





# ACS - DAC DIVISION NEWSLETTER July 2014

# **MESSAGE FROM THE CHAIR**

Recognizing excellent science and professionalism in our colleagues is one of the most rewarding activities of the Division. It is my pleasure to congratulate the recipients of ACS National Awards for Chromatography and Analytical Chemistry, Dr. Susan Olesik, and Dr. Johnathon Sweedler, respectively. In addition, congratulations to Division awardees: David Koppenaal, Joseph Gardella, Tim Harris, Debra Rolison, Chris Enke, and Ben Garcia.

I invite you to learn more about the stellar work and careers of these awardees at the upcoming ACS national meeting in San Francisco, August 10-14. In particular, there will be an award symposium recognizing Dr. Olesik on Monday morning; an award symposium recognizing Dr. Sweedler on Tuesday afternoon; and a Division Awards Symposium featuring all of the division award recipients on Monday afternoon. You are also invited to meet these awardees at our reception, planned for Tuesday, 5-7pm at the Intercontinental Hotel.

#### In this issue:

Analytical Division Elections – ballots due July 29th

ACS National Meeting, San Francisco, August 10-15. Early registration deadline: July 15<sup>th</sup>

- Executive committee meeting
- Member reception
- Awards
- National Awards
- Division Awards
- Sessions what, when, and where

SciX, Reno, NV, SEPT. 28 - OCT. 3, 2014 – Advanced registration deadline September Many thanks for Susan Olesik in for the excellent work she has performed on the division members' behalf in organizing another outstanding series symposia and co-sponsored symposia at the upcoming national meeting.

If you are in San Francisco, please consider joining us for the open executive committee meeting on Monday from 4-7 pm.

Finally, I would like to thank the candidates who have stepped forward to be considered by our members to serve in elected positions on the Division executive committee! Please remember to vote!

Thomas M. Rossi, Ph.D. Chairman Division of Analytical Chemistry

## **2014 ACS ANALYTICAL DIVISION ELECTION**

Don't miss your chance to take part in the 2014 ACS Analytical Division elections! You should have received your ballot in your email, along with a link and validation code for your vote.

Choosing the leadership of our Division is an important way that all of our members can have a voice in ensuring that we continue to provide the value and service that you need. The duties of the executive committee include assuming the fiduciary responsibility for the Division, providing conference programming, recognizing excellent scientific achievement through the Division Awards, undergraduate awards, and graduate fellowship programs and ACS Fellow nominations, and keeping our strategic direction aligned with that of the ACS.

We once again have an excellent slate of nominees. The nominees are:

Chair Elect Steve Soper Joel Harris

Treasurer Adam Woolley Jason Cheng Councilors (You may vote for up to three candidates) Michelle Buchanan Steve Scypinski Scott Shippy Donna Nelson Al Ribes Frank Kero

#### Please vote soon if you have not already done so. The voting deadline is July 20<sup>th</sup>.

## SPOTLIGHT ON SAN FRANCISCO, AUGUST 10-14, 2014

Early Registration extended to July 15!! Visit the registration website today at <a href="http://www.acs.org/content/acs/en/meetings/fall-2014/registration/fees.html">http://www.acs.org/content/acs/en/meetings/fall-2014/registration/fees.html</a>

The division has a number of activities planned for the San Francisco meeting – a total of 29 sessions, including three awards symposia. In addition, the division will be co-sponsoring 12 symposia.

#### **Executive Committee Meeting**

For those of you attending the Fall meeting, please feel free to join the Executive Committee in its open meeting on Monday, August 11<sup>th</sup>, from 4pm - 7pm in Esplanade Blrm. 310 of the Moscone Ceter, South Building.

#### **Member Reception**

The Division is sponsoring a members' reception on Tuesday from 5pm - 7pm in the Telegraph Hill Room of the Intercontinental Hotel. Tickets for the reception are available as part of your ACS registration package.

## **National Awards**

#### ACS Award for Chromatography



The ACS National Award for Chromatography will be presented at the Fall meeting to Professor Susan V. Olesik during a session in her honor at 8:30 AM on Monday morning in Moscone Center, North Bldg. Room: 124. The Awards is Cosponsored by: WCC and is financially supported by: Sigma-Aldrich. The symposium has been organized by Isiah Warner.

