



ACS - DAC DIVISION NEWSLETTER

July 2015

LETTER FROM THE CHAIR

Dear Fellow Analytical Division Members,

I hope you are enjoying your summer! I would like to draw your attention to the upcoming fall ACS meeting in Boston August 16-20. Doug Duckworth, as program chair, has organized an exciting program with much breadth and depth including over 300 talks and posters. As examples, Open- Air Analytical Measurements for Forensics, Health and Homeland Security and Advances in Analytical Chemistry for Early Stage Cancer Screening will likely be of interest to many. For those of us in academia, a session on Reenvisioning the Foundational Course in Analytical Chemistry is also provided. Please go to this link to view the full programming: <http://www.acs.org/content/acs/en/meetings/fall-2015/program-overview.html>

Another highlight of the fall meeting is the presentation of the Analytical Division Annual Awards and talks by the award recipients. The awards session is Tuesday morning with the Division Banquet, Tuesday evening. Please strongly consider joining us for both events.

Purnendu (Sandy) K. Dasgupta, University Texas- Arlington, is the recipient of the 2015 J. Calvin Giddings Award for Excellence in Education. Sandy has launched a large cadre of analytical chemists into outstanding careers in industry and academia. He has published over 350 papers and over 20 patents. He develops methods for challenging real-world problems. His research interests are broad spanning contributions in ion chromatography, environmental science, toxicology and pharmacology with significant previous awards in all of these areas.

David Muddiman, North Carolina State University, is the recipient of the 2015 Award in Chemical Instrumentation. David's has published over 215 peer reviewed articles with innovation in instrument development that innovations in electrospray source design, electrospray emitter design, improvements in molecular imaging and improvements in infrared multiphoton ionization to allow FT-MS studies on a broad range of biologically important species.

George S. Wilson, University of Kansas, is the recipient of the 2105 Award in Electrochemistry. George was one of the first electrochemists to consider in-vivo electrochemistry. He has helped launched many of the careers of bioanalytical chemists in academia and industry. He is a true innovator and one of the fathers of bioelectrochemistry.

Frank Bright, SUNY-Buffalo, is the recipient of the 2015 Award in Spectroscopy. Frank has over 240 peer-reviewed publications and reviews. He is a leader in spectroscopy and sensor technology.

William (Bill) R. Heineman, University of Cincinnati, is the 2015 Recipient of the Distinguished Service Award. He has represented analytical chemists internationally and nationally in so many different forums. Furthermore, as an accomplished bioelectrochemist he has also published over 400 research papers and patents.

Scott T. Phillips, Pennsylvania State University, is the 2015 recipient of the Arthur F. Findeis Award for Achievements by a Young Analytical Scientist. Professor Phillip's research interests span analytical (Bottom-Up approaches to sensing); biological (bioorganic chemistry, bioinspired organic chemistry); environmental (applied organic chemistry), material and nanoscience (responsive materials); organic (design and synthesis of functional molecules) and biomedical study.

Please check the program for the forward looking talks that these leaders will provide. I think many would strongly enjoy these talks and also rubbing elbows with these individuals at the banquet.

I hope to see you in Boston!

Regards,



Chair ACS Analytical Division

OUR DIVISION OFFICERS

Susan Olesik (Chair)



Dr. Olesik is a Dow Professor and Chair of the Department of Chemistry and Biochemistry at Ohio State University. She is a recipient of several prestigious awards including the ACS 2014 Helen M. Free Award for Public Outreach, the 2014 ACS Award in Chromatography, the 2012 AAAS Fellow, the 2010 OSU Building Bridges Excellence Award, the 2009 ACS Fellow, the 2008 ACS National Award for Encouraging Disadvantaged Students into Careers in the Chemical Sciences; the 2008 Stanley C. Israel Regional Award for Advancing Diversity in the Chemical Sciences; the 2006 OSU Alumni Association Heinlen Award; the 2005 Columbus Technical Council (CTC) Technical Person of the Year; the 2004 ACS Columbus Section Award for Outstanding Achievement & Promotion of Chemical Sciences and the 2000 AWISCO Woman in Science Award. Dr. Olesik has also received a commendation from NASA for contributing a GC Column to Cassini-Huygen's probe.



Joel Harris (Chair-Elect) (Chair-Elect 2014-2015; Program Chair, 2015-2016; Chair, 2016-2017)

Dr. Harris, DAC Chair-Elect, is a Distinguished Professor of Chemistry at the University of Utah and Fellow of the American Association for the Advancement of Science and of the Society for Applied Spectroscopy. He is recipient of the ACS Division of Analytical Chemistry Award in Chemical Instrumentation, the Pittsburgh Analytical Chemistry Award, the Distinguished Teaching Award of the University of Utah, the Bomem-Michelson Award of the Coblenz Society, and the American Chemical Society Award in Analytical Chemistry.



