

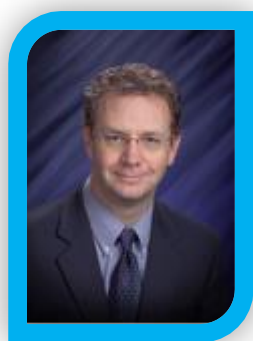


## ACS - DAC DIVISION NEWSLETTER

February 2, 2016

### LETTER FROM THE CHAIR

Chair ACS Analytical Division: **Douglas C. Duckworth, Ph.D**



Greetings! This year seems to be off to a quick start with January already in our rear view mirror. Looking forward we have much to be excited about in Division of Analytical Chemistry (DAC).

Let me start by commending the efforts of the Long Range Program Planning Committee (LRPPC) that has been hard at work under the leadership of Joel Harris and Lane Baker. Once formed the LRPP had to get off to a quick start, establishing a committee and addressing the immediate needs of the spring meeting. Technical program planning for our two national meetings and co-sponsored symposia at Pittcon and SciX is a year-round effort. In recent years, the DAC program chair orchestrated the planning alone with the support of symposia organizers.

Moving forward, the LRPPC will be able to share the workload and organize more comprehensive programs through the diverse expertise of the LRPPC members and symposia organizers. I think you will recognize notable improvements in our upcoming and future programs.

Our division will also be well-represented in nine co-sponsored symposia at Pittcon in Atlanta, Georgia on March 6 - 10, 2016. The DAC Poster session on Sunday evening includes 24 posters.

The 251<sup>st</sup> ACS National Spring meeting in San Diego kicks off March 13-17, 2016 ([http://www.acs.org/content/acs/en/meetings/spring-2016.html?cid=home\\_meetings](http://www.acs.org/content/acs/en/meetings/spring-2016.html?cid=home_meetings)). I am told that programmed activities are at their highest level for a spring meeting since 2006. The symposium organizers are to be commended for their efforts. There are total of 367 papers being presented in 27 oral sessions and the poster session. I hope you can attend the Sunday Poster Session & Reception (7:00pm - 9:00pm) that includes 142 poster submissions. It promised to be an enjoyable event.

Now is the time to help the LRPP committee with your abstracts for the Fall National Meeting in Philadelphia, August 21 –25, 2016. The abstract submission just opened and the call for papers can be found at <http://cen.acs.org/content/dam/cen/94/4/09404-nationalmeeting.pdf> . The program includes forty-two symposia that can be reviewed at <http://www.analyticalsciences.org/ACS%20ANYL%20Phila%20Aug%202016%20call%20for%20papers.pdf> . Earlier this month, I presented the revised DAC Mission Statement — to promote the science of analytical chemistry and the careers of its practitioners by providing enhanced professional opportunities, educating members and society, and building bridges between scientific fields. Our commitment to supporting the technical programming of the national meetings is a key part of this strategy. Thank you in advance for helping strengthening the DAC with your submissions and participation.

As I said, there is much to be excited about in the days ahead!  
Doug Duckworth, Chair

## OUR DIVISION OFFICERS

The names and contact information of the Division Officers are listed below:

### Chair

**Douglas C. Duckworth, Ph.D.** (Chair-Elect, 2013-2014; Program Chair, 2014-2015; Chair, 2015-2016)

Chief Scientist

Pacific Northwest National Laboratory

902 Battelle Boulevard, P.O. Box 999, MSIN K8-37, Richland, WA 99352

USA Tel: 509-375-722. Contact: [Douglas C. Duckworth](#)

### Program Chair

**Joel M. Harris** (Chair-Elect, 2014-15; Program Chair, 2015-16; Chair, 2016-17) Professor Department of Chemistry

University of Utah

315 South 1400 East, Salt Lake City, UT

84112 Tel: 801-581-3585. Contact: [Joel](#)

[M. Harris](#)

### Chair-Elect

**Karen Phinney** (Chair-Elect, 2015-16; Program Chair, 2016-17; Chair, 2017-18)

National Institute of Standards and

Technology 100 Bureau Drive, MS 8314

Gaithersburg, MD

Tel: 20899-8314. Contact: [Karen Phinney](#)

### Secretary

**Anna G. Cavinato** (2016-2017)

Chair, Division of Science, Mathematics and Technology

Department of Chemistry and Biochemistry

Eastern Oregon University, One University Blvd., La Grande, Oregon 97850

(541) 962-3561; FAX (541) 962-3873. Contact: [Anna G. Cavinato](#)

### Treasurer

**Adam T. Woolley** (2015-2016)

Department of Chemistry

Brigham Young University

C100 BNSN (Benson Science Building)

Provo, UT 84602

Tel: 801-422-1701 Contact: [Adam T. Woolley](#)

### The following also are members of the Executive Committee:

#### Councilors

**Michelle Buchanan** (2015-2017)

Oak Ridge National Laboratory

P.O. Box 2008, Mail Stop 6230

Oak Ridge, TN 37831-6230

Tel: (865) 574-1144; FAX (865)574-0323. Contact: [Michelle Buchanan](#)

**Karl Booksh** (2016-2018)  
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University of Delaware  
Newark, Delaware 19716  
Tel: (302) 831-2561. Contact: [Karl Booksh Website](#)

**Roland F. Hirsch** (2016-2018)  
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(301) 903-9009; FAX (301) 903-0567  
Contact: [Roland F. Hirsch](#)