Professor Olesik is chair of the Department of Chemistry and Biochemistry and Dow Professor of Chemistry at Ohio State University. Professor Olesik pioneered the field of enhanced-fluidity liquid chromatography, a technique now commonly used by the pharmaceutical industry for chiral separations. She is recognized for her research in enhanced-fluidity liquids, fundamental investigations of fluid phenomena, and the development of unique nanofibrous media for separation.

The session will feature presentations by Lisa Holland,

Apryll Stalcup, Luis Colón, and Mary Wirth as well as Dr. Olesik's award address, entitled "Advances in separation science using molecularly organized stationary phases and unique solvents: Innovations in separation science through student success."

#### ACS Award in Analytical Chemistry

A second award session is scheduled for Tuesday afternoon at 1 PM in honor or Jonathon Sweedler, this year's recipient of the ACS National Award in Analytical Chemistry. The award is sponsored by Battelle Memorial Institute and will be presented in a session schedule organized by Evan Williams. The symposium will feature presentations by Evan Williams, Amanda B. Hummon, Mark Wightman, Michael Heien, and Richard Zare. The session will conclude with Professor Sweedler's award address, "Tools to measure D-amino acid signaling in the brain."

Although there were no analytical chemists on the chemistry faculty at the University of California, Davis, when Jonathon Sweedler was an undergraduate, he had the opportunity to work with Tomas Hirschfeld at the Lawrence Livermore National Laboratory for three summers and as he puts it, "My enthusiasm for analytical chemistry has never left me." He earned his



Ph.D. in analytical chemistry in 1989 from the University of Arizona, where he worked with M. Bonner Denton. After completing joint postdoctoral fellowships at Stanford with Zare and

neuroscientist Richard Scheller, now a vice president at Genentech, Sweedler joined the faculty at Illinois in 1991. He was promoted to associate professor in 1996 and full professor in 1999. He was named the James R. Eiszner Family Chair in Chemistry in 2008. In 2012, he became the director of Illinois's School of Chemical Sciences. He has received a number of awards over the years, including the Ralph N. Adams Award from the Pittsburgh Conference in 2012, the Pittsburgh Analytical Chemistry Award from the Society for Analytical Chemists of Pittsburgh in 2007, the Award in Chemical Instrumentation from the ACS Division of Analytical Chemistry (DAC) in 2002, and the Arthur F. Findeis Award, also from DAC, in 1997. He has been a Fellow of the American Association for the Advancement of Science in 2001, and was named a fellow of ACS in 2011

## DAC Awards

The 2014 Division Awards will be presented in a special session scheduled for 1 PM on Monday afternoon, organized by Division Chair Thom Rossi. The awardees and their award addresses are

- Chemical Instrumentation: David Koppenaal, Pacific Northwest National Laboratory, *"Instrumental advances in atomic mass spectrometry"*
- J. Calvin Giddings Award for Excellence in Education: Joseph Gardella, University at Buffalo, "A River Runs Through It: Travels through analytical chemistry and education"
- Spectrochemical Analysis: Tim Harris, Howard Hughes Medical Institute (Janelia Farm), "Optical measurements in single crystals, quantum wells, single molecules, and mouse brains"
- Electrochemistry: Debra Rolison, Naval Research Laboratory, "Controlling the rates of electrochemical environments through architectural design on the Nanoscale"
- Distinguished Service in the Advancement of Analytical Chemistry: Chris Enke, University of New Mexico, "Our Division: Challenges and opportunities in serving the analytical community"
- Arthur F. Findeis Award for Achievements by a Young Analytical Scientist: Ben Garcia, University of Pennsylvania, "Quantitative proteomics for understanding the histone code"

Dave Koppenaal, the 2014 recipient of the Division of Analytical Chemistry Award in Chemical Instrumentation., will be recognized for his work in the development of unique plasma-source mass spectrometry instrumentation, which has pushed frontiers in environmental and nonproliferation analysis and detection. First presented in 1955, the division's Chemical Instrumentation Award recognizes advances in the field of chemical instrumentation. The award honors those who conceptualize, develop and demonstrate unique, innovative instrumentation and promote its use. Prior winners of this award include Richard Zare, Lloyd Smith, John Fenn, Alan Marshall, Graham Cooks, Gary Hieftje and James Winefordner. Koppenaal pioneered the application of inductively coupled plasma/mass spectrometry as a powerful and relevant radioanalytical tool and demonstrated its use for radioactive waste characterization, ultra-trace nuclear forensics use and other applications. He holds nine patents



for inductively coupled plasma-mass spectrometry instrumentation.