Douglas C. Duckworth (Program Chair, 2014-2015; Chair, 2015-2016)

Dr. Duckworth is currently the Chief Scientist and Program Manager with the National Security Directorate at Pacific Northwest National Laboratory.



Anna G. Cavinato (Secretary)

Dr. Cavinato is a Professor of Chemistry at Eastern Oregon University in La Grande, OR. Her research interests are in the area of sensor development using DNA aptamers. She is also a member of the Analytical Sciences Digital Library and a contributor of active learning modules for class and lab activities. Dr. Cavinato is the mentor of the EOU Chemistry Club, chair of the Diversity Committee for the Richland Local Section and just recently was appointed as chair of the ACS Project SEED.

Adam Woolley (Treasurer)

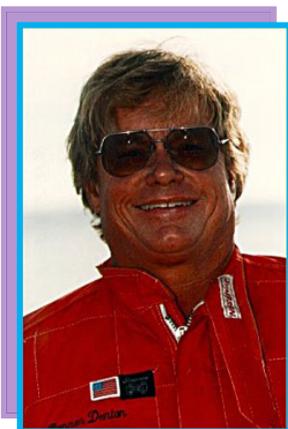


Dr. Woolley is Professor and Associate Chair in the Department of Chemistry and Biochemistry at Brigham Young University in Provo, Utah. He has received the ACS Division of Analytical Chemistry Award for Young Investigators in Separation Science, a Presidential Early Career Award for Scientists and Engineers (PECASE), and the Karl G. Maeser Research and Creative Arts Award from Brigham Young University. Dr. Woolley's research lies at the interface between chemistry, engineering and biology. A common theme is the interrelationship between biological molecules and miniaturization. We are utilizing miniaturization tools to detect and quantify clinically relevant biomolecules and we are also applying DNA in forming nanoscale electronic systems and materials. Dr. Woolley has served in several capacities in professional organizations including, Treasurer: Division of Analytical Chemistry, American Chemical Society (2015-present); member, Analytical and Bioanalytical Chemistry International Advisory Board (2014-present); member, Analytical Methods Advisory Board (2013-present); member: National Research Council, Research Associateship Program Panel

(March 2010-present; member: National Institutes of Health EBIT (formerly EBT) study section (July 2009-June 2013; Chair-Elect, Chair, and Past-Chair: Central Utah Section of the American Chemical Society: 2007-2009; and Program Co-Chair for the combined 2008 Rocky Mountain/Northwest Regional American Chemical Society Meeting held in Park City, UT (June 2008).

Michelle Buchanan (Councilor)

Dr. Buchanan is the Associate Laboratory Director for the Physical Sciences at Oak Ridge National Laboratory, overseeing research divisions covering chemistry, materials science, physics and nanoscience. She has over 150 scientific publications and technical reports and holds two patents. She has held numerous positions in the Analytical Chemistry Division of the ACS and is a Fellow of both the ACS and AAAS. She has also served the scientific community extensively with memberships on advisory boards of journals, universities, research centers, and national research organizations and funding agencies.



M. Bonner Denton (Councilor)

Dr. Denton is a Professor in the Department of Chemistry at the University of Arizona, Tucson, Arizona. Dr. Denton’s research interest includes Analytical Spectroscopy, Mass Spectrometry, and the development of analytical instrument for laboratory automation for real-world sample analysis and applications.

Roland F. Hirsch (Councilor)

Dr Hirsch is a program manager at the Office of Biological & Environmental Research in the Department of Energy’s Office of Science. He is involved in management of projects in analytical chemistry, structural molecular biology, microbiology and biogeochemistry. Prior to joining the Federal government, he was on the chemistry faculty of Seton Hall University.



Kimberly Agnew-Heard (Councilor)

Dr. Agnew-Heard is a senior scientific reviewer at the Center for Tobacco Products at the Food and Drug Administration. She served as ACS-Analytical Division councilor, Facebook page editor, and ACS Project SEED committee member present).

Susan Lunte (Alternate Councilor)

Dr. Lunte is the Ralph N. Adams Distinguished Professor of Chemistry and Pharmaceutical Chemistry and Director of the Adams Institute for Bioanalytical Chemistry, Department of Chemistry, at the University of Kansas.

Michael Early (Alternate Councilor)

Michael is Proteomics Marketing Manager in the Lab Separations Division for Bio-Rad Laboratories, Inc.

Frank A. Kero (Alternate Councilor)

Frank is an Analytical Applications Specialist for Sample Preparation Products at Biotage.

Al Ribes (Alternate Councilor)

Al works for The Dow Chemical Company in the Netherlands.