**Kimberly Agnew Heard** (2014-2016)  
FDA/CTP/OS/DPS  
10903 New Hampshire Avenue, WO-32-3156  
Silver Spring, Maryland 20993-0002  
Contact: [Kimberly Agnew-Heard](#)

#### **Alternate Councilors**

**Dr X. Nancy Xu** (2016-2018)  
Professor in Chemistry, Biochemistry and Biomedical Engineering (Affiliated)  
Department of Chemistry and Biochemistry  
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**Frank A. Kero** (2015-2017)  
LC-MS Product Specialist  
Atlanta Center of Excellence  
PerkinElmer  
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Tel: 908-413-1244. Contact: [Frank A. Kero](#)

**Al Ribes** (2015-2017)  
The Dow Chemical Company  
Ooievaar 19  
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**Susan Lunte** (2014-2016)  
Department of Chemistry  
University of Kansas  
Lawrence, Kansas 66045-7572  
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#### **Chair of the Subdivision of Chromatography and Separations Chemistry**

**Kate Rimmer** (10/01/2015-9/30/2017)  
National Institute of Standards and Technology  
100 Bureau Drive  
Gaithersburg, MD 20899  
Contact: [Kate Rimmer](#)

### **Immediate Past Chair of the Division**

**Susan V. Olesik** (Chair-Elect, 2012-2013; Program Chair, 2013-2014; Chair, 2014-2015)

Dow Professor and Chair

Department of Chemistry and Biochemistry

The Ohio State University

100 West 18th Avenue, Columbus, OH 43210

Tel: (612)-292-0733; FAX 614-688-5402 . Contact: [Susan V. Olesik](#)

### **Editor of *Analytical Chemistry***

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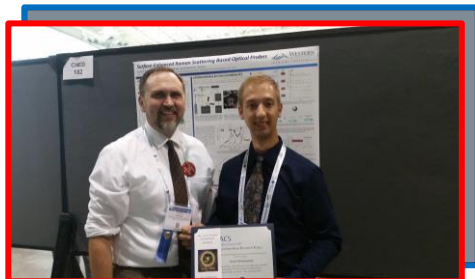
## Recap of the 250th ACS Fall National Meeting and Exposition Boston, MA – August 16-20, 2015



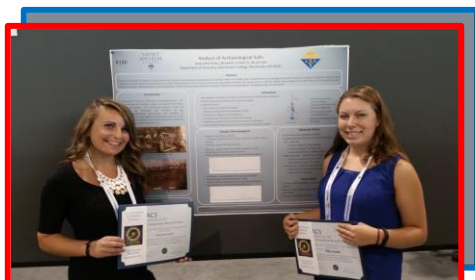
The 250<sup>th</sup> American Chemical Society National Meeting & Exposition occurred in Boston, MA, on August 16-20, 2015. The meeting was very exciting and well attended with thousands of student and scholar participants nationally and internationally. The meeting featured thousands of poster and oral 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 globally to network and exchange ideas. A wide variety of new technologies, analytical instrumentation and devices for chemical analyses were also exhibited at the meeting. The ACS meeting also served as an avenue for the participants to explore and experience the Boston metropolis' rich culture. Overall, the Boston meeting was extremely well organized, exciting and a tremendous success!

### The Division Student Poster Presentations and Certificate Awards in Boston:

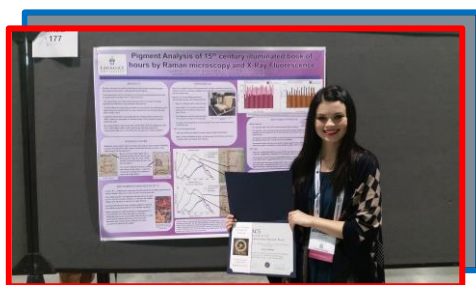
The Division presented certificate awards to all undergraduate student poster presenters at the ACS Boston meeting. The overarching goal of the certificate award is to recognize the student's research efforts and accomplishments and to further energize, excite and stimulate the students for future scholarly activities. Selected poster presentations and award certificate presentations at the ACS-meetings in Boston are highlighted below.



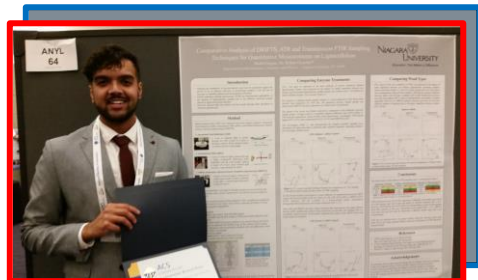
**Daniel Botamanenko**, Noah Schorr, and Steven Emory. *Surface-enhanced Raman scattering based optical probes for real-time pH determination.* Daniel is a Chemistry major in the Department of Chemistry at Western Washington University, Bellingham, Washington, United States.



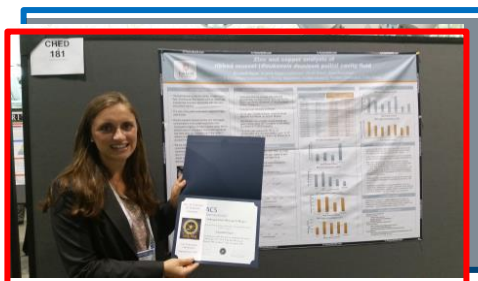
**Jacqueline Kelley**, Alexandra Scafidi and Nicole Eyet. *Analysis of archeological soils.* Jacqueline and Alexandra are Chemistry majors in the Department of Chemistry at Saint Anselm College, Manchester, New Hampshire, United States.



