

# SAN FRANCISCO NATIONAL MEETING MANIA!

Who's who at chemistry's Bay Area bash. This list is not comprehensive.

CARMEN DRAHL, C&EN WASHINGTON



**Plenary:**  
**Pedro Alvarez**  
Wizard of water  
reuse, Rice



**Plenary:**  
**Paul Anastas**  
Green chemistry  
guru, Yale



**Kavli Lecture:**  
**Joan Brennecke\***  
Ionic liquids icon,  
Notre Dame



**Plenary:**  
**Walter Leitner**  
Supply-chain  
specialist, RWTH  
Aachen



**Plenary:**  
**Heinz Leuenberger**  
Sustainability  
seeker, UN Industrial  
Development  
Organisation

**Green = Global  
stewardship  
(meeting theme)**  
\* 2014 ACS National  
Award Winner



**Robert Fraley**  
Roundup Ready  
crop inventor and  
CTO, Monsanto



**George Whitesides**  
Harvard's provocateur  
talks about 2012 ACS  
President Bassam  
Shakhashiri and  
reforming graduate  
education



## UP & COMING CABLE CAR



**Ali Bouzari**  
Culinary consultant  
to Michelin-starred  
restaurants and  
Ph.D. candidate,  
UC Davis



**Beth Cooper**  
Eco-paint seeker,  
Dow Chemical



**Guangbin Dong**  
C-C activation  
catalyzer, UT Austin



**Xiaolin Zheng**  
This National  
Geographic  
Emerging  
Explorer evaluates  
nanowires for water  
splitting at Stanford



**Mark Shiflett**  
Refrigerant  
innovator, Dupont



**Jennifer Field**  
Water contaminant  
chaser, Oregon  
State



**Michael Gonzalez**  
Senior adviser,  
green chemistry,  
EPA



**Kavli Lecture:**  
**Ali Khademhosseini**  
Biomaterials buff,  
Harvard



**Henry (Hoby) Wedler**  
Blind UC Davis Ph.D.  
candidate will stress  
chemical safety and  
accessibility



**Peter Burns**  
Actinide authority,  
Notre Dame



**Jean'ne Shreeve**  
Fluorine phenom,  
U of Idaho



**Melody Hammond**  
Chemical analysis  
ace, Phillips 66



**Richard Zare**  
Physical chemistry  
legend, Stanford

## WHAT TO DO IN SAN FRANCISCO

### Golden Gate Bridge

You've seen it in pictures. Now see it in person.



### Alcatraz Island

This former prison once housed the notorious Al Capone.



### Pier 39

Brave the throngs to experience seafood and sea lion sightings.



### Lombard Street

Drive down this winding road with caution!



