



ACS - DAC DIVISION NEWSLETTER September 2014

LETTER FROM THE CHAIRMAN

My tenure as chairman for the Division ends this month, and I am very pleased to welcome Dr. Susan Olesik as my successor. Susan will begin her duties in October, and has just completed a very successful year as Program Chair. One of the hallmarks of her leadership is her ability to welcome and engage the members of our division in the various activities that come to a focus on the executive committee. I know that she will be undertaking an active effort to expand your participation and input into the division and it should be a very exciting year for all of us!

I'd like to thank Faye Rubinson who has been doing an excellent job of keeping our members informed and engaged by writing our newsletter. She is now moving on to new ventures and I wish her well. At the same time, we welcome new communications committee members Sayo Fakayode of North Carolina A&T State University as the new newsletter editor and Stuart Chalk of the University of North Florida.

I am happy to report to you that a long trend in declining numbers of members for the Division has been reversed this year. This is thanks primarily I believe to the efforts of Mishelle Bushey, who instituted a membership drive by sending reminders to people to renew their division membership at the same time as they renew their ACS membership, and to claim a small reward for doing so.

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I am also pleased to report that the Executive Committee has agreed, as part of our strategic plan for 2015, to establish a permanent endowment fund to help stabilize the Division's financial position and ability to bring benefits to the division members. Initially in 2015 proceeds from the endowment will be utilized to fund a membership contest in which universities and corporations can compete for a prize based on the number of division memberships and renewals they generate. Awards will be given to help fund travel expenses to ACS meetings. Stay tuned!

It has been my pleasure to serve as chairman of the division. I thank the membership for putting their trust in me and I look forward to Susan's leadership in 2015, and I welcome all of the incoming officers for the new year!

2014 ACS ANALYTICAL DIVISION ELECTION

The results are in!! The Division's new officers for 2014-2015 are:

Chair-Elect: Dr. Joel Harris, University of Utah
Treasurer: Dr. Adam Woolley, Brigham Young University
Councilor: Dr. Donna Nelson, University of Oklahoma
Alternate Councilor: Dr. Michelle Buchanan, Oak Ridge National Laboratory
Dr. Al Ribes, The Dow Chemical Company

Thank you to the other candidates. Your willingness to take part in the Division activities is crucial to its success. Thank you, also, to all of those who voted in the election – participation was up significantly from last year.

ACS NATIONAL MEETING, SAN FRANCISCO

National Awards

Susan Olesik - ACS Award for Chromatography AND Helen M. Free Award for Public Outreach

The Division's 2014-2015 Chair, Professor **Susan Olesik** picked up not one, but TWO awards at the recent National meeting.



Presentation of Helen Free Award. (L to R) xxx, Helen Free, Susan, and Tom Barton



ACS Award in Chromatography. (L to R) Lisa Holland, West Virginia University, Frantisek Svek, Lawrence Berkeley National Laboratory, Susan, Luis Colon, University at Buffalo, and Apryll Stalcup, Dublin City University

During a symposium in her honor on Monday morning, Susan was awarded the ACS Award in Chromatography. The Award is sponsored by Sigma-Aldrich. 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.

Dr. Olesik also was awarded the 2014 Helen M. Free Award for Public Outreach. Over the last fifteen years, Dr. Olesik has been actively involved in public outreach by enhancing the

understanding and appreciation for science and chemistry. Dr. Olesik has worked on several levels to expand opportunities for young people, such as addressing such problems as distance for rural high school students by connecting them through use of video conferences. Her audience has not been confined to high school students, however, as she also has worked with other scientists, teachers and school aged children.

ACS Award in Analytical Chemistry



Pictured above (L to R): Richard Zare, Jonathan Sweedler, Mark Wightman, Michael Heien, Amanda Hummon and Evan Williams.

On Tuesday afternoon **Jonathon Sweedler** was awarded the 2014 ACS National Award in Analytical Chemistry, sponsored by Battelle Memorial Institute. Professor Sweedler was recognized for his research in analytical neurochemistry. He has developed small-volume methods to probe individual neurons, and uses these techniques to discover novel neurochemical pathways. Professor Sweedler has been a member of the faculty at University of Illinois since 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 since 2001, and was named a fellow of ACS in 2011. Professor Sweedler is Editor of the ACS journal *Analytical Chemistry*.