Dr. Koppenaal, former chair of the Division of Analytical chemistry, received undergraduate degrees in both Environmental Chemistry and Mathematics from Southwest Missouri State University and his Ph.D., in Analytical Chemistry from University of Missouri –Columbia. Dr. Koppenaal is the author of more than 70 papers in open literature, numerous reports and formal documents on mass spectrometry for inorganic and isotopic characterization. In addition, he holds 9 US and international patents for ICP-MS instrumentation developments. He is currently a fellow of the American Association for the Advancement of Science, the Royal Society of Chemistry and the American Chemical Society.

Joseph A. Gardella, Jr. is a SUNY Distinguished Professor and the John and Frances Larkin Professor of Chemistry at the University at Buffalo, State University of New York (aka UB).



He also serves as the Director of the Interdisciplinary Science and Engineering Partnership (ISEP) with Buffalo Public Schools (isep.buffalo.edu). The ISEP program has been recently awarded a 5 year \$10M Math Science Partnership grant with Joe as principal investigator. Joe has been on the faculty at UB since 1982. Joe was born and raised in Detroit Michigan, and completed a dual degree program in Chemistry (B.S.) and Philosophy (B.A.) from Oakland University in Rochester Michigan., a Ph.D. in Analytical Chemistry at the University of Pittsburgh and postdoctoral research in Physical Chemistry at the University of Utah. He served as a visiting scientist/program officer at the National Science Foundation Chemistry Division in 1989-90. From 1999-2005, he was Associate Dean for External Affairs in the College of Arts and Sciences and he was responsible for coordinating and leading the College's programs in working with industry, community, government and elementary and secondary schools. From 1996-2006, he was the Director of the UB Materials Research Instrumentation Facility, managing ca. \$9M of shared research instrumentation. As a

Faculty Fellow in the Institute for Local Governance and Regional Growth from 2005-2006, he pursued policy studies in regional science and environmental policy and public participation.

Professor Gardella's research interests are in quantitative analysis and surface chemistry, broadly applied to the study of environmental effects at polymer surfaces and tissue engineering with synthetic biomaterials. His work and that of his Ph.D. students has resulted in some 240 publications and a similar number of invited talks worldwide. His work is funded by the National Science Foundation, Office of Naval Research, National Institutes of Health, US Army and industry. Besides his research interests, he has long standing interests in curriculum development for scientists and non- scientists. Professor Gardella also has been active in program development in undergraduate research, interdisciplinary studies, service learning and other academic reform areas.

He is the UB representative to the Western New York Service Learning Coalition (WNYSLC, www.wnyslc.org). Gardella was co-PI on the Community Linked Interdisciplinary Research (CLIR) program, funded by the Hewlett Foundation at UB, to develop and sustain course based public service research as a means to increase the participation of undergraduates in integrative research or scholarly activity. He is also the Co-PI on the Professional Science Masters program in CAS, funded by the Alfred P. Sloan Foundation, developing innovative masters programs in the sciences. He served as Program Director and Principal Investigator of the NIH funded Research Institute in Biomedical Materials Science and Engineering (RIBSE) (www.ribse.buffalo.edu), a summer interdisciplinary undergraduate research program. He has been recognized locally and nationally for his work in all areas of academic endeavor. Most recently, he was promoted to SUNY Distinguished Professor (Nov, 2013). He was awarded the inaugural AVS Recognition for Excellence in Leadership Award in September 2012, and a UB Community Partner award in June 2012. He was recognized with the Distinguished Alumni Achievement Award from his alma mater. Oakland University in 2011. For his research, he was named a fellow of the Society for Applied Spectroscopy (2010) and was also a named Fellow of the American Association for the Advancement of Science (2007) and the AVS, the Technology Society (American Vacuum Society) (2004). He has been awarded the National Science Foundation Award for Special Creativity twice (2009-2011 and 1991-1993). He has been awarded a 2005 National Science Foundation Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring (PAESMEM), the 72<sup>nd</sup> Jacob Schoellkopf Medal of the Western New York American Chemical Society (2002), the 2003 Ernest Lynton Award for Faculty Public Service, three SUNY Chancellor's Medals for Excellence in Teaching (1996), Faculty Service (2004) and Scholarly and Creative Work (2005), and has been a fellow of the Exxon Education Foundation (1989-91) and Lawrence M. Gelb Foundation (1986-89).