Newsletter Editor

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Report from the 249th American Chemical Society National Meeting & Exposition, Chemistry of Natural Resources, Denver CO

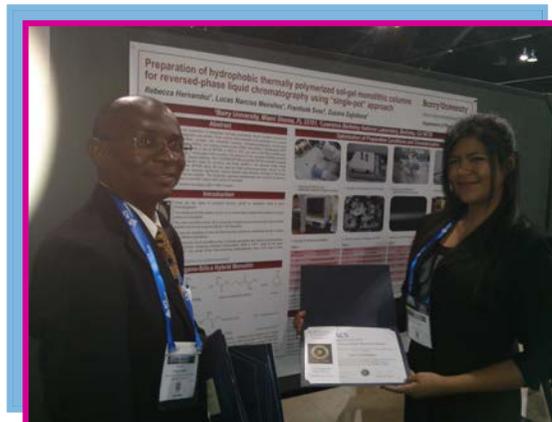


The 249th American Chemical Society National Meeting & Exposition occurred in Denver, CO in March 21-26, 2015. The meeting was well attended with thousands of student and scholar participants from all over the world. The meeting also featured thousands of poster and oral presentations on new scientific discoveries and innovations in food and nutrition, medicine, health, energy, the environment, and related fields where chemistry plays a central role. The meeting also served as an avenue for the students, faculty, chemists, engineers, and scholars from different institutions nationally and internationally to network and exchange ideas. A wide variety of technologies and analytical instrumentation were also exhibited at the meeting. Overall, the Denver meeting was well organized and a tremendous success!

The Division Student Poster Presentations and Certificate Awards in Denver:

The Division presented certificate awards to all undergraduate student poster presenters in Denver. The objective of the certificate award is to recognize the student's research efforts and to further motivate the students in future research. Several of the poster presentations at ACS-meetings in Denver are highlighted below.

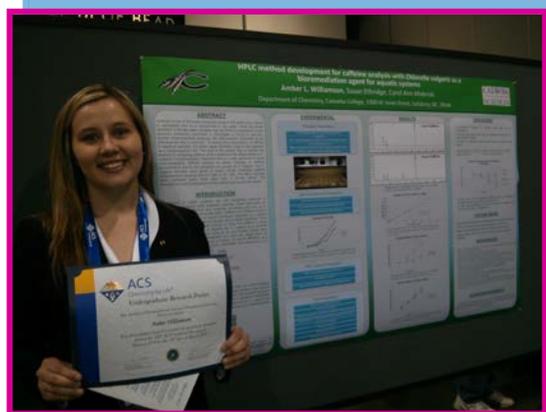
Dr. Sayo Fakayode presenting a poster presentation certificate award to **Rebecca Hernandez**. Rebecca is an undergraduate student in the Department of Chemistry, Barry University. Rebecca and her co-authors (Narciso Meirelles, Lucas; Svec, Frantisek; Zajickova, Zuzana) presented a poster titled "Preparation of hydrophobic thermally polymerized sol-gel monolithic columns for reversed-phase liquid chromatography using "single-pot" approach"



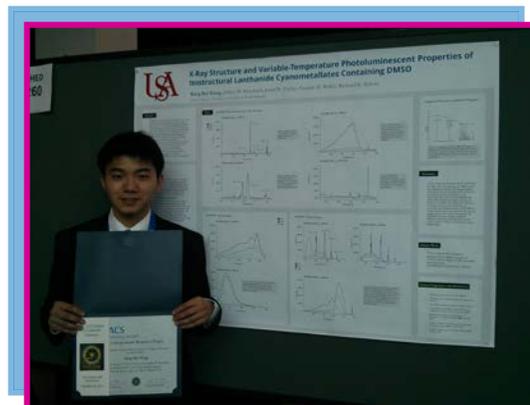
Rebecca Hernandez and her research mentor, Dr. Zuzana Zajickova



Williamson, Amber L., Ethridge, Susan M.; Miderski, Carol A. HPLC method development for caffeine analysis with *Chlorella vulgaris* as a bioremediation agent for aquatic systems, Department of Chemistry, Catawba College, NC



Xiang, Kang Rui; Hendrich, Jeff; White, Frankie D.; Taylor, Jared D.; Sykora, Richard, X-ray structure and variable-temperature photoluminescent properties of isostructural lanthanide cyanometallates containing DMSO, Department of Chemistry, University of South Alabama



Peak, Christopher; Guitierrez, Grecia; Thompson, Josiane; Nuckles, Kristi L.; Carr, Chelsea; Schreyer, Tj; Moore, Sarah; Butler, Nathan; Giddings, Luther D.; Alvarez, Mary; et al cation of pharmaceuticals in Utah's Jordan River, Salt Lake Community College, Utah



Henshaw Eme, N.; Fietkau, Ronald, Determination of fluoride levels in mouthwash and tap water samples, Department of Chemistry, Physics and Astronomy, Georgia College & State University, Milledgeville, GA



Telcy, Anne G.; Han, Sung Yub; Li, Xiao,
Optimization of silver shell and silica core
nanoparticles as SERS active substrate,
Department of Chemistry, University of
South Florida, Tampa



250th ACS Fall National Meeting and Exposition Boston, MA – August 16-20, 2015



Thousands of chemical professionals are expected to participate in the upcoming 250th ACS National Meeting & Exposition in Boston, MA August 16-20, 2015. The conference will be loaded with exciting programs and numerous venues for scientific learning, new innovations, and networking with national and international peers.