## NOBEL WHARF



**Robert Grubbs**  
Caltech



**Alan Heeger**  
UC Santa Barbara



**Roald Hoffmann**  
Cornell



**Richard Schrock**  
MIT



**Stanley Prusiner**  
UC San Francisco



**Isiah Warner**  
Mentor extraordinaire,  
Louisiana State



**Jonathan Sweedler\***  
Cutting-edge  
neurochemistry  
that comes with  
great hair



**Jin-Quan Yu**  
C–H activation  
ace with a mane  
to match, Scripps  
California



**Geoffrey Coates**  
Sculptor of  
polymers, Cornell



**James Hedrick**  
Performance  
polymer  
powerhouse, IBM



**Dawn Shaughnessy**  
Radiochemistry  
ringleader, Lawrence  
Livermore National  
Lab



**Charles Lieber**  
Nanoscale  
trailblazer, Harvard



**Harry Gray**  
Inorganic icon,  
Caltech



**Susan Olesik\***  
Separations sage,  
Ohio State



**Heather Maynard**  
Protein-polymer  
dynamo, UCLA



**Krzysztof  
Matyjaszewski**  
Polymer pioneer,  
Carnegie Mellon



**Karin Briner**  
VP, head of  
global discovery  
chemistry, Novartis



**Abigail Doyle\***  
Catalysis problem  
solver, Princeton



**Daniel Erlanson**  
President, Carmot  
Therapeutics



**Rebecca Ruck**  
Process chemistry  
site lead, Merck  
& Co.



**Stuart Schreiber\***  
Chemical biology  
kingpin, Broad  
Institute



**Peter Kim**  
Former Merck  
Research Labs  
head, Stanford



**Jay Keasling**  
Synthetic biology  
bigwig, UC Berkeley



**Denise Sekaquaptewa**  
U of Michigan social  
psychologist will  
explain stereotyping's  
effects on STEM



**Peter Schultz**  
Stem cell wrangler,  
Scripps California



**Kelly George**  
Formulation maven,  
L'Oréal



**Bruce Roth**  
Lipitor inventor,  
Genentech



**J. Fraser Stoddart**  
Supramolecular  
superstar,  
Northwestern



**Sam Kean**  
Find out about  
ghost elements with  
the author of "The  
Disappearing Spoon"



**S. Ted Oyama**  
Environmental  
catalysis expert,  
Virginia Tech

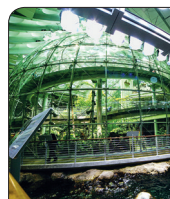
## & SCHEDULE ONLINE

For dates, times, locations for  
speakers, visit <http://cenm.ag/sanfran14>. Or find "C&EN Picks"  
on the ACS meeting mobile app,  
coming soon!



**Coit  
Tower**  
Go here  
for the  
best views  
of the City  
by the Bay.

**California  
Academy of  
Sciences**  
Take the  
family to this  
natural history  
museum,  
rebuilt in 2008.



**Cable Car  
Museum**  
Learn the  
history of San  
Francisco's  
most iconic  
mode of  
transit.



**Chinatown**  
Snap a  
photo of this  
neighborhood's  
green-tiled  
entry gate.





## WHO, WHAT, WHERE

Notable ACS San Francisco speakers to check out, along with talk title, time, and location

NAME	DAY	DATE	TIME	HOTEL	ROOM	TALK TITLE
Plenary: Pedro Alvarez	Sunday	8/10	5:25 PM	Moscone Center, South Bldg.	Gateway Ballroom	Nanotechnology-enabled water disinfection and microbial control: Mechanisms, applications, and implications
Pedro Alvarez	Tuesday	8/12	2:15 PM	San Francisco Marriott Marquis	Golden Gate Section C3	Model of the inhibitory mechanisms of photocatalytically generated reactive oxygen species by natural organic matter
Plenary: Paul Anastas	Sunday	8/10	3:55 PM	Moscone Center, South Bldg.	Gateway Ballroom	Molecular design for sustainability
Ali Bouzari	Sunday	8/10	10:30 AM	Moscone Center, North Bldg.	135	Applied culinary science: Restaurant cooking elevated through scientific insight
Joan Brennecke	Monday	8/11	9:50 AM	Moscone Center, West Bldg.	2002	Effect of cation, water, and other additives on AHA ionic liquids for CO <sub>2</sub> capture
Kavli Lecture: Joan Brennecke	Monday	8/11	5:40 PM	Moscone Center, South Bldg.	Gateway Ballroom	How ionic liquids can contribute to global stewardship
Karin Briner	Tuesday	8/12	3:00 PM	Moscone Center, West Bldg.	3010/3012	Drug discovery challenges and opportunities: Shaping the future of medicinal chemistry
Peter Burns	Sunday	8/10	8:30 AM	San Francisco Marriott Marquis	Pacific I	Geochemical aspects of nuclear waste disposal
Peter Burns	Monday	8/11	8:10 AM	San Francisco Marriott Marquis	Foothill B	Incorporation of neptunium into uranyl minerals and various non-actinide low-temperature minerals
Geoffrey Coates	Monday	8/11	8:55 AM	Hilton San Francisco Union Square	Golden Gate 3	Recent advances in the development benign polymeric materials
Geoffrey Coates	Monday	8/11	11:20 AM	Hilton San Francisco Union Square	Golden Gate 5	New polymers from old monomers: Advances enabled through catalyst design and discovery
Geoffrey Coates	Wednesday	8/13	3:15 PM	Moscone Center, West Bldg.	3002	Recent advances in the development of bimetallic catalysts
Beth Cooper	Sunday	8/10	9:25 AM	Moscone Center, West Bldg.	3020/3022/3024	Latex-pigment interactions in paint to reduce environmental impact and improve performance
Guangbin Dong	Monday	8/11	1:20 PM	Hilton San Francisco Union Square	Union Square 15/16	Catalytic C–C activation: A 'cut and sew' approach to bridged and fused rings
Abigail Doyle	Tuesday	8/12	9:20 AM	Moscone Center, West Bldg.	3020/3022/3024	Award Address (Arthur C. Cope Early Career Scholars Award sponsored by the Arthur C. Cope Fund). New reagents and strategies for catalytic nucleophilic fluorination
Abigail Doyle	Wednesday	8/13	10:05 AM	Moscone Center, West Bldg.	3002	New electrophiles for nickel-catalyzed cross coupling
Daniel Erlanson	Sunday	8/10	9:30 AM	Moscone Center, West Bldg.	3010/3012	Cryptic covalents and other unknown knowns: Useful or not?
Daniel Erlanson	Tuesday	8/12	2:05 PM	Moscone Center, South Bldg.	Esplanade Ballroom 301	Starting a biotech in the midst of the Great Recession
Jennifer Field	Wednesday	8/13	1:30 PM	Moscone Center, North Bldg.	124	Coupling large volume injection with tandem mass spectrometry: Strategies and environmental applications
Jennifer Field	Tuesday	8/12	8:35 AM	San Francisco Marriott Marquis	Club Room	Research at the interface of environmental chemistry and engineering
Robert Fraley	Tuesday	8/12	11:40 AM	San Francisco Marriott Marquis	Yerba Buena Salon 9	Role of innovation in addressing the challenges facing global agriculture
Kelly George	Sunday	8/10	9:05 AM	Moscone Center, West Bldg.	3020/3022/3024	Development of new skin care cleansing formulations using design of experiment and fast formulation tools