DAC Awards

The 2014 Division Awards were presented in a special session on Monday afternoon organized by Division Chair Thom Rossi. The awardees and their award address titles were:

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

Stan Crouch, a longtime colleague and collaborator of Chris Enke, presented Chris’s address and accepted the Distinguished Service Award on his behalf. Feature stories appeared in the July issue of the Newsletter, at http://www.analyticalsciences.org/ANYL_Newsletter_July_2014.pdf.



Pictured above (L to R): Thom Rossi, Division Chair, David Koppenaar, Ben Garcia, Debra Rolison, Joe Giardello, and Tim Harris. Not pictured: Chris Enke.

Analytical Reception



The Analytical Division Reception on Tuesday evening sparked its usual lively discussions, and provided an opportunity to take a break and catch up with colleagues

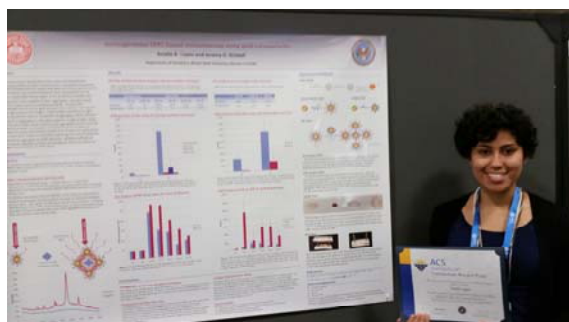
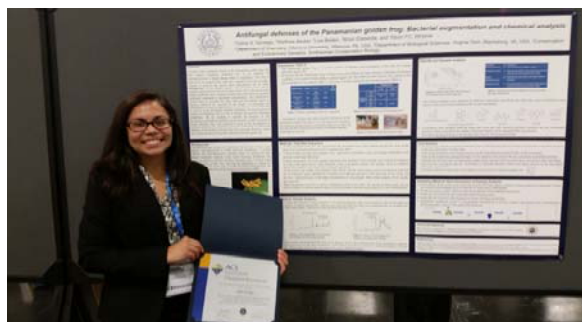
Shown at right, Thom Rossi took advantage of the occasion to congratulate Susan Olesik, the incoming chair for 2014-2015 on her work this year as Chair-Elect. As Chair-Elect Susan has been responsible for programming at the last two national meetings as well as at Pittcon.

Thank you, Susan!!!



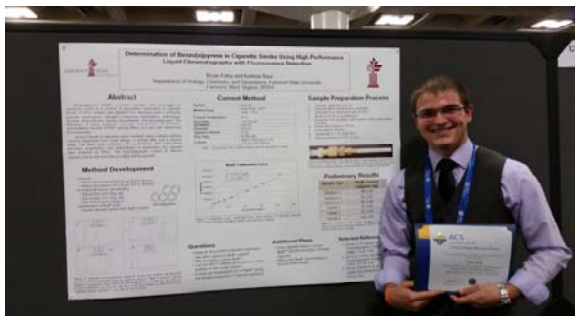
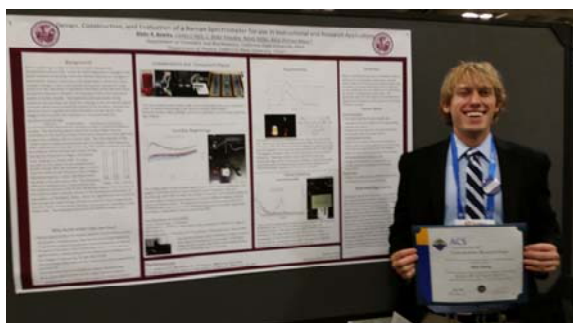
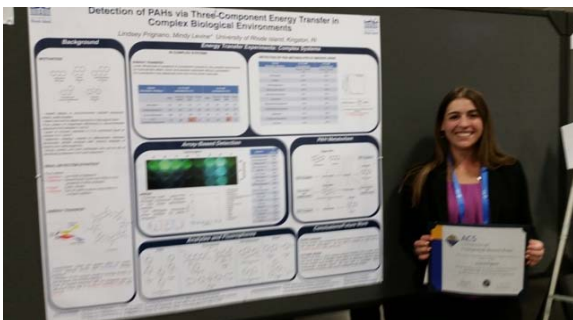
Student Poster Session