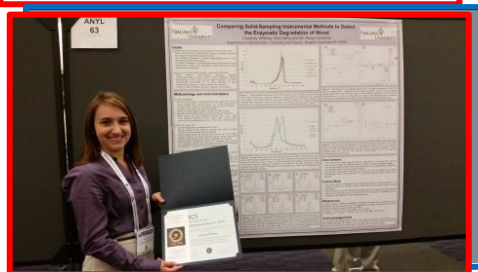
**Caren Sullivan**, Allison Fleshman, and Benjamin Tilghman. *Pigment analysis of a 14th century illuminated book of hours by Raman microscopy.* Caren is a Chemistry student in the Department of Chemistry at Lawrence University, Appleton, Wisconsin, United States.



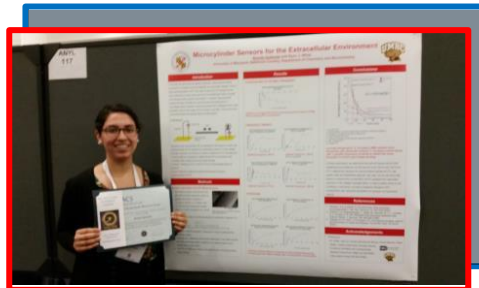
**Mohit Gogna**, Robyn Goacher. *Comparative analysis of DRIFTS, ATR, and transmission FTIR sampling techniques for quantitative measurements on lignocellulose.* Mohit is a student in the Department of Biochemistry, Chemistry, Physics at Niagara University, Lewiston, New York, United States.



**Elizabeth Pacer**, Amanda Harper-Leatherman, Phyllis Braun, and Diane Brousseau. *Zinc and copper analysis of ribbed mussel (*Geukensia demissa*) pallial cavity fluid.* Elizabeth is a chemistry major in the Department of Chemistry & Biochemistry at Fairfield University, Fairfield, Connecticut, United States.



**Courtney Whitney**, Nicholas Zerby, Robyn Goacher. *Comparing solid-sampling instrumental methods to detect the enzymatic degradation of wood.* Courtney is a chemistry major in the Department of Biochemistry, Chemistry, Physics at Niagara University, Lewiston, New York, United States.



**Brenda Gutierrez**, and Ryan White. *Microcylinder sensors for the extracellular microenvironment.* Brenda is chemistry major in the Department of Chemistry and Biochemistry at the University of Maryland Baltimore County, Baltimore, Maryland, United States.



## DIVISION PARTICIPATION IN MOLE EVENT DAY IN BOSTON

Kimberly Agnew-Heard (Division Councilor and Facebook Page Editor) and Anna G. Cavinato (Division Secretary) and several other division members participated in the Mole Event day activities at the ACS-Boston meeting.



Photo of Kimberly Agnew-Heard, Anna G. Cavinato participating in the Mole Event at the ACS Boston meeting

## Cindy Larive receives Award for Volunteer Service to the American Chemical Society



A division member, Dr. Larive received the Award for Volunteer Service to the American Chemical Society (<http://www.acs.org/content/acs/en/funding-and-awards/awards/national/bytopic/award-for-volunteer-service-to-the-american-chemical-society.html>) at the ACS-Boston meeting to recognize her outstanding contributions to undergraduate and graduate education and her efforts to promote and advance analytical chemistry inside and outside the ACS. The Award for Volunteer Service Volunteer Service is given to an individual who has demonstrated exceptional volunteering efforts at Local Sections, Divisions, Regional Meetings and International Chapters or at Committee levels to promote chemistry and the chemical sciences. Dr. Larive's research interest focuses primarily in the area of bioanalytical chemistry. Her research involves the use a variety of analytical techniques including CE, HPLC, UPLC, GC, NMR and mass spectrometry for chemical analysis, characterization, and quantification of molecules of bioanalytical and biomedical interests. Dr. Larive is also a recipient of numerous awards and has served in different capacities Chair, ACS Division of Analytical Chemistry, 2013, ACS Fellow, 2011, UC-Riverside Innovative Teaching Award, 2011, Program Chair, ACS Division of Analytical Chemistry 2012, AAAS Fellow, 2008, J. Calvin Giddings Award for Excellence in Education, ACS Division of Analytical Chemistry, 2007, Honorary Doctorate, College of Pharmacy, Semmelweis University, Budapest, Hungary, 2005, IUPAC Fellow, 2004, Award for Teaching Excellence, 2002 (selected by Chemistry undergraduate students), IUPAC Young Observer, 2001, Kaw Valley Girl Scout Woman of Distinction, 1997, and the Eli Lilly New Faculty Award, 1996.

Congratulations Cindy on your accomplishments!

## 251st American Chemical Society National Meeting & Exposition San Diego, California, March 13-17, 2016

# Computers in Chemistry

Thousands of chemical and engineering professionals are expected to participate in the upcoming 251<sup>st</sup> ACS National Meeting & Exposition in San Diego, California, March 13-17, 2016. The theme for the San Diego conference is “*Computers in Chemistry*”. The conference will be marked with exciting programs and numerous venues for scientific learning, new innovations and networking peers from academic, industry and government laboratory nationally and internationally.

### REGISTRATION AND ACCOMODATIONS ARE NOW OPEN!

[Registration](#) and [Accommodations](#) for the ACS 2016 Spring National Meeting in San Diego are now opened. The [Program](#) overview is also available now. The full technical program will be available on the ACS website very soon.