Tim Harris is a Group Leader and Director of Applied Physics at the HHMI Janelia Farm Research Campus in Ashburn, VA. He grew up in California and received his BS in chemistry for California Polytechnic at San Luis Obispo. After his Ph.D. from Purdue



University, studying Laser Intracavity Absorption and Laser based Phase fluorimetry in 1978, Tim spent the following 18 very collaborative years at Bell Labs. Murrav Hill, NJ. While at Bell, his work included high sensitivity fluorescence, the first use of CCD imagers for Raman scattering instrumentation, the characterization of quantum dots using a variety of spectroscopic tool, the first report of fluorescence Near-Field Microscopy. The latter led to many follow on applications including single molecule imaging, lifetimes, and spectroscopy, single quantum dot imaging and spectroscopy. In 1996 Harris moved to Seq Ltd. a small biotech startup in Princeton, NJ, where he led the development of high throughput multicolor confocal microscopy for cell based drug screening. This system led to the acquisition of the company by Amersham PLC in 2000 and the imager was deployed to pharmaceutical labs around the world. Harris moved to Helicos Biosciences in January 2004 as the founding technical employee where his team reported the first single molecule DNA sequencing. He has held his current position since

2008. His group is charged with development of tools to advance the current state of neuroscience research. Projects included characterization of new fluorescence probes for two photon microscopy, development of specialized microscopes for synapse resolved neuroanatomy, and projects for advanced electrophysiology using both extracellular and patch pipette technology. He also leads a project jointly funded by HHMI, The Allen Institute for Brain Research, Gatsby Charitable Foundation, and the Wellcome Trust, partnered with Cambridge University and University College London. We are developing an advanced microelectrode silicon probe with a capacity 20X greater than those currently available.

Debra Rolison is the 2014 recipient of the Analytical Division Award in Electrochemistry. Rolison heads the Advanced Electrochemical Materials section at the U.S. Naval Research Laboratory (NRL), where her research focuses on multifunctional nanoarchitectures for such rate-critical applications as catalysis, energy storage and conversion, and sensors. She is



particularly renowned for improving performance in energy-relevant interphases via nanometric control of the requisite multifunctional processes and for bringing an architectural perspective to the design of ultraporous solids. These architectures have relevance in applications where properties obtainable with bulk homogeneous materials limit the physical and chemical signatures and restrict technological development. Along with Bruce Dunn (UCLA), Jeffrey Long (NRL), and Henry White (University of Utah), she established a new sub-discipline in electrochemical science: three-dimensional (3D) electrochemical energy storage. She is also an Adjunct Full Professor of Chemistry at the University of Utah (2000-present). She was a Faculty Scholar at Florida Atlantic University (1972-1975), where she worked with Frank Schultz on nonaqueous ionselective electrodes and the electrochemistry of sulfido molybdenum complexes before receiving her B. S. in Chemistry. She received a Ph. D. in Chemistry from the University of North Carolina at Chapel Hill (1980) after demonstrating the Pt-like character of