Here's to the next generation of Analytical Chemists! Students taking part in the Analytical Division part of the CHED Undergraduate Poster session are pictured below and at the top of the next page. This page: **Celina Santiago** - Villanova University, Villanova, PA. and **Arielle Lopez** - Illinois State University, Normal, IL.



Top of next page : Upper row : **Lindsey Prignano** - University of Rhode Island, Kingston, RI, and **Blake Bewley** - California State University, Chico, CA. Bottom row: **Bryan Foley** - Fairmont State University, Fairmont, WV, and a group of students from Huntingdon College, Montgomery,

Alabama, which included (from left to right) **Brandon Veach**, **Storm Mcwhorter**, **Peyton Nelson**, and **Mitchell Luckie**.



ACS FELLOWS (FELLOW ANALYTICAL CHEMISTS) RECOGNIZED

Several members of the Division were recognized at the Fall meeting as ACS Fellows. The ACS fellows program began in 2009 as a way to recognize and honor ACS members for outstanding achievements in and contributions to science, the profession and ACS. The selection of Fellows is highly prestigious with only one to two percent of the ACS membership selected. It reflects not only scientific excellence, but also the diverse contributions made by ACS members. In 2014, 99 ACS members were selected as fellows. Of these, eight are Analytical Division members.

Donivan Porterfield, Pacific Northwest National Laboratory, is a radiochemist engaged in research and development and analytical services supporting stockpile stewardship and nuclear forensics and nonproliferation. As part of his work, he is also involved in plutonium heat source fabrication for deep space exploration and national security applications, nuclear material safeguards, radiobioassay, environmental monitoring and more. He contributes significantly to the Laboratory's nuclear forensics mission, where his work involves development and



qualification of radioanalytical methods for plutonium and other actinides. Porterfield has also assisted in developing numerous American Society of Testing and Materials (ASTM) standards related to the nuclear fuel cycle and to water quality standards. He received the Max Hecht Award, the Harlan J. Anderson Award and the Standards Development award, which are three major ASTM awards, and was made a fellow of the ASTM for his service. Porterfield credits his colleagues for contributing to his success - "While such recognition focuses on the individual, such is only possible in an environment of cooperation and collaboration that the Laboratory and organizations such as the American Chemical Society

both encourage and nurture; a little bit of hard work doesn't hurt either. Porterfield said. In addition to his technical skills, Porterfield has held numerous positions within the ACS, including serving as chair of the Central New Mexico Local Section and as a member of the ACS Leadership Advisory Board. His commitment to chemistry is reflected in his work with chemistry education and outreach.

Dr. Arlene Garrison holds the position of Vice President, University Partnerships at Oak Ridge Associated Universities (ORAU).. Dr. Garrison received her doctorate in analytical chemistry in 1981 and much of her research has emphasized process analysis and control. She is Alternate Councilor for the East Tennessee Section of the American Chemical Society (ACS), a member of the ACS Budget and Finance Committee, and the Board of Trustees for ACS insurance plans. Garrison also currently serves on the National Academy of Inventors Board, the Board of the Southern Appalachian Science and Engineering Fair, the Anderson County Chamber Board, and the National Science Foundation Advisory Committee for the Small Business Innovation Research program. In recognition of her volunteer work in science outreach to pre-college students, Garrison was one of the 10,000 Olympic Torch Bearers as the torch moved to the 1996 Olympic Games in Atlanta.