REGISTRATION AND ACCOMODATION NOW OPEN!

Registration and Accommodations for housing for the ACS 2015 Fall National Meeting in Boston is open. Additionally, the Technical Program is now available!

The Division's Boston program is on the web at:

<http://www.analyticalsciences.org/ANYL%20Program%20Boston%202015%20final.pdf>

Division events at the Boston ACS National Meeting:

Please join the Division of Analytical Chemistry for dinner on Tuesday, August 18 from 6 pm to 9 pm at Joe's American Bar and Grill-Waterfront. Tickets can be purchased when you register for the conference. Also, the Division invites you to attend the Division's Annual Meeting and the open meeting of the Executive Committee on Monday, August 17 from 4 to 7 pm at the Renaissance Boston Waterfront.

The Fred Kavli Innovations in Chemistry Lecture will be given by George Whitesides of Harvard University, who is noted for his contributions to analytical chemistry: "Problems, Puzzles, and Inevitabilities in Research"



The Plenary Session speakers are:

- 1). Dr. Paula Hammond, Massachusetts Institute of Technology
- 2). Dr Pat Brown, Impossible Foods
- 3). Dr. Karen Wooley, Texas A & M,

See you in Boston next month!

SPRING MEETING: PITTCON
Atlanta, GA – March 6-10, 2016



Abstract Deadline: August 14, 2015
Conferee registration opens: October 1, 2015

2016 Technical Program: The PITTCON 2016 technical program will be comprehensive and will also feature several exciting sessions sponsored by the Division. The overall program covers a wide range of interests in instrumental analysis and the application of measurement science as listed below.

Instrumental Analysis
Analytical Chemistry
Applied Spectroscopy
Life Sciences
Bioanalysis
Food Sciences
Chromatography
Molecular and Atomic Spectroscopy
Portable Instruments
Electrochemistry
Mass Spectrometry
Lab-on-Chip Technology

Nanotechnology
Biomedicine
Shale Energy
Informatics
Pharmaceutical
Environmental
Genomics, Proteomics
Metabolomics and Metabonomics
Forensics
Polymer
Food Science
Biofuels

DIVISION RESOURCES FOR STUDENTS

The Division of Analytical Chemistry has historically provided several resources and funding opportunities for undergraduate and graduate students including, [Student Chapter Organizations](#), [ACS Meeting Travel Awards](#), [Undergraduate Research](#), [Internships](#), [Summer Jobs](#), and [Co-ops](#), [Study Abroad Programs](#), [Scholarships](#), Planning for Graduate School [Career Resources](#), and Two-Year/Community College Students. Detail information about these funding opportunities can be found on the ACS-Analytical Division website. Students and their Student Chapter advisors are encouraged to take advantage of these funding opportunities.

DIVISION AWARDS PROGRAM: Solicitation of Nominations for 2016 Awards:

The Division of Analytical Chemistry in conjunction with the Dow Chemical Company, Agilent Technologies, Philip Morris USA, and Waters Corporation are sponsoring several awards:

[ACS Division of Analytical Chemistry Award in Chemical Instrumentation](#)

[ACS Division of Analytical Chemistry Award in Spectrochemical Analysis](#)

[ACS Division of Analytical Chemistry Award in Electrochemistry](#)

[ACS Division of Analytical Chemistry Arthur F. Findeis Award for Achievements by a Young Analytical Scientist](#)

[ACS Division of Analytical Chemistry Award for Distinguished Service in the Advancement of Analytical Chemistry](#),

[ACS Division of Analytical Chemistry Award for Young Investigators in Separation Science](#).

Deadline for Receipt of nominations in the Division Office is November 1, 2015

ACS REGIONAL MEETING SUPPORT

Travel funding is available from the Analytical Division to support a speaker to attend symposium at a regional American Chemical Society meetings. The purpose of this funding is to encourage expert speakers who would not normally attend that particular regional meeting. It is expected that local speakers will be included to fill out the symposium. There is no formal application process.

Detailed information and questions concerning eligibility, [application process](#), and nomination process for these funding awards should be sent to Miquela Sena.

Miquela Sena
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