The [Plenary Session](#) talk will be given by eminent scholars on Sunday, March 13, 2016, 3:00 – 6:00 p.m., San Diego Convention Center, Ballroom 20 A – C. The Plenary session speakers are:

#### 1). [Dr. George C. Schatz](#): Using Self-Assembly to make Functional Materials: Computational Perspectives



Dr. Schatz is a Morrison Professor of Chemistry and Professor of Chemical and Biological Engineering, Department of Chemistry, Northwestern University. His research interest involves theory and computation as applied to problems in nanotechnology, properties of materials, macromolecular structures and dynamics, molecular self-assembly, optics, materials physics and biophysics. His research interests also include electronic structure methods, quantum and classical theories of dynamical processes, and using these methods to study the reactions of molecules at different interfaces. Dr. Schatz is a recipient of many awards and recognitions including the Alfred P. Sloan Fellow, Dreyfus Fellow, National Fresenius Award, Phi Lambda Upsilon, Fellow, American Physical Society, Fellow, American Association for the Advancement of Science, Max Planck Research Award, Fellow,

International Academy of Quantum Molecular Science, Fellow, American Academy of Arts and Sciences, Member of the National Academy of Sciences, Bourke Medal of the Faraday Division of the Royal Society of Chemistry, Feynman Prize of the Foresight Institute and Fellow of the American Chemical Society. Dr. Schatz is also the Editor-in-Chief, Journal of Physical Chemistry.



## 2). **Dr. Sharon Hammes-Schiffer:** Proton-coupled electron transfer in catalysis and energy conversion



Dr. Hammes-Schiffer is a Swanlund Professor of Chemistry, Department of Chemistry, University of Illinois at Urbana-Champaign. Dr. Hammes-Schiffer received her B.A. degree in Chemistry from Princeton University in 1988 and her Ph.D. in Chemistry from Stanford University in 1993. She was a postdoctoral fellow at AT&T Bell Laboratories. Dr. Hammes-Schiffer's research interests focus on the development and application of theoretical and computational methods for describing chemical reactions in condensed phases and at interfaces. Dr. Hammes-Schiffer's overarching research goals are the elucidation of the fundamental physical principles underlying charge transfer processes and catalysis, as well as to assist in the interpretation of experimental data. Dr. Hammes-Schiffer has received several awards and recognition

including Fellow, Biophysical Society, 2015, Member, International Academy of Quantum Molecular Science, 2014, Member, U.S. National Academy of Sciences, 2013, Fellow, American Association for the Advancement of Science, 2013, Member of American Academy of Arts and Sciences, 2012, Fellow of the American Chemical Society, 2011, NIH MERIT Award, 2011, Fellow of the American Physical Society, 2010, American Chemical Society Akron Section Award, 2008, Iota Sigma Pi Agnes Fay Morgan Research Award, 2005, International Academy of Quantum Molecular Science Medal, 2005, Alexander M. Cruickshank Lecturer, Gordon Research Conferences, 2004, and NSF Creativity Extension Award, 2003.

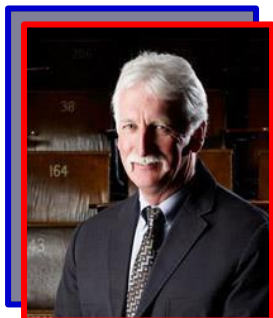
## 3). **Dr. David Baker:** Post-Evolutionary Biology: Design of novel protein structures, functions and assemblies



Dr. Baker is the Head of the Institute for Protein Design, Department of Biochemistry, University of Washington. He received his BA, Biology from Harvard University and earned his PhD, Biochemistry from University of California, Berkeley. Dr. Baker's research interest focuses on designing protein-based therapeutics, nanomaterials, and catalysts for practical real world problems solving in medicine and engineering. His research interests also include the development of

methods for solving macromolecular structures using sparse experimental data sets. Dr. Baker is a recipient of Raymond and Beverly Sackler International Prize in Biophysics, Centenary Award, Biochemical Society, Foresight Institute Feynman Prize, AAAS Newcomb Cleveland Prize, Overton Prize, International Society for Computational Biology, and the Young Investigator Award.

#### 4) Dr. William L. Jorgensen: 30 Years of Free Energy Perturbation Theory: From Free Energies of Hydration to Drug Discovery



Dr. Jorgensen is a Sterling Professor of Chemistry, Department of Chemistry, Yale University. Dr. Jorgensen received his BA from Princeton University, 1970 and his Ph.D. from Harvard University, 1975. Dr. Jorgensen's research interests span across organic, medicinal, and computational chemistry, simulations of organic and enzymatic reactions, computer-aided drug design and synthesis and development of therapeutic agents targeting infectious, inflammatory, and hyperproliferative diseases. Dr. Jorgensen has received several awards and honors including A.C. Cope Scholar Award, 1990, Fellow, American Association for the Advancement of Science, 1994, ACS Award for Computers in Chemical and Pharmaceutical Research, 1998, Sato International Award, 2004, ISQBPAward in Computational Biology, 2004, American Academy of Arts and Sciences, 2007, Fellow, American Chemical Society, 2009, International Academy of Quantum Molecular Science, 2010, U.S. National Academy of Sciences, 2011, ACS Joel H. Hildebrand Award in the Theoretical and Experimental Chemistry of Liquids, 2012, and Tetrahedron Prize, 2015.

See you in San Diego in March!

#### The Division's call for papers for the ACS National Meeting in Philadelphia in August

The [call for papers](#) for the 252nd ACS National Meeting has just been issued. Joel Harris and Lane Baker are the Program Chairs for the Division for this meeting and have organized a large and comprehensive program with [42 planned sessions](#). The program includes jointly organized sessions with other Divisions such as BIOL, CINP, COLL, MEDI, PHYS and POLY and the Multidisciplinary Program Planning Group (MPPG) which is chosen as the theme for this meeting "Chemistry of the People, by the People, and for the People". You can [submit papers](#) using your ACS Network ID and password, but must do so by the deadline of March 21, 2016.