Gary Christian, Professor Emeritus at University of Washington has been recongized for his research in electroanalytical chemistry, atomic spectroscopy, and flow analysis. He is the author of the influential textbook *Analytical Chemistry* and has served as Editor-in Chief of *Talanta* since 1989. He has served the Division as Chair of the Division of Analytical Chemistry and also on the local level as a Councilor of the Kentucky and Puget Sound Local Sections and as a member and Chair of numerous ACS award committees. Professor Christian's research interests include electroanalytical chemistry, atomic spectroscopy, process analysis, flow injection analysis, and electroinjection analysis. He is the author of over 300 papers and has authored books on: Atomic Absorption Spectroscopy; Trace Analysis; Analytical Chemistry (7 editions); Instrumental Analysis (2 editions); Problem Solving in Analytical Chemistry; and Quantitative Calculations in Pharmaceutical Practice and Research, as well as an American Chemical Society short-course on atomic absorption spectroscopy. He has received numerous awards over the years both here and abroad for both his scholarship and his service to both Analytical Chemistry and to the field of Chemistry as a whole.



Dr. Robert McGorin is Department Head and Jacobs-Root Professor of Food Science & Technology at Oregon State University. He earned a B.A. in Chemistry from Northwestern University and completed M.S. and Ph.D. degrees in Organic/Medicinal Chemistry from the University of Illinois at Urbana-Champaign. Dr. McGorin is an elected Fellow of the Institute of Food Technologists and the American Chemical Society, and past-Chair and recipient of the Distinguished Service Award from the ACS Agricultural & Food Chemistry Division. His research focuses on the analytical chemistry of foods, including development and application of advanced analytical techniques to isolate, separate and identify trace odor and flavor compounds,

and relating specific flavor components to sensory characteristics. He is Section Editor, Food Analysis for the *Encyclopedia of Analytical Chemistry: Instrumentation and Applications*, and has published four ACS Symposium Series books on the chemistry of thermally-generated flavors and aromas, interactions between flavor chemicals and food components, and dairy flavors. Prior to his academic career, he led positions in Strategic Innovative Research, Chromatography and Flavor Analysis at Kraft Foods R&D to support the development of flavor systems for novel food products.



Carolyn Ribes is currently the Business Analytical Leader at The Dow Chemical Company, and is responsible for all manufacturing analytical and quality control measurements made for several global businesses. Over Dr. Ribes' years at Dow, she has made major contributions to industrial on-line process control, manufacturing quality, and productivity through development and implementation of reliable analytical measurements on a global basis. She is the co-inventor on two US patents and has over 96 peer-reviewed internal publications. She has also been a leader in the ACS Community as treasurer of the Division of Analytical chemistry; a leader of the Younger Chemists Committee, Women

Chemists Committee, Joint Subcommittee on Diversity; and vice-chair of the Council Policy Committee. She is a past chair of US National Committee of IUPAC and is the Secretary of the IUPAC Committee on Chemistry and industry and is a recognized champion for diversity and inclusion

Richard C. Willson is Huffington-Woestemeyer Distinguished Professor of Chemical & Biomolecular Engineering, Biochemistry and Biomedical Engineering at the University of Houston, a Senior Affiliate of the Houston Methodist Research Institute, and a member of the SCBMB program, the highest-rated doctoral program at Baylor College of Medicine. He serves as Diagnostics Theme Lead for the NIH Western Regional Center of Excellence. He holds B.S. (honors) and M.S. degrees in Chemical Engineering from Caltech, and completed his Ph.D. in Biochemical Engineering (C.L. Cooney, R.C. Reid) and postdoctoral studies in Biochemistry (J. King) at MIT. Dr. Willson is the recipient of the Presidential Young Investigator Award under the first Bush administration, an elected Fellow of the American Institute of Medical and Biological Engineering, the American Association for the Advancement of Science, and (now) the American Chemical Society, an elected member of Phi Kappa Phi and Sigma Xi, former President of the International Society for Molecular Recognition, and recipient of the ACS Division of Biochemical Technology Van Lanen award. He has published over 100 refereed papers and roughly 60 patents, and was a founder of Combicat, Stematix, and VisiGen.



Other 2014 Fellows who are affiliated with the division are **Natalie Foster** and **Judith Ann Summers-Gates**.