NAME	DAY	DATE	TIME	HOTEL	ROOM	TALK TITLE
Michael Gonzalez	Tuesday	8/12	8:05 AM	Moscone Center, North Bldg.	120	Chemistry and its role in sustainability
Harry Gray	Monday	8/11	8:45 AM	Moscone Center, South Bldg.	Esplanade Ballroom 304	Recruiting the next generation of chemists through hands-on research experiences
Harry Gray	Monday	8/11	12:10 PM	Moscone Center, West Bldg.	2024	Organometallic photoreductants
Harry Gray	Monday	8/11	1:30 PM	Moscone Center, West Bldg.	2018	Solar-driven water splitting
Robert Grubbs	Monday	8/11	1:30 PM	Moscone Center, West Bldg.	2024	Synthesis of large and small molecules using olefin metathesis catalysts
Robert Grubbs	Tuesday	8/12	11:45 AM	Moscone Center, West Bldg.	2016	Selective formation of olefins using olefin metathesis
Melody Hammond	Monday	8/11	9:10 AM	Moscone Center, North Bldg.	132	Chemical technician: Accidental career or chosen occupation?
James Hedrick	Monday	8/11	8:30 AM	Hilton San Francisco Union Square	Golden Gate 3	Organic catalysis: A broadly useful strategy for functional biodegradable polymers
James Hedrick	Monday	8/11	9:20 AM	Hilton San Francisco Union Square	Continental Parlor 7/8	Resurgence of high performance polymers
James Hedrick	Wednesday	8/13	6:45 PM	InterContinental San Francisco	Grand Ballroom B	Organocatalytic routes to advanced materials: From semiconductors, green chemistry to nanomedicine
Alan Heeger	Thursday	8/14	9:00 AM	Moscone Center, West Bldg.	2004	General strategy for self-assembly of highly oriented nanocrystalline semiconducting polymers with high mobility
Roald Hoffmann	Monday	8/11	3:25 PM	Moscone Center, South Bldg.	Esplanade Ballroom 304	Not just-so: Telling stories in chemical research and the teaching of chemistry
Sam Kean	Monday	8/11	11:00 AM	InterContinental San Francisco	Grand Ballroom C	Disappearing spoon: Ghost elements
Jay Keasling	Tuesday	8/12	2:45 PM	InterContinental San Francisco	Grand Ballroom B	Synthetic biology for advanced biofuels
Kavli Lecture: Ali Khademhosseini	Monday	8/11	4:10 PM	Moscone Center, South Bldg.	Gateway Ballroom	Engineered hydrogel biomaterials for regenerative medicine applications
Peter Kim	Sunday	8/10	10:35 AM	InterContinental San Francisco	Grand Ballroom B	Toward an HIV vaccine
Plenary: Walter Leitner	Sunday	8/10	4:40 PM	Moscone Center, South Bldg.	Gateway Ballroom	Catalysis as key science and technology for sustainable chemical supply chains
Plenary: Heinz Leuenberger	Sunday	8/10	3:10 PM	Moscone Center, South Bldg.	Gateway Ballroom	Requirements for a globally sustainable chemicals industry
Charles Lieber	Sunday	8/10	1:30 PM	Moscone Center, West Bldg.	2001	Nanoelectronics meets biology: From new tools to electronic therapeutics
Krzysztof Matyjaszewski	Sunday	8/10	8:05 AM	Hilton San Francisco Union Square	Continental Ballroom 4	State-of-the-art of controlled radical polymerization (reversible deactivation radical polymerization)
Krzysztof Matyjaszewski	Sunday	8/10	4:00 PM	Hilton San Francisco Union Square	Continental Parlor 7/8	Branched polymers by ATRP
Krzysztof Matyjaszewski	Monday	8/11	8:30 AM	Hilton San Francisco Union Square	Golden Gate 4	Highly porous materials derived from polymers prepared by ATRP
Heather Maynard	Monday	8/11	8:15 AM	San Francisco Marriott Marquis	Golden Gate Section C3	Bioinspired polymers for protein drug delivery
Heather Maynard	Monday	8/11	10:00 AM	Moscone Center, South Bldg.	276	Functionalized polymeric surfaces generated by electron beam lithography for applications from encryptic messages to enhanced cell adhesion
Heather Maynard	Tuesday	8/12	4:45 PM	Hilton San Francisco Union Square	Continental Parlor 3	Protein-polymer conjugates synthesized by ring opening metathesis polymerization