### SPRING MEETING: PITTCON

March 6 - 10, 2016  
Georgia World Congress  
Center Atlanta, GA USA



**PITTCON**<sup>®</sup>  
CONFERENCE & EXPO 2016

Thousands of chemical professionals are expected to participate in the upcoming 2016 PITTCON in Atlanta, GA USA, March 6 - 10, 2016. The conference will be packed with exciting programs ranging from new innovations in analytical chemistry, instrumental analysis, nanotechnology,

pharmaceutical, environmental, polymer, forensic, biotechnology and biofuel. New innovations of analytical instrumentation for real world application and measurement science will be presented and demonstrated at the conference. The conference will also promote professional development and networking with peers from academic, industry and government laboratories nationally and internationally.

**Registration** (<http://pittcon.org/register/>) is now opened. You must register before February 12, 2016 to get a \$150.00 registration discount!

**Accommodation:** You can make your hotel room reservation at: <https://compass.onpeak.com/e/70PIT15>

**2016 Technical Program:** The PITTCON 2016 technical program is now available at <http://pittcon.org/technical-program/>. This year's technical program is comprehensive and will also feature several exciting sessions sponsored by the Division.

**Analytical Division Exhibit at PITTCON:** The Analytical Division will have an exhibit booth (booth number 3026) at 2016 PITTCON. The event will be used to disseminate the available scholarship and award opportunities, resources and to promote other division activity. Members who stop by will receive a free gift from the division. Please stop by to support the Division at this event.

## 2016 PITTCON Award Recipients

### Pittsburgh Analytical Chemistry Award: Sanford A. Asher



Dr. Asher is a Distinguished Professor of Chemistry, University of Pittsburgh. Dr. Asher received his PhD in Chemistry at the University of California, Berkeley and was a Postdoctoral Fellow at Harvard in Applied Physics. Dr. Asher is a prolific writer and has authored over 290 publications. He is also an inventor of over 29 patents in the area of photonic crystals. His research interests include the development of deep UV resonance Spectroscopy for use in Biophysical, Physical and Analytical Chemistry. His research interests also involve the development of analytical instrumentation

and protocols for protein structure and protein folding analysis and for the detection of explosive molecules. They are also developing novel photonic crystal optical devices and responsive materials. Dr. Asher is a recipient of numerous awards including, 2016 Society of Analytical Chemists of Pittsburgh (SACP) Award in Analytical Chemistry, 2015 FACSS Charles Mann Award for Applied Raman Spectroscopy, Scientific Advisor, Taiwan Association of Raman Spectroscopy, 2013, Charles E. Kaufman Award, 2011, Member, University of Pittsburgh Research Council, 2009, Spectroscopy Society of Pittsburgh, Pittsburgh Spectroscopy Award, 2008, Society Fellow, Society for Applied Spectroscopy, 2007, Distinguished Professor of Chemistry, University of Pittsburgh, 2006, and Sigi Ziering Award for Outstanding Contribution of a Publication in the Journal, Clinical Chemistry, 2005.

### **Chromatography Forum of the Delaware Valley Dal Nogare Award: Stephen Weber**



Dr. Weber is a Professor of Chemistry and Clinical Translational Science at the University of Pittsburgh. He received his B.A., Biology and Chemistry at Case Western Reserve University, Cleveland, Ohio in 1970 and his PhD in Chemistry, McGill University, Montreal, Quebec, Canada in 1979. His research interests include analytical separations theory and application as well as chromatographic detection/quantitation in bioanalytical chemistry, especially neurochemistry. Dr. Weber has received several awards and recognitions including Dal Nogare Award of the Chromatography Forum of the Delaware Valley 2016, Palmer Award, Minnesota Chromatography Forum 2015, Provost's Award for Excellence in Mentoring 2012, NIH Center for Scientific Review College of CSR Reviewers, Plenary Lecturer – 9<sup>th</sup> Workshop on Biosensors and Bioanalytical Micro-techniques in Environmental and Clinical Analysis 2009, Pittsburgh Award of the ACS 2008, and Wayne State University – Frontiers Lectureship 2008.

### **The LCGC Lifetime Achievement in Chromatography Award: Milton L. Lee**



Dr. Lee received a Ph.D. in Analytical Chemistry from Indiana University and is currently the H. Tracy Hall Professor of Chemistry at Brigham Young University. He has authored and co-authored many scientific peer reviewed publications. He has also received a number of national and international awards and has founded several analytical instrument companies.

### **Ralph N. Adams Award: David R. Walt**



Dr. Walt is a University Professor at Tufts University. He received his B.S. in Chemistry from University of Michigan, Ann Arbor, Michigan in 1974. He obtained his PhD in Chemical Biology from SUNY at Stony Brook, Stony Brook, New York in 1979. He was a Postdoctoral Research Associate, 1979-81, Massachusetts Institute of Technology, Cambridge, MA. His research interest includes development of optical fiber microarrays for the detection and analysis of single molecules. Dr. Walt has received numerous prestigious awards for his work and contribution to the field of microwell arrays and single molecules. He is also a member of the National Academy of Engineering. Dr. Walt is the Scientific Founder and a Director of Illumina Inc. and Quanterix Corp.

