC)		D	A		
Advances in Hydrogen Production* (FUEL)		D	D		
Process Intensification* (I&EC)			D		

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Division of Physical Chemistry

PHYS

B. D. Kay, Program Chair

Grand Hyatt San Francisco	S	M	Tu	W	Th
Frontiers in Molecular Biophysical Dynamics: Experiment and Theory	A				
Fundamentals of Metal Oxide Catalysis**	D	A	A	D	D
Theory of Rare Events and Accelerated Dynamics	D	D	A		
Physical Chemical Foundations of Biological Membrane Phenomena	D	D	D	A	D
Frontiers in Molecular Dynamics: Experiment and Theory	D	D	D	D	D
Physical Chemistry of Ionic Liquids	D	D	D	D	
Frontiers in Single-Molecule Biophysical Chemistry and Imaging**	D	D	D	P	D
Chemistry in Extreme Environments	P	D	P	D	D
Fifty Years of Electron Transfer and RRKM Theories**		P	D	D	D
Sci-Mix		E			
Cyber Science, Chemistry**			P	D	D
Poster Session				E	
Surface Chemistry Symposium in Honor of Gabor Somorjai* (COLL)	D	D	A	D	D
Dynamics of Single Atoms, Molecules, and Clusters on Surfaces* (COLL)	D	D	D	D	D
SWNTs From Synthesis to Application, From the Lab to the Fab: In Memory of Richard Smalley* (PRES)	D	D	D	D	
Progress in Computational and Experimental Studies of Materials for Hydrogen Storage* (FUEL)		D	D		
Teaching Quantum Concepts in Chemistry* (CHED)			P		

Division of Polymer Chemistry

POLY

C. A. Guymon, C. Landry-Coltrain, Program Chairs

San Francisco Marriott	S	M	Tu	W	Th
General Papers: Synthesis and Characterization	A	D		A	P
Polymers in Biosensors and Biochips	D	A			
Entrepreneurship in Polymers and Technology**	D	D	AE		
7th International Biorelated Polymers Symposium	D	D	D	D	D
Multicompartment Micelles: Higher Order Self-Assembly of Block Copolymers**	D	D			
General Papers: Polymers in Nanotechnology	D				
Mark Scholars Symposium	P				
General Poster Session	E				
Nanoparticles and Microparticles: Synthesis and Applications		P	D	D	A

Division of Polymer Chemistry **POLY**

C. A. Guymon, C. Landry-Coltrain, Program Chairs

San Francisco Marriott	S	M	Tu	W	Th
General Papers: Polymers and Biology		P			
Sci-Mix		E			
Biocatalysis in Polymer Science			D	D	D
Organic Thin Films for Photonic Applications**			DE	D	D
Silicones and Silicone-Modified Materials			D	D	D
Industrial Sponsors Award in Honor of James Hedrick			P		
Joint POLY/PMSE Poster Session			E		
Health Materials and Techniques: Research and Development over the Past 25 Years: Investment in Basic Research Leading to Benefits for Society* (HIST)	A				
SWNTs From Synthesis to Application, From the Lab to the Fab: In Memory of Richard Smalley* (PRES)	D	D	D	D	
Fuel Cell Chemistry and Operation* (FUEL)		P	D	D	D

Division of Polymeric Materials: Science & Engineering **PMSE**

D. Webster, Program Chair

San Francisco Marriott	S	M	Tu	W	Th
Health Materials and Techniques: Research and Development over the Past 25 Years: Investment in Basic Research Leading to Benefits for Society* (HIST)	A				
SWNTs From Synthesis to Application, From the Lab to the Fab: In Memory of Richard Smalley* (PRES)	D	D	D	D	
NSF Partnership for Research and Education in Materials* (CHED)	D				
Polyfunctional Organoboranes: From Molecules to Materials* (INOR)	E				
Computational Material Design in Chemical Industries* (I&EC)			D	A	
Polyfunctional Organoboranes: From Molecules to Materials* (INOR)			D	D	
Fuel Cell Chemistry and Operation* (FUEL)		P	D	D	D
Organic Thin Films for Photonic Applications* (POLY)			DE	D	D