SCIX, SEPTEMBER 28 – OCTOBER 3, 2014

It is almost time to head to Reno for this years SciX. A complete list of session on topics covering the entire scope of analytical chemistry can be found on the meeting website at

<http://www.scixconference.org>. In addition to the scientific sessions, SciX is also the occasion for a number of awards. The award sessions planned for the meeting are listed below and are followed by brief profiles of the award recipients.

Award	Awardee(s)	Award symposium scheduled
FACSS Student Award and Tomas A. Hirschfeld Award	James R Hands Andrew J. Schwartz Mengliang Zhang	--
FACSS Distinguished Service Award	Ron Williams Ed Havlena	Thursday morning, October 2
Charles Mann Award for Applied Raman Spectroscopy	Richard van Duyne	Tuesday, September 30
2014 ANACHEM Award	David E. Clemmer	Thursday morning, October 2
Lester W. Strock Award -	Steven Ray	Wednesday, October 1
Coblentz Society Craver Award	Lynne S. Taylor	Thursday, October 2
AES Mid-Career Award	Kevin Dorfman	Wednesday, October 1.
William Meggers Award	Rohit Bhargava	Wednesday, October 1
ACS Division of Analytical Chemistry Award in Chemical Instrumentation	David Koppenaar	Tuesday, September 30



FACSS Student Awardee **James R. Hands** graduated from the University of Central Lancashire, UK, in July 2012 with a 1st class BSc. (Hons) in Forensic Science. During his time as an undergraduate student, James was a junior research associate in the Bioanalytical Sciences Research Group laboratory headed by Dr Matthew J. Baker. Presently, James is an Analytical Chemistry Ph.D candidate at the University of Central Lancashire in the Bioanalytical Sciences Research group where he is developing rapid spectroscopic methodologies for brain cancer diagnosis in collaboration with clinical partners at Royal Preston NHS Foundation Trust and The Walton Centre NHS Foundation Trust supported by Brain

Tumour North West and the Sydney Driscoll Neuroscience Foundation. His research interests focus on spectroscopic diagnostics with real world applications. His research work has established a robust and highly reproducible diagnostic method for the diagnosis of brain cancer with high sensitivities and specificities using patient sera and ATR-FTIR.

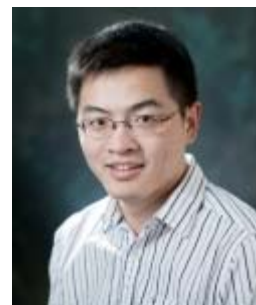
The Tomas Hirschfeld Awards recognize the most outstanding papers submitted to the conference by a graduate student. This years recipients are Andrew Schwartz and Mengliang Zhang.



Andrew (Andy) Schwartz is a Ph.D. Candidate in Professor Gary Hieftje's lab at Indiana University. His graduate research has focused on development, characterization, and application of a novel, low-power source for atomic emission spectrometry, the solution-cathode glow discharge. Since beginning his work in the Hieftje Lab, Andy has presented seven lectures/posters at various conferences and authored/coauthored five peer-reviewed publications. In recognition of his research accomplishments, he has been awarded the Robert and Marjorie Mann Chair Fellowship and Kraft Fellowship (both from Indiana University), as

well as a 2013 Barbara Stull Graduate Student Award from the Society for Applied Spectroscopy.

Mengliang Zhang started his Ph.D. in Analytical Chemistry from Ohio University in 2010. For his first two years Mengliang was working on method development for a project related to a local DOE site that was contaminated with polychlorinated biphenyls under the direction of Dr. Glen Jackson (West Virginia University). He developed a soil extraction method and was using a portable ion trap GC/MS for the analysis. After he joined Dr. Peter Harrington's group in 2012, his research focused on the development of high throughput methods for the determination of environmental pollutants [e.g., polychlorinated biphenyls, trichloroethylene (TCE)] with chemometrics. Recently he used multivariate calibration method to resolve overlapped ion packets of TCE and deuterated TCE and constructed calibration model to determine the ratio of TCE to deuterated TCE. This approach will be applicable to many problems that require the calibration of analytes measured by mass spectrometer using isotopically labeled standards. He is also interested in developing the automatic pipeline for the identification of active components in vegetables with LC/MS and chemometric methods. He has co-authored 15 peer reviewed papers since 2010.