#### **Pittsburgh Spectroscopy Award: Jürgen Popp**



Dr. Popp studied chemistry at the Universities of Erlangen and Wuerzburg in Germany. Since 2002, he holds the Chair position for Physical Chemistry at the Friedrich-Schiller University, Jena. He is also the Scientific Director of the Leibniz Institute of Photonic Technology, Jena, since 2006. His research interest primarily focuses on biophotonics.

#### **Pittsburgh Conference Achievement Award: Jared L. Anderson**



Dr. Anderson is a Professor in the Department of Chemistry at Iowa State University. Dr. Anderson received his B.S. in 2000 from South Dakota State University and obtained his Ph.D. from Iowa State University in 2005. He was a chemistry faculty member at The University of Toledo between 2005 and 2015. Dr. Anderson's research interests focuses on all areas of separation science and sample preparation including understanding the role of ionic liquids (ILs) and polymeric ionic liquids (PILs) in chromatographic separations and sample preparation, particularly microextraction-based techniques. His research also involves the development of stationary phases for multidimensional gas chromatography, alternative approaches in sample preparation, particularly in nucleic acid extraction, and developing analytical tools for trace analysis within active pharmaceutical ingredients. Dr. Anderson is a recipient of several awards and recognitions including a NSF CAREER Award, Emerging Leader in Chromatography Award given by LCGC Magazine, and the American Chemical Society Young Investigator in Separation Science Award. Dr. Anderson was listed in the "Top 40 under 40" Power List by the Analytical Scientist Magazine in 2014.

#### **Satinder Ahuja Award for Young Investigator in Separation Sciences: Matthew Miller**



Dr. Miller is currently a Technical Leader at Dow Chemical in the Analytical Sciences Core R&D group, Freeport, Texas. Dr. Miller received his B.S. in Chemistry from Saginaw Valley State University and his Ph.D. in Analytical Chemistry from Michigan State University.



### **The Coblenz Society/ABB – Bomem-Michelson Award: Shaul Mukamel**



Dr. Mukamel is a Distinguished Professor of Chemistry at The University of California, Irvine. He received his B. S. in Tel-Aviv University, 1969, and his PhD from Tel-Aviv University, 1976. He is a pioneer in the development of coherent multidimensional electronic and vibrational molecular spectroscopy spanning the infrared to the x-ray spectral regimes, and has authored the book “Principles of Nonlinear Optical Spectroscopy”, Oxford University Press (1995). He has received numerous awards and recognition including 2003 Lippincott Award, The Optical Society of America, 2005 JILA Distinguished Fellow, 2009 Centenary Visiting Professor, Indian Institute of Science, Bangalore, India, 2010 Award of The Time resolved Vibrational Spectroscopy (TRVS) Conference, 2011 Earle K Plyler Prize for Molecular Spectroscopy, American Physical Society, 2011 Senior Fellowship, Freiburg Institute for Advanced Studies (FRIAS), School of Soft Matter Research, Albert-Ludwigs, University, Freiburg, Germany, 2012 Hamburg Prize for Theoretical Physics, 2013 Lamb Award for Laser Science and Quantum Optics, Physics of Quantum Electronics (PQE) Conference, Snowbird, Utah, 2013 Elected Member of the American Academy of Arts & Sciences, 2014 Mulliken Prize Medal, University of Chicago, 2015 Ahmed Zewail ACS Award in Ultrafast Science and Technology, 2015 Elected Member of the National Academy of Sciences, and 2016 ABB Bomem-Michelson Award.



### **The Coblenz Society – Williams-Wright Award: Drou t Warren Vidrine**

Dr. Vidrine (Vidrine Consulting) will receive the 2016 Williams- Wright Award from the Coblenz Society in recognition of his significant contributions in both instrument and application innovations, particularly those that have helped FTIR mature from a fragile laboratory technique to an ubiquitous industrial tool.

### **The LCGC Emerging Leader in Chromatography Award: Debby Mangelings**



Dr. Mangelings is an Associate Professor, Department of Analytical Chemistry and Pharmaceutical Technology, Vrije Universiteit Brussel. Dr. Mangelings’ research interests include chiral separations, development of miniaturized separation techniques, and development of novel generic chiral protocols as well as of the use of capillary electrochromatographic separation technique.



**SEAC – Charles N. Reilley Award: Reginald Penner**



Dr. Penner is a Chancellor's Professor and Chairman, Department of Chemistry, University of California, Irvine. He received a Ph.D. in Chemistry in 1987 from Texas A&M University under the supervision of Professor Charles R. Martin. His research group involves analytical method development for various applications in polymer, materials, nanomaterials, and nanoscience. Some of his prestigious awards include, National Science Foundation Award for Special Creativity 2004-2007, Elected Fellow, American Association for the Advancement of Science (AAAS) 2007, 2009 Faraday Medal, Royal Society of

Chemistry of the UK, Electrochemistry Group, 2009; 2011 Appointed Chancellor's Professor, University of California, Irvine in 2011, and Charles N. Reilley Award presented by the Society for Electroanalytical Chemistry (SEAC), 2016.

**SEAC – Royce W. Murray Award: Ryan White**



Dr. White is currently an Assistant Professor at the University of Maryland Baltimore County. Dr. White obtained his B.A. from University of North Carolina in 2003 and received his Ph.D. from University of Utah in 2007. He was a Postdoctoral fellow at the NIH in Kevin Plaxco's laboratory before starting at UMBC in 2011. His research interest involves intersection of nanoscience, electrochemistry and the biological interface. His research interests include the development of new (bio) analytical methods to probe chemical and biological systems with unprecedented spatial and temporal resolutions afforded by working at the nanoscale.