Division of Polymeric Materials: Science & Engineering **PMSE**

D. Webster, Program Chair

San Francisco Marriott	S	M	Tu	W	Th
General Papers/New Concepts in Polymeric Materials	A			D	D
Nanotechnology Applications in Coatings Science and Technology of Next Generation Photovoltaics	D	D	A		
Block Copolymers as Nanoscale Materials	D	D	D	D	
Electroactive and Photoresponsive Metal-Containing Polymers	D	D			
ICI Student Award Symposium	P				
Advanced Membranes for Energy and Environmental Applications		D	D	D	D
Roy W. Tess Award Symposium on Durability and Service Life Prediction of Polymeric Materials in Honor of Jonathan Martin		D			
Sci-Mix		E			
Polymers for Biomedical Applications			D	D	D
Self-Assembly Approaches for Nanopatterning			P	D	D
National Starch & Chemical Co. Award Symposium for Outstanding Graduate Research in Polymer Science and Engineering in Honor of Jiaying Huang			P		
Joint PMSE/POLY Poster Session			E		
Advances in Protein Drugs and Gene Delivery: Delivery and Diagnostic Technologies					A

Division of Professional Relations **PROF**

J.A. Walsh, Program Chair

San Francisco Marriott	S	M	Tu	W	Th
To Ph.D. or not to Ph.D.: A Guide to the Perplexed Student	A				
What Does It Take to Succeed in the Pharmaceutical Industry?	P				
Leadership in Scientific and Technical Organizations: A Critical Skill for Advancement and Success			A		
ChemCensus 2005: The Present and Future of Chemistry**		D			
Changing Communications of the 21st Century in Honor of the 10th Anniversary of the Helen Free Award for Science Outreach**			P		
Careers in Chemistry: Are there Alternatives to Working at a Laboratory Bench?				A	
Question-based Review (QbR) for Generic Drugs: An Enhanced Pharmaceutical Quality Assessment System					A
Career Services-ChemJobs Career Center Workshops	D	D	D	D	
Careers for Computational Chemists in Pharma, Biotech, Patent Law, Software Vendors, and the National Institutes of Health* (COMP)	A				

PROGRAM SUMMARY

Division of Professional Relations (continued)

PROF

J.A. Walsh, Program Chair

San Francisco Marriott	S	M	Tu	W	Th
Hiring and Promotion in Chemical Education* (CHED)	D				
The ACS Throughout My Career* (YCC)		A			
Women Chemical Entrepreneurs* (SCHB)		D			
Academic Employment Initiative* (AEI)		E			
Steps to Business Success for the Chemistry Entrepreneur* (SCHB)			A		
Equipping the 2015 Chemical Technology Workforce* (TECH)			D		
Defining Outcomes and Preparing for Departmental Reviews: Maintaining a Healthy Department* (CHED)					P

Division of Small Chemical Businesses

SCHB

P. J. Bonk, Program Chair

San Francisco Marriott	S	M	Tu	W	Th
Women Chemical Entrepreneurs**		D			
Sci-Mix		E			
Steps to Business Success for the Chemistry Entrepreneur**			A		
Single Interest Group: Consulting Challenges and Opportunities**			P		
The What, Why, and How of a Business Plan**			P		
True Stories of Small Chemical Businesses**				A	
Entrepreneurship in Polymers and Technology* (POLY)	D	D	AE		
SWNTs From Synthesis to Application, From the Lab to the Fab: In Memory of Richard Smalley* (PRES)	D	D	D	D	
Chemistry of Wine* (YCC)	P				
Entrepreneurship in Chemical Informatics* (CINF)		P			
The Lawyer Is In: CHAL's Legal Assistance Network* (CHAL)		P			

Catalysis & Surface Science Secretariat

CATL

B. Zhou, Secretary General

	S	M	Tu	W	Th
Surface Chemistry Symposium in Honor of Gabor Somorjai* (COLL)	D	D	A	D	D
Correlation of Single Crystal Studies Using Surface Science Techniques to Industrial Catalysts* (COLL)	D				
Nano-Scale Science and Technology in Bio-molecular Catalysis* (COLL)				D	D

Committee on Community Activities

CCA

P. Fox, Program Chair

	S	M	Tu	W	Th
Changing Communications of the 21st Century in Honor of the 10th Anniversary of the Helen Free Award for Science Outreach* (PROF)					
		P			