NAME	DAY	DATE	TIME	HOTEL	ROOM	TALK TITLE
Heather Maynard	Wednesday	8/13	1:55 PM	InterContinental San Francisco	Union Square	Conjugates and nanoparticles of trehalose glycopolymers stabilize protein therapeutics
Heather Maynard	Thursday	8/14	9:15 AM	Hilton San Francisco Union Square	Plaza A	Trehalose glycopolymers by controlled radical polymerization for application in protein stabilization
Susan Olesik	Sunday	8/10	4:45 PM	Moscone Center, South Bldg.	Esplanade Ballroom 308	Micro or nanoscale based chromatography, highly sustainable separation science: ANYL perspective
Susan Olesik	Monday	8/11	10:55 AM	Moscone Center, North Bldg.	124	Award Address (ACS Award in Chromatography sponsored by Sigma-Aldrich/Supelco). Advances in separation science using molecularly organized stationary phases and unique solvents: Innovations in separation science through student success
Susan Olesik	Tuesday	8/12	10:05 AM	Hilton San Francisco Union Square	Union Square 15/16	Inclusion and diversity efforts of The Ohio State University — College of Natural and Mathematical Sciences
S. Ted Oyama	Sunday	8/10	1:05 PM	Moscone Center, South Bldg.	232/234	Kinetic and spectroscopic studies of catalytic mechanisms: Hydrodeoxygenation of biomass feedstocks on transition metal phosphides
Stanley Prusiner	Sunday	8/10	11:10 AM	InterContinental San Francisco	Grand Ballroom B	Prions causing neurodegeneration: A unifying etiology and the quest for therapeutics
Bruce Roth	Tuesday	8/12	4:00 PM	Moscone Center, West Bldg.	3010/3012	Evolution of medicinal chemistry: Building and leading the global team
Rebecca Ruck	Sunday	8/10	10:00 AM	Moscone Center, West Bldg.	3020/3022/3024	MK-7655: Surprising synthetic complexity for seemingly straightforward steps
Stuart Schreiber	Tuesday	8/12	4:00 PM	Moscone Center, West Bldg.	3020/3022/3024	Award Address (Arthur C. Cope Award sponsored by the Arthur C. Cope Fund). Evolving role of organic chemistry in the science of therapeutics
Richard Schrock	Tuesday	8/12	11:05 AM	Moscone Center, West Bldg.	3002	Synthesis of stereoregular ROMP polymers
Richard Schrock	Wednesday	8/13	9:35 AM	Moscone Center, West Bldg.	2006	Reduction of dinitrogen catalytically to ammonia with protons and electrons
Peter Schultz	Sunday	8/10	3:00 PM	Moscone Center, West Bldg.	3004/3006	Chemical approach to regenerative medicine
Peter Schultz	Monday	8/11	2:40 PM	InterContinental San Francisco	Grand Ballroom B	The expanding genetic code
Denise Sekaquaptewa	Tuesday	8/12	2:30 PM	Hilton San Francisco Union Square	Union Square 15/16	Social psychological research on factors shaping institutional climate in STEM
Dawn Shaughnessy	Sunday	8/10	4:05 PM	San Francisco Marriott Marquis	Pacific H	Radiochemical measurements of neutron reaction products at the National Ignition Facility
Mark Shiflett	Monday	8/11	8:40 AM	Moscone Center, West Bldg.	2002	Phase behavior to separation of gases using ionic liquids
Jean'ne Shreeve	Wednesday	8/13	10:50 AM	Palace Hotel	Sea Cliff	Biocidal dense iodine-rich compounds
J. Fraser Stoddart	Sunday	8/10	3:10 PM	Moscone Center, South Bldg.	236	Extended metal-carbohydrate frameworks
J. Fraser Stoddart	Monday	8/11	3:45 PM	Hilton San Francisco Union Square	Golden Gate 5	Artificial molecular motors