The FACSS Governing Board will present a Distinguished Service Award to **Ron Williams** of Middle Georgia State College, Macon, Georgia at the at SciX 2014 meeting. Ron Williams is Dean of Arts & Sciences at Middle Georgia State College.. He came to Macon after serving as Dean of Science, Engineering and Technology at Saginaw Valley State University in Michigan and, before that, was head of Chemistry and Physics at Armstrong Atlantic State University in Savannah Georgia. He taught at Clemson University from 1988 through 1998. He started his teaching career at Ohio University in 1982 after spending a year as a Post Doctoral fellow in Dr. Gary Horlick's laboratory. He graduated with his PhD in

Analytical Chemistry from the University of Georgia in 1981 under the tutelage of the esteemed Dr. Geoffrey Coleman. His research interests have spanned chemometrics, spectroscopy and computer automation. He has served as Program Chair and Governing Board chair of the FACSS organization, as well as secretary and workshops chair.

The 2014 Charles Mann Award for Applied Raman Spectroscopy is presented each year to an individual who has demonstrated advancements at a conference presented by FACSS in the

field of applied Raman Spectroscopy and/or demonstrated dedication to the advancement of the Raman spectroscopy program at a conference presented by FACSS and/or the ASTM Raman subcommittee. The 2014 Awardee is **Richard P. Van Duyne**, Charles E. and Emma H. Morrison Professor of Chemistry, Professor of Biomedical Engineering, and Professor in the



Applied Physics program at Northwestern University. Professor Van Duyne discovered surface-enhanced Raman spectroscopy (SERS), invented nanosphere lithography (NSL), and developed ultrasensitive nanosensors based on localized surface plasmon resonance (LSPR) spectroscopy. His research interests include all forms of surface-enhanced spectroscopy, plasmonics, nanoscale biosensors, atomic layer deposition (ALD), atomic force microscopy (AFM), scanning tunneling microscopy (STM), ultra-high vacuum (UHV) STM, UHV-tip-enhanced Raman spectroscopy (UHV-TERS), and surface-enhanced femtosecond stimulated Raman spectroscopy (SE-FSRS). Professor van Duyne has been the recipient of a

number of awards and has been recognized by Thomson Reuters as one of the top 100 chemists over the period 2000-2010 based on the impact of his published research.

The ANACHEM Award was established in 1953 and is presented annually 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. This year's awardee is **David E. Clemmer**. Professor Clemmer has been a member of the

Chemistry faculty at Indiana University since 1995. From 2002 to 2006 he served as the chair of the Chemistry Department and he is currently the associate dean for the Natural and Mathematical Sciences. His research involves the development of analytical methods for studying the structures of complex low-symmetry systems. His group is especially interested in measurements that allow rapid characterization of complex mixtures of biological molecules. Some of the methods have been commercialized and now are being used to address a range of scientific problems, including: elucidation of fundamental issues associated with how proteins fold and aggregate; characterization of the human proteome; and, assessment of molecules that may be used as markers for following specific disease states.



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. More details on the award are available from the Society for Applied Spectroscopy. This year the award will be presented to **Steven Ray**. Dr. Ray is currently an Associate Scientist and member of the Graduate Faculty in the Department of Chemistry at Indiana University, where he works in the Laboratory for Spectrochemistry. Dr. Ray's research interests focus on novel aspects of analytical instrumentation, including atomic spectroscopy, plasma spectrochemistry, and mass spectrometry. In particular, Dr. Ray has been active in the development of new types of

mass spectrometry instrumentation, including the development of time-of-flight mass spectrometry for elemental analysis. Steven was part of the research group recognized with the 2011 R&D100 award for the development of a monolithic semiconductor ion detector for mass spectrometry. Dr. Ray and his collaborators also received the 2013 Ron Hites Award recognizing the best manuscript published in the *Journal of the American Society for Mass Spectrometry*. Most recently, Dr. Ray has been working on the development of Distance-of-