RuO2 electrodes in nonaqueous electrolytes. Rolison is a Fellow of the American Association for the Advancement of Science, the Association for Women in Science, the Materials Research Society, and the American Chemical Society and received the 2011 ACS Award in the Chemistry of Materials, the 2011 Hillebrand Prize of the Chemical Society of Washington, the 2012 Charles N. Reilley Award of the Society for Electroanalytical Chemistry, and the 2014 Award in Electrochemistry from the ACS Division of Analytical Chemistry. Her editorial advisory board service includes *Analytical Chemistry, Langmuir, Journal of Electroanalytical Chemistry, Advanced Energy Materials, Nano Letters*, the *Encyclopedia of Nanoscience and Nanotechnology*, and *Annual Review in Analytical Chemistry*. When not otherwise bringing the importance of nothing and disorder to materials chemistry, Rolison writes and lectures widely on issues affecting women (and men!) in science, including proposing Title IX assessments of science and engineering departments. She is the author of over 200 articles and holds 26 patents.

Chris Enke is currently Professor Emeritus of Chemistry at Michigan State University and The University of New Mexico and Adjunct Professor at Indiana University. He received the BA degree from Principia College in 1955 and the Ph.D. from the University of Illinois in 1959. His thesis, with Herbert Laitinen, concerned the formation of surface oxide films on platinum



electrodes. While at Illinois. He also worked with Howard Malmstadt to introduce a graduate lab/lecture course in the electronics of laboratory instrumentation. Prior to his move to The University of New Mexico in 1994, he was Instructor and Assistant Professor at Princeton University and then Associate Professor, Professor, and Professor Emeritus at Michigan State University. Howard Malmstadt and Chris wrote the pioneering work, "Electronics for Scientists." Malmstadt. Stan Crouch and Chris went on to write several more texts and lab books (13 in all) in the electronics of laboratory instrumentation. This same team developed and presented the hands-on ACS short course, "Electronics for Laboratory Instrumentation" scores of times beginning in 1979. He also wrote an introductory analytical chemistry text called, "The Art and Science of Chemical Analysis" that was published by Wiley in December, 2000. Throughout his career, Chris has remained active in both fundamental research and the development of new teaching materials and methods. His research interests

have included electroanalytical chemistry (high-speed charge transfer kinetic studies, introduction of operational amplifiers and computer control in electrochemical instrumentation), electrolytic conductance (invention of the bipolar pulse conductance method now universally employed), computer-based instrumentation (including distributed microprocessor control systems), array detector spectroscopy (one of the first vidicon applications), and mass spectrometry (discovery of low-energy ion fragmentation and co-invention of the triple quadrupole mass spectrometer, interpretation of MS/MS spectra, and the equilibrium partition theory of electrospray ionization).

Chris has served as Chair of the Analytical Division of the American Chemical Society, President of the American Society for Mass Spectrometry and Chair of the Computers in Chemistry Division of ACS. He has served on many professional society and journal advisory boards. Chris received the ACS awards for Scientific Instrumentation (1974), Computers in Chemistry (1989), and Analytical Chemistry (2011), the ASMS award for Distinguished Contribution to Mass Spectrometry (1993) and the J. Calvin Giddings Award for Excellence in Education given by the Analytical Chemistry Division of the American Chemical Society (2003). He is a Fellow of ACS and AAAS.

While Program Chair, Chair, and Past Chair of the Division (2004-2008), he and Al Ribes spearheaded the strategic planning session held by the Analytical Division. A major goal arising from this session was to provide better contact with and service to our members. He brought the Analytical Sciences Digital Library under the wing of the Division, enhancing our previous website. He enthusiastically supported Laurie Locascio's initiative to program at Pittcon. He designed the new Division Logo and worked on creating a working partnership with the journal Analytical Chemistry, alerting Division members to journal content.

Sixty-nine students received their Ph.D.'s under his direction. Alone and with them, he has published over 140 papers, 18 book chapters, and obtained 13 patents, these works now cited over 3000 times. His most recent accomplishments have been the invention of distance-of-flight mass spectrometry and the discovery that the distribution of component concentrations in complex mixtures is very likely lognormal. He is currently immersed in the study of epistemology, trying to sort out the facts that scientists know and use from the explanations we make up to explain them.

Benjamin A. Garcia obtained his PhD in 2005 at the University of Virginia under Prof. Donald Hunt and then was an NIH NRSA Postdoctoral Fellow at the University of Illinois under Prof.