Committee on Economic & Professional Affairs

CEPA

S. Shah, Program Chair

	S	M	Tu	W	Th
Entrepreneurship in Polymers and Technology* (POLY)	D	D	AE		
ChemCensus 2005: The Present and Future of Chemistry* (PROF)		D			
Academic Employment Initiative* (AEI)		E			
Equipping the 2015 Chemical Technology Workforce* (TECH)				D	
Single Interest Group: Consulting Challenges and Opportunities* (SCHB)				P	
The What, Why, and How of a Business Plan* (SCHB)				P	

Committee on Environmental Improvement

CEI

E. Warren, Program Chair

	S	M	Tu	W	Th
Green Chemistry and Engineering Poster Session* (I&EC)	E				

Committee on Minority Affairs

CMA

J. P. Shoffner, A. T. O'Brien, L. M. Watkins, Program Chairs

Hilton San Francisco	S	M	Tu	W	Th
Percy L. Julian: Scientist, Humanist, Educator, Entrepreneur, and Inspirational Trailblazer**			D		
Academic Employment Initiative* (AEI)		E			

Committee on Science

COMSCI

D. J. Nelson, Program Chair

	S	M	Tu	W	Th
H. C. Brown Legacy Symposium* (ORGN)	P	A			
SWNTs From Synthesis to Application, From the Lab to the Fab: In Memory of Richard Smalley* (PRES)	D	D	D	D	
Percy L. Julian: Scientist, Humanist, Educator, Entrepreneur, and Inspirational Trailblazer* (CMA)		D			
Equipping the 2015 Chemical Technology Workforce* (TECH)			D		

Society Committee on Education

SOCED

A. G. Cavinato, Program Chair

Palace	S	M	Tu	W	Th
Nanotechnology Symposium	A				
Eminent Scientist Lecture featuring Robert H. Grubbs		A			
Environmental Impact of Natural Disasters		A			
Community College Programs Designed to Help Students Transition to Four-Year Colleges and Universities* (CHED)	D				
ChemCensus 2005: The Present and Future of Chemistry* (PROF)		D			
Percy L. Julian: Scientist, Humanist, Educator, Entrepreneur, and Inspirational Trailblazer* (CMA)		D			
Recovery from and Prevention of Natural Disasters* (DSTR)		P	D	D	D
Revision of the ACS Guidelines for Undergraduate Chemistry Programs* (CHED)		P			
Undergraduate Research Poster Session* (CHED)		P			
Academic Employment Initiative* (AEI)		E			
Successful Student Affiliates Chapter Poster Session* (CHED)		E			
Equipping the 2015 Chemical Technology Workforce* (TECH)			D		

Women Chemists Committee

WCC

R. D. Libby, Program Chair

	S	M	Tu	W	Th
Entrepreneurship in Polymers and Technology* (POLY)	D	D	AE		
Symposium in Honor of Sylvia Ware: An Educational Leader and Visionary* (CHED)	P				
The ACS Throughout My Career* (YCC)		A			
Percy L. Julian: Scientist, Humanist, Educator, Entrepreneur, and Inspirational Trailblazer* (CMA)		D			
In Remembrance of Doris Kasey Kolb: An Anthology* (CHED)		D			
Women Chemical Entrepreneurs* (SCHB)		D			
Strategies for Being a Successful Ph.D. Student* (YCC)				P	
Academic Employment Initiative* (AEI)				E	
Honoring Mary Wirth, Recipient of the Spectrochemical Analysis Award* (ANYL)				P	
Writing in the Undergraduate Chemistry Curriculum* (CHED)					D
Honoring Alanah Fitch, Recipient of the J. Calvin Giddings Award for Excellence in Analytical Education* (ANYL)					P

Younger Chemists Committee

YCC

A. C. Myers, M. Jeffries-El, Program Chairs

San Francisco Marriott	S	M	Tu	W	Th
Chemistry of Wine**	P				
The ACS Throughout My Career**		A			
Strategies for Being a Successful Ph.D. Student**			P		
Percy L. Julian: Scientist, Humanist, Educator, Entrepreneur, and Inspirational Trailblazer* (CMA)			D		
Women Chemical Entrepreneurs* (SCHB)		D			
General Papers: Young Investigator Session* (TOXI)				A	
Environmental Chemistry Awards* (ENVR)				P	
The What, Why, and How of a Business Plan* (SCHB)				P	
True Stories of Small Chemical Businesses* (SCHB)					A

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