Flight Mass Spectrometry and has also been active in the development of novel ionization sources for mass spectrometry. Steven has been active within the SAS and FACSS, serving as SciX Program Chair and currently serves as the FACSS Governing Board Chair-Elect. Dr. Ray has published approximately 75 manuscripts and book chapters, and holds 8 patents. He currently serves on the editorial board of the *Journal of Analytical Atomic Spectrometry* and the editorial advisory boards of *Spectrochimica Acta, Part B* and *Analytical and Bioanalytical Chemistry*

The Craver Award is presented annually to an outstanding young molecular spectroscopist. **Lynne S. Taylor** is the 2014 recipient of the Coblenz Society Craver Award. She is a Professor of Industrial and Physical Pharmacy and of Chemical Engineering (by courtesy) at Purdue University. Research in Lynne's group is directed toward exploring the science underlying the preformulation, formulation and manufacturing of drugs and other bioactive substances. Vibrational spectroscopy plays a pivotal role in this research, providing insight into composition, intermolecular interactions and phase transformation kinetics. She has used *in situ* Raman spectroscopy extensively to investigate phase transformations in pharmaceutical materials including probing crystallization, polymorph conversion and anhydrate-to-hydrate transformation, in powders, solutions and suspensions as well as during processing operations. Her research with infrared spectroscopy has focussed on improving solubility enhancing formulations by understanding the role of drug-polymer intermolecular interactions in modifying the crystallization behaviour of amorphous solids. Her recent foray into nanoIR spectroscopy and imaging is providing new insights into microstructure in drug-polymer blends.



Kevin Dorfman is the 2014 recipient of the AES Mid-Career Award. Kevin is an Associate Professor of Chemical Engineering and Materials Science at the University of Minnesota, is the recipient of the 2014 AES Mid-Career Award. Kevin is internationally recognized as a leading figure in the area of electrophoretic techniques for DNA separations. He has over eighty publications, including a seminar article of great significance to the field in *Reviews of Modern Physics* entitled "DNA Electrophoresis in Micro-fabricated Devices." Since starting his faculty career in 2006, Kevin has earned several awards as a young investigator. In addition to recognition by the University of Minnesota itself, Kevin has also received the Allan P. Colburn Award of the AIChE, a Dreyfus Teacher-Scholar Award, DARPA

Young Faculty Award, Packard Fellowship, NSF CAREER Award, Dreyfus New Faculty Award, and HFSP Career Development Award.

The Applied Spectroscopy William Meggers Award will be presented to **Rohit Bhargava** of the University of Illinois. The Meggers Award is presented each year to recognize the author(s) of the outstanding paper appearing in *Applied Spectroscopy* during the previous year. Professor Bhargava's research interests have spanned the areas of Instrumentation development and analysis including the development of high definition and ultrasensitive IR imaging systems, and of time-resolved IR imaging. He has also made advancements in the design and fabrication of nanostructures for optical sensing, advancements in chemometrics, high-performance computing and visualization. His



work has spanned applications of spectroscopic imaging to solve various problems in composite polymers, cancer histopathology, forensics, molecular diffusion and seed grains. The article for which this award will be made appeared in the January issue of *Applied Spectroscopy*, entitled "High-Definition Spectro-scopic Imaging." Dr. Bhargava's co-authors on the article are Rohith K. Reddy, Michael J. Walsh, Matthew V. Schulmerich, and P. Scott Carney.

David Koppenaar is the 2014 recipient of the Division of Analytical Chemistry Award in Chemical Instrumentation. He 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. Koppenaar 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. Koppenaar, former chair of the Division of Analytical chemistry, received his Ph.D., in Analytical Chemistry from University of Missouri – Columbia. Dr. Koppenaar 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.



M. Bonner Denton, University of Arizona, will be awarded Honorary Membership in the Society for Applied Spectroscopy at the annual SAS Wine and Cheese Awards Reception on Tuesday, September 30th. Honorary members are those individuals who have made exceptional contributions to the art and science of spectroscopy in scientific or laboratory research development of new or innovative instrumentation or equipment, or development of adis, standards, etc., that help spectroscopists practice their craft in a more efficient and accurate manner. Porfessor Denton's research interests have included analytical spectroscopy, optical imaging instrumentation, laboratory automation, mass spectrometry and ion mobility spectrometry, as well as chemical forensics.