Neil Kelleher from 2005-2008. From there Ben was appointed as an Assistant Professor in the Molecular Biology Department at Princeton University from 2008-2012, until his recruitment as the Presidential Associate Professor of Biochemistry and Biophysics at the University of Pennsylvania Perelman School of Medicine in 2012. The Garcia lab has been developing and applying novel proteomic approaches and bioinformatics for interrogating protein modifications, especially those involved in epigenetic mechanisms. Dr. Garcia is on the editorial boards for the BMC Genomics and Molecular and Cellular Proteomics journals, and serves on the Board of Directors for the U.S. Human Proteome Organization. He has also been recognized with many honors and awards for his mass spectrometry research

including the American Society for Mass Spectrometry Research Award, a National Science Foundation early faculty CAREER award, an NIH Director's New Innovator Award, the Presidential Early Career Award for Scientists and Engineers (PECASE), an Alfred P. Sloan Fellowship, an AB Sciex Young Investigator award, a Biomed Central Research award in Molecular and Cellular Science, and the PITTCON Achievement Award.

## Schedule of ANYL – sponsored sessions

All sessions sponsored by the Division will be held in the Moscone Center North Building. Further details can be found on the website for the meeting:

http://abstracts.acs.org/chem/248nm/meetingview.php?page=division

Day/Time	Session	Location
Sun AM	Innovations in Microscale and Nanoscale Analytical Chemistry	125
	Advances in Separation Science	124
	Innovations in Analytical Spectroscopy	111
Sun PM	Advances in Separation Science	124
	Innovations in Analytical Spectroscopy	130
	Bioanalytical Microfluidics: Applications To Quantitative Biology	130
	Ion Funnel: Key Enabling Technology for Mass-Spectrometric Analyses	125

Mon AM	ACS Award for Chromatography: Symposium in Honor of Professor Susan V. Olesik	124
	Pro-Fluorogenic Probe-Based Methods for Disease Detection	130
	Advances in Ionization Techniques and Mechanisms	125
	Therapeutic Monoclonal Antibodies	111
Mon PM	Advances in Ionization Techniques and Mechanisms	125
	Therapeutic Monoclonal Antibodies	124
	ACS Division of Analytical Chemistry Awards	130
	Innovations in Analytical Chemistry Education	111
Mon E	Sci-Mix (Analytical 105-125)	Hall D
Tues AM	Frontiers in Metabolomics	125
	Innovations in Bioanalysis	111
	Coherent Multidimensional Spectroscopy for Materials Science	130
	Separation Science and Technology as a Convergence Platform for SusChEM	124
Tues PM	Coherent Multidimensional Spectroscopy for Materials Science	130
	Separation Science and Technology as a Convergence Platform for SusChEM	124
	ACS Award for Analytical Chemistry: Symposium in Honor of Professor Jonathan V. Sweedler	132
	Analytical Challenges of Poorly Soluble Drug Formulations	111
	Coupling Sequence To Omics: The Joint EMSL-JGI User Program	125
Tues E	General Posters (Analytical 185-283)	Hall D
Wed AM	Innovations in Mass Spectrometry	125
	Portable XRF Spectroscopy	111
	Separation Science and Technology as a Convergence Platform for SusChEM	124
Wed PM	Innovations in Mass Spectrometry	125
	Novel Separations for Critical Environmental Analyses	124
	Super-Resolution Chemical Imaging	130
	Innovations in Bioanalysis	111
Thurs AM	Innovations in Mass Spectrometry	125
	Super-Resolution Chemical Imaging	130
	Advances in Electrochemistry	124

Thurs PM	Advances in Bioelectrochemistry	124
	Analytical Chemistry and Global Sustainability	125
	Cheaper, Better, Faster: Incorporating New Technologies in the Analytical Chemistry Curriculum	130
	General Innovations in Analytical Chemistry	111