NAME	DAY	DATE	TIME	HOTEL	ROOM	TALK TITLE
J. Fraser Stoddart	Tuesday	8/12	11:10 AM	Moscone Center, South Bldg.	272	Development of supramolecular nanogating on mesoporous silica for in vivo therapeutic applications
J. Fraser Stoddart	Tuesday	8/12	3:30 PM	Hilton San Francisco Union Square	Continental Ballroom 5	Controlled $\pi$ - $\pi$ assemblies by dynamic covalent chemistry
Jonathan Sweedler	Tuesday	8/12	10:50 AM	Moscone Center, North Bldg.	125	Neurometabolomics: The cell by cell chemical characterizations of the brain
Jonathan Sweedler	Tuesday	8/12	4:10 PM	Moscone Center, North Bldg.	132	Award Address (ACS Award in Analytical Chemistry sponsored by Battelle Memorial Institute). Tools to measure D-amino acid signaling in the brain
Isiah Warner	Monday	8/11	9:05 AM	Hilton San Francisco Union Square	Union Square 15/16	Mentoring, research, and diversity: Transforming undergraduate STEM education
Isiah Warner	Tuesday	8/12	4:25 PM	Hilton San Francisco Union Square	Union Square 15/16	Transformation of the Louisiana State University Chemistry Department
Henry (Hoby) Wedler	Monday	8/11	4:20 PM	InterContinental San Francisco	Cathedral Hill	Importance of complete accessibility and independence in the laboratory
Henry (Hoby) Wedler	Wednesday	8/13	9:45 AM	Moscone Center, South Bldg.	Esplanade Ballroom 304	Nobody can see atoms: Science camps highlighting approaches to making chemistry accessible to blind and visually-impaired students
Henry (Hoby) Wedler	Wednesday	8/13	1:20 PM	Moscone Center, West Bldg.	3011	Isomerization of cycloartanol: An indicator of thermally-treated olive oil
George Whitesides	Monday	8/11	11:50 AM	Moscone Center, South Bldg.	Esplanade Ballroom 304	Bassam as irritant
Jin-Quan Yu	Monday	8/11	8:35 AM	Palace Hotel	Pacific Heights	Trifluoromethylation of C-H bonds via Pd or Cu catalysis
Jin-Quan Yu	Monday	8/11	1:10 PM	Moscone Center, West Bldg.	3020/3022/3024	Ligand-accelerated C-H activation reactions: Near and far
Richard Zare	Monday	8/11	9:35 AM	Moscone Center, North Bldg.	125	Ambient ionization mass spectrometric imaging with high spatio-temporal resolution
Richard Zare	Monday	8/11	1:35 PM	Moscone Center, South Bldg.	Esplanade Ballroom 304	Power of a lecture demonstration
Richard Zare	Tuesday	8/12	3:35 PM	Moscone Center, North Bldg.	132	Chemical modification of plastic blood collection tubes to achieve hydrophilic interior surfaces
Richard Zare	Wednesday	8/13	2:50 PM	Moscone Center, West Bldg.	2010	Reaction dynamics in liquid droplets
Xiaolin Zheng	Sunday	8/10	10:30 AM	InterContinental San Francisco	InterContinental A	Flame synthesized metal oxide nanowires as effective photoanodes for photoelectrochemical water-splitting

**NOTE:** Dates, times, and rooms are subject to change.