Last, but not least, FACSS also awards poster prizes to students during the SciX conference poster sessions Monday through Thursday.

SERMACS

SERMACS 2014 welcomes the ACS Analytical Division to *Tune in to Chemistry* in Nashville October 16-19. The meeting will be filled with great science – and some excellent entertainment.



SERMACS 2014
TUNE IN TO CHEMISTRY IN MUSIC CITY

You will be able to enjoy jazz pianist Anthony Belfiglio during our opening reception on Thursday, and the thrice Grammy-nominated *SteelDrivers* will be puttin' the *Hammer Down* during the Bluegrass and BBQ party Friday night. Visit the meeting website for further details and a sample music video.

In between jazz and bluegrass, on Friday morning you can listen to the sweet sounds of discovery as Sir Harry Kroto – 1996 Chemistry Nobel Laureate – gives a plenary lecture on the fascinating chemistry of Carbon in Nano and Outer Space. The steady buzz and hum of commerce in the chemical enterprise will be emanating from the grand Exposition beginning Thursday evening and lasting until Saturday afternoon. Several practical and timely workshops will also be available to meet many of your professional development needs, including the ACS Leadership Development workshop, Fostering Innovation, and Harry Elston's Chemical Hygiene Officer Workshop.

No matter where your own research or educational interests lie when you *Tune in to Chemistry*, we have exciting special symposia for you to enjoy. Among the symposia on the SERMACS 2014 schedule, those of special interest to the Analytical Division are:

Celebrating 30 Years of Electrochemistry (arranged by Maryanne Collinson, VCU) in honor of Ed B owden's 30th year at NCSU. (Ed is shown at left.) [Saturday, 10/18](#)

Forensic Science: from Teaching to Research (arranged by Robbie Montgomery, UT-Martin)) includes speakers from education, research, industry, and government/law enforcement. Fri PM to Sun AM

Mass Spectrometry and Its Biomedical Applications (arranged by Ronghu Wu, Ga Tech) Titles for this full-day symposium on Saturday, 10/18, reflect talks on quantitative proteomics, ultra high resolution MS, MALDESI, open port sampling for liquids in API, MS/MS for lipid isomer identification and quantitation, FTICR, and MS imaging..

Ultrasensitive Surface Measurements and Nanoscale Lithography (arranged by Jayne Garno, LSU) will be focused on AFM and related techniques Saturday, 10/18

Special room rates (\$139 single/double) are available at our meeting site, the Sheraton Music City Hotel, until September 24, and the meeting pre-registration deadline is September 25. For a virtual tour the sights and sounds of Nashville, go to www.visitmusiccity.com.

IT'S NOT TOO EARLY TO START PLANNING! ACS NATIONAL MEETING SPRING, 2015

The next ACS National Meeting will be in Denver, March 22-26, 2015. The meeting theme is "Chemistry of Natural Resources". You may [submit an abstract](#) for an oral or poster presentation at the meeting now. Note that the new Meeting Abstracts Programming System (MAPS) will be used starting with this meeting. [Douglas Duckworth](#) is the Program Chair for the Division for 2015. **The deadline for submission of abstracts for the Division is October 20, 2014.**

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Get unbiased evaluation of structures
with ACD/Labs software

Determine complex unknown structures with ACD/Structure Elucidator Suite

Identify known compounds through spectral database searches

Perform complete de novo structure elucidation for novel compounds

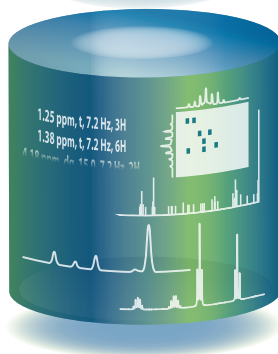
Verify structures through a variety of advanced algorithms

Gain confidence and save time with Automated Structure Verification

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