# Co-sponsored Symposia:

Sun AM	Novel Approaches for Food Verification(AGFD)	Moscone South, Esplanade Ballroom 307
Sun PM	Authentication and Adulteration of Food(AGFD)	Moscone South, Esplanade Ballroom 307
Mon AM	Authentication and Adulteration of Food(AGFD)	Moscone South, Esplanade Ballroom 305
	Redefining the Mole and Kilogram: Impact on Chemistry(NTS)	Moscone South, Esplanade Ballroom 305
	Advances in Food Allergen Research: Identification, Detection, Characterization and Mitigation(AGFD)	Moscone South, Esplanade Ballroom 307
	IUPAC: Agricultural Biotechnology(AGRO)	Oral Session (San Francisco Marriott Marquis (SFMM) Yerba Buena 1/2
	IUPAC: Environmental Fate and Metabolism(AGRO)	Oral Session SFMM Nob Hill C/D Poster Session: 62-128 Yerba Buena 7/8
	IUPAC: Residues in Food and Feed(AGRO)	Oral Session SFMM Yerba Buena 10/11
Mon PM	Authentication and Adulteration of Food(AGFD)	Moscone South, Esplanade Ballroom 305
	IUPAC: Agricultural Biotechnology(AGRO)	Oral Session SFMM Yerba Buena 1/2
	IUPAC: Environmental Fate and Metabolism(AGRO)	Poster Discussion: SFMM Pacific A Oral Session SFMM Nob Hill C/D Poster Session: 206-225 Yerba Buena 7/8
	IUPAC: Residues in Food and Feed(AGRO)	Oral Session SFMM Yerba Buena 10/11 Poster Session 242-276 Yerba Buena 7/8
Mon PM	Undergraduate Research Posters(CHED)	Moscone Center North, Hall D Analytical posters 197-209
	Advances in Food Allergen Research: Identification, Detection, Characterization and Mitigation(AGFD)	Moscone South, Esplanade Ballroom 307

Tues AM	IUPAC: Agricultural Biotechnology(AGRO)	Oral Session: Yerba Buena 1/2 Poster Session (297-309), Yerba Buena 7/8
	IUPAC: Environmental Fate and Metabolism(AGRO)	Oral Session SFMM Nob Hill C/D Poster Session 374-383, 473-510, Yerba Buena 7/8
	IUPAC: Residues in Food and Feed(AGRO)	Oral Session SFMM Yerba Buena 10/11 Poster Session 400-405 Yerba Buena 7/8
	IUPAC: Formulation and Application(AGRO)	Oral Session Yerba Buena 5/6
	International Collaborations with International Impact: Chemistry for Global Change(CHED)	Moscone South Esplanade Ballroom 305
	ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences: Symposium in Honor of Rigoberto Hernandez(CMA)	Hilton San Francisco Union Square Union Square 15/16
Tues PM	IUPAC: Agricultural Biotechnology(AGRO)	Oral Session Yerba Buena 1/2
	IUPAC: Environmental Fate and Metabolism(AGRO)	Oral Session Nob Hill C/D
	IUPAC: Residues in Food and Feed(AGRO)	Oral Session SFMM Yerba Buena 10/11 Poster Session 562-578 SFMM Yerba Buena 7/8
	IUPAC: Formulation and Application(AGRO)	Oral Session Yerba Buena 5/6 Poster Session 516-536 SFMM Yerba Buena 7/8
	International Collaborations with International Impact: Chemistry for Global Change(CHED)	Moscone South Esplanade Ballroom 305
	ACS Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences: Symposium in Honor of Roberto Hernandez (CMA)	Hilton San Francisco Union Square Union Square 15/16
Wed AM	IUPAC: Agricultural Biotechnology(AGRO)	Oral Session SFMM YB 1/2
	IUPAC: Environmental Fate and Metabolism(AGRO)	Oral Session Nob Hill B Posters 636-664 Yerba Buena 7/8
	IUPAC: Residues in Food and Feed(AGRO)	Oral Session SFMM Yerba Buena 10/11
	IUPAC: Formulation and Application(AGRO)	Oral Session Yerba Buena 12/13 Poster Session 805-825 SFMM Yerba Buena 7/8
Wed PM	IUPAC: Agricultural Biotechnology(AGRO)	Oral Session SFMM YB 1/2
	IUPAC: Environmental Fate and Metabolism(AGRO)	Oral Session (Regulatory - Chirality) SFMM Nob Hill B Oral Session (Realistic Exposure Assessment + Nanopesticides) SFMM Nob Hill A