**RSC – JAAS Emerging Investigator Lectureship Award: Gerardo Gamez and Lara Lobo**



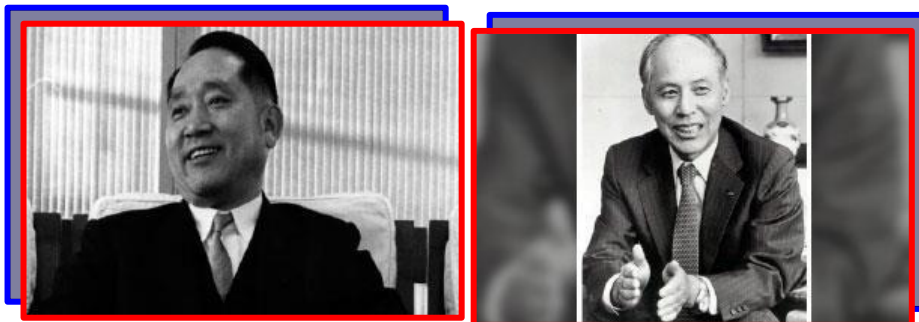
Dr. Gamez obtained his PhD in Analytical Chemistry at Indiana University-Bloomington under the supervision of Professor Hieftje. He is currently an Assistant Professor, Department of Chemistry and Biochemistry at Texas Tech University. He was a Postdoctoral fellow at ETH Zurich and also worked as a Scientist at EMPA Thun before joining the faculty of the Department of Chemistry and Biochemistry at Texas Tech University. His research interest includes research in plasma-based analytical spectrochemistry.

### Lara Lobo Revilla



Dr. Revilla received her PhD at the University of Oviedo under the supervision of Professor Rosario Pereiro and Dr. Nerea Bordel, before joining the A&MS group of Professor Frank Vanhaecke at Ghent University (Belgium). Dr. Revilla is currently a Postdoctoral researcher at the University of Oviedo. Her research interest includes the development of analytical mass spectrometry techniques for real world applications.

### The Pittcon Heritage Award: Kenji Kazato and Kazuo Ito



Kenji Kazato

Kazuo Ito

Presentation of the 2016 Pittcon Heritage Award is posthumously awarded to Kenji Kazato and Kazuo Ito, founders of JEOL – will be accepted by Gon-emon Kurihara, President of JEOL.

Kenji Kazato and Kazuo Ito led the post WWII effort in Japan to build an electron microscope. This resulted in their development in 1947 of a magnetic field type electron microscope – the DA-1. They founded the Japan Electron Optics Laboratory Company (JEOL) and led the company through future advances in the development of SEM and other types of scientific instruments. In 1975, Kazato retired as president of JEOL and became adviser until his passing in 2012. Ito served as president of JEOL from 1982 to 1987. Under his direction, JEOL made important advances in software development. In 1984, Ito established the long-term management vision “V-90” for the company’s future direction.

## Member Achievements:

The following ANYL Division Members were named 2015 and 2016 ACS Fellows

**Rodney Morris Bennett** Critical Path Services, LLC (A knoell Company)

**Bonnie A. Charpentier** Cytokinetics, Inc.

**John Driscoll** PID Analyzers, LLC

### Michael Appell



Dr. Appell earned his BS in Biochemistry in 1995 and received his PhD in Medicinal Chemistry from the University of Illinois at Chicago in 2000. Dr. Appell's research solves agricultural problems in the areas of food safety and natural product utilization. This research utilizes a combination of analytical chemistry, chemical theory, synthesis, and materials science. Dr. Appell has been awarded the Distinguished Service Award (2013) and designated a Fellow (2015) of the ACS Division of Agricultural and Food Chemistry. He is an active member of ACS and currently a Research Chemist for the USDA, Agricultural Research Service.

### Joseph T. Hupp



Dr. Hupp is a Senior Science Fellow, Division of Chemical, Sciences and Engineering, Argonne National Lab and a Morrison Professor of Chemistry, Northwestern University. Dr. Hupp's received his B.S Chemistry from Houghton College in 1997 and his PhD from Michigan State University in 1983. Dr. Hupp research interest is interdisciplinary, involving the development and application of photovoltaic and photoelectrochemical conversion, metal organic frameworks, and chemical catalysis for chemical sensors and other real world applications. Dr. Hupp is a recipient of several prestigious awards including, Fellow of the Royal Society of Chemistry, 2014, Thomson-Reuters ISI "Highly Cited Researcher", 2014, Stephanie L. Kwolek Award, Royal Society of Chemistry, 2014, Hoffman Lecturer, Florida State University, 2014, Charles N. Reilly Award, Society for Electroanalytical Chemistry, 2014, International Award, Japan Society for Coordination Chemistry, 2013, Plenary Lecturer, Griffith Memorial Lecturer, University of New Orleans, 2012, American Chemical Society, Division of Analytical Chemistry, Award in Electrochemistry, 2012.

### Ellen R. Fisher



Dr. Fisher is a Professor, Department of Chemistry, Colorado State University. She received her PhD from University of Utah. Fisher's research interest includes plasma chemistry, reactivity of radicals with surfaces using LIF and molecular beam techniques. Her research interest also involves plasma polymerization deposition, etching of materials, and characterization of plasma synthesized thin films.