Wed PM	IUPAC: Environmental Fate and Metabolism(AGRO)	Oral Session (Regulatory - Chirality) SFMM Nob Hill B Oral Session (Realistic Exposure Assessment + Nanopesticides) SFMM Nob Hill A
	IUPAC: Residues in Food and Feed(AGRO)	Oral Session SFMM Yerba Buena 10/11
	IUPAC: Formulation and Application(AGRO)	Oral Session Yerba Buena 7/8
Thurs AM	IUPAC: Agricultural Biotechnology(AGRO)	Oral Session SFMM Yerba Buena 13
	IUPAC: Environmental Fate and Metabolism(AGRO)	Oral Session SFMM Nob Hill H Poster session 894-904 Yerba Buena 7/8
	IUPAC: Residues in Food and Feed(AGRO)	Oral Session SFMM Yerba Buena 10 Poster Session 916-929 Yerba Buena 7/8
Thurs PM	IUPAC: Agricultural Biotechnology(AGRO)	Oral Session SFMM Yerba Buena 13
	IUPAC: Environmental Fate and Metabolism(AGRO)	Oral Session SFMM Nob Hill A
	IUPAC: Residues in Food and Feed(AGRO)	Oral Session SFMM Yerba Buena 10

Still need more information?? Details on programming and events can be found on the ACS meeting website at <a href="http://www.acs.org/content/acs/en/meetings/fall-2014.html">http://www.acs.org/content/acs/en/meetings/fall-2014.html</a>

# SCIX, RENO – TAHOE, SEPT. 28 - OCT. 3, 2014

## **Advance Registration Deadline: September 5**

In addition to a full slate of other sessions that exemplify the incredible breadth of analytical chemistry, SciX will feature a number of awards symposia, plus numerous student and FACSS-sponsored poster awards.

David Koppenaal, Pacific Northwest National Laboratory will again be recognized as the recipient of the ACS Analytical Chemistry Division Award for Analytical Instrumentation.

Richard P. Van Duyne, of Northwestern University, will receive the Charles Mann Award for Applied Raman Spectroscopy. The Charles Mann Award is presented annually at SciX to an individual who has demonstrated advancement(s) at FACSS in the field of applied Raman Spectroscopy.

The 2014 AES Mid-Career Award will be presented to Kevin Dorfman, University of Minnesota. This award is given for exceptional contributions to the field of electrophoresis, microfluidics, and related areas by an individual who is currently in the middle of their career.

The Applied Spectroscopy William F. Meggers Award is given to the author(s) of the outstanding paper appearing in Applied Spectroscopy. The 2014 recipient is Rohit Bhargava, University of Illinois.

Lester W. W. Strock Award will be presented to Steven Ray, Indiana University. The Lester W. Strock Award is given by the New England Section of the Society of Applied Spectroscopy in recognition of a selected publication of substantive research in/or application of analytical atomic spectrochemistry in the fields of earth science, life sciences, or stellar and cosmic sciences.

The 2014 ANACHEM Award recipient will be David E. Clemmer, Indiana University. The ANACHEM Award is presented annually by ANACHEM to an outstanding analytical chemist based on activities in teaching, research, administration or other activity which has advanced the art and science of the field.

Lynne S. Taylor, Purdue University, is the 2014 Coblentz Society Craver Awardee. The award was created by the Coblentz Society, and it is presented annually to an outstanding young molecular spectroscopist whose efforts are in the area of applied analytical vibrational spectroscopy.

The FACSS Innovation Award will be determined during SciX in a special Thursday afternoon session during which presentations are made by Finalists for the award.

# Breathe New Life Into Analytical Data



From structure characterization, to mixture analysis, and more – the new MS Workbooks from ACD/Labs make analysis and interpretation a breeze.

- Import data from most major instrument vendors
- Create knowledge faster with advanced interpretation algorithms
- Store and search "live" data and results in a unified environment
- Share and re-use knowledge in future projects



Meet us at the National ACS Fall Meeting San Francisco, August 10-14 2014 Booth 1110

A part of ACD/Spectrus Integrated Knowledge Management