## Karl Booksh: University of Delaware



Dr. Booksh is a Professor, Department of Chemistry and Biochemistry, University of Delaware. He received his B.S., 1990, University of Alaska – Fairbanks and his Ph.D., 1994, University of Washington - Seattle. His research interests are in the development of in-situ chemical sensors for environmental, biomedical, industrial process monitoring, instrumental design and the use of advanced data analysis (Chemometrics) methods to achieve optimal instrumental performance.

We are excited and proud of your accomplishments! Congratulations to you all!

### GENERAL ANNOUNCEMENT:

The Analytical Division announces a new block grant program, sponsored by a generous contribution from Merck, “to be used to support scientific and educational programs to promote learning, the exchange of scientific ideas, and the furtherance of scientific developments.” Up to \$1000 may be requested through this program.

Applications should include the following: (1) the name of the individual or entity applying; (2) the amount of funding being requested; and (3) a brief statement (<400 words total) that describes the intended use of the funds and the relevance of the proposed activities to the grant program scope.

Applications for 2016 block grants should be submitted to the Analytical Division Treasurer at [ACS-ANYL-treasurer@byu.edu](mailto:ACS-ANYL-treasurer@byu.edu) by March 1, 2016. Grant recipients will be notified by March 31, 2016.

### 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](#). Detailed 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 is due in the Division Office by November 1, 2016**

### ACS REGIONAL MEETING SUPPORT

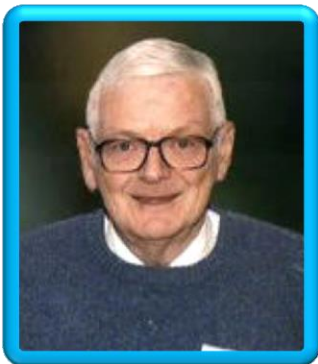
Travel funding is available from the Analytical Division to support a speaker to attend a symposium at regional American Chemical Society meetings. The purpose of this funding is to encourage expert speakers who would not normally attend that particular regional meeting. It is expected that local speakers 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.

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Santa Fe, NM 87505  
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### OBITUARY: PEOPLE WE LOST IN 2015:

#### Dr. Richard A. (Dick) Keller's (1935-2015)



Keller passed on September 1, 2015 in Los Alamos, NM at the age of 80. Keller was a pioneer in both ultrasensitive gas-phase spectroscopy and single-molecule detection in solution. He was the postdoctoral mentor of many successful analytical chemists, including Norm Dovichi at Notre Dame and Steve Soper at UNC. Keller received his B.S. degree from Allegheny College in 1956 and his Ph.D. from the University of California, Berkeley, in 1961. Keller was on the faculty at the University of Oregon from 1960-1963 and at the National Bureau of Standards, Washington, D.C. from 1963-1976. Keller joined Los Alamos National Laboratory in 1976. Keller was promoted to Laboratory Fellow in the Chemical Science and Technology Division at Los Alamos. Keller is the recipient of the 1993, ACS Division of Analytical Chemistry Award for Spectrochemical Analysis and the 1996 Lester W. Strock Award from the Society for Applied Spectroscopy. He was elected to the Society of Fluorescence in October, 1997. Keller's research interests are in the development and characterization of new laser based analytical techniques. Keller was particularly interested in the application of single molecule detection to analytical measurements. He was famously known for his humor and unfailing optimism, his passions were family and science. His personal and professional integrity and his strong work ethic are incredible and will continue to inspire family, colleagues, and friends. He enjoyed playing tennis, hiking and backpacking, and watching professional football and college basketball. One of his



great pleasures was hosting an annual Super Bowl party for dozens of colleagues and friends. He was survived by a wife, Mary Keller, a daughter, Natalie Keller of Boston, MA, a son and daughter-in-law, Bruce and Tanny Keller of Santa Fe, a son and a daughter-in-law, Alan and Meg Keller of Arlington, VA, grandchildren, Katie, Shea, and Will, great-granddaughter, Shaylee, and brother, Gary Keller of Pittsburgh, PA.

#### **Joseph Caruso (1940 - 2015)**



Dr. Caruso passed away Monday, November 23, 2015 at the age of 75. Dr. Caruso was preceded in death by his parents William and Mary Caruso. Dr. Caruso was a beloved husband to Judith Caruso, loving father of Charles Button Caruso, Amy (Kent) Attwell, and Bill (Amy) Caruso. He was a devoted grandfather of Sky, Mackenzie, Kent Jr., Samantha, Isabella, River, Joseph, and Gianni a cherished brother of Tony (Shirley) Caruso. Dr. Caruso was a chemistry professor at the University of Cincinnati since 1969 and a former Dean of the College of Arts and Sciences. Dr. Caruso was a recipient of several awards and recognitions including the Division's Spectrochemical Analysis Award and a Fellow of the ACS.

#### **Ruhangiz (Ruhi) Rezaaiyan (1954-2015)**



Ruch passed on July 29, 2015 in Greensboro, NC at the age of 61. She received her B.S., chemistry, Sharif University of Technology, Iran, 1978. She obtained her Ph.D. in analytical chemistry, Indiana – University under Professor Gary Hieftje, 1985. She was a regulatory Manager at Syngenta Crop Protection. She was highly respected by Syngenta teams around the world and by the regulatory staff at the Environmental Protection Agency. Ruhi was known for her regulatory/science knowledge and expertise, and her vivacious, generous, and gracious personality. Ruhi lived life to the fullest, and she relished spending time with family and friends. She was a fabulous cook and loved to travel, entertain, and share favorite dishes from her homeland along with wonderful cups of tea and conversations. She was survived by husband, Dr. Jahangir Emrani; a son, Darius Emrani; and daughters, Bitra and Gloria Emrani.