



## ACS - DAC DIVISION NEWSLETTER January 2013

### A WORD FROM THE CHAIR

On behalf of the Division executive committee I am pleased to bring you greetings for the New Year. We certainly hope that 2013 is off to a great start for you. This year marks the 75<sup>th</sup> anniversary of the Division of Analytical Chemistry, and will provide us opportunities to look back on our proud history and forward at the promises of a vibrant and expanding field of science. The Division will be sponsoring several events at Pittcon and at the Fall ACS meeting in Indianapolis recognizing this anniversary year.

We would also like to acknowledge YOU, our members, for your contributions to YOUR Division as we work toward the next 25 years. Your dues contribute to our many activities to support our discipline and develop our future leaders. Your dues dollars support the Division's scientific programs at ACS meetings and at Pittcon, and contribute to graduate fellowships, the Kolthoff awards for undergraduate students, and the Analytical Sciences Digital Library ([www.asdlib.org](http://www.asdlib.org)). The Division -sponsored awards promote research excellence and help to communicate the value of Analytical Chemistry to the scientific community.

#### In this issue:

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- DAC at PITTCON
- Christy Haynes – Kavli Foundation Emerging Leader
- Bard and Goedenough named to receive National Medal of Science

In addition, the Division is grateful to the companies who contribute to these activities by sponsorship of Division Awards or graduate fellowships. Another avenue by which industrial support is provided is through our corporate patrons program, and the Division is pleased to welcome ACD/Labs as our newest patron (please see their ad at the end of this newsletter). We would also like to thank our three

academic partners: The R. N. Adams Institute for Bioanalytical Chemistry at the University of Kansas, the University of Illinois at Urbana – Champaign and the University of California – Riverside. We welcome the support of your organization as a partner or patron; you can learn more about this program and sign up at our website [http://www.analyticalsciences.org/membership.php?action=patron\\_partner](http://www.analyticalsciences.org/membership.php?action=patron_partner)

### DIVISION OF ANALYTICAL CHEMISTRY AT PITTCON

The Division will be sponsoring ten invited symposia, four contributed oral sessions and a poster session at PITTCON this spring. The Division's reception will be on Tuesday evening (details in our March issue).

Day	Time	Room	Title
Sunday	1 PM	123	Forensic Science: Preparing Students for the Job (Invited symposium)
	1 PM	115A	Bioanalytical Chemistry – Advances in Analysis of Living Systems (Organized Contributed Session)
Monday	8 AM	201B	Understanding Analytical Method Variance and the Impact for QbD Filing for Pharmaceutical Products (Invited symposium w/ AAPS)
	1 PM	204ABC	General Topics in Analytical Chemistry (Poster Session)
	2 PM	115A	Chemistry Education (Organized Contributed Session)
	2 PM	201B	Bioanalytical Method Validation: Concepts, Expectations and Challenges in Small Molecule and Macromolecules (Invited Symposium)
Tuesday	8 AM	201A	Ion Mobility Spectrometry in Pharmaceutical Analysis (Invited symposium)
	8 AM	123	Nanoparticles in Separation Science (Invited symposium)
	8AM	202A	General Topics in Analytical Chemistry (Organized Contributed Session)
Wednesday	8 AM	201A	Mass Spectrometry of Proteins in the Pharmaceutical and Biophysical Sciences (Invited symposium)
	8 AM	202B	Pharmaceutical Analysis (Organized Contributed Session)
	2 PM	125	Bioanalytical Chemistry – Advances in Analysis of Living Systems (Invited symposium)
	2 PM	124	Translating Microfluidics into the Analytical Curriculum: Making Innovation Practical (Invited symposium)
Thursday	8 AM	125	Metals in Biology – Characterization of Moiety and Function (Invited symposium)
	2 PM	118C	Supercritical Fluid Chromatography (Invited symposium)

All Members of the Division are welcome to attend the meeting and information on time and place will be posted on the Division's web and Facebook sites in February.

With regard to Division Business, the Executive Committee meeting will be Monday late afternoon (details will be sent to members of the Committee in the near future).

## **AWARD PRESENTATIONS AT PITTCON 2013**

**Kevin A. Schug**, Shimadzu Distinguished Professor of Analytical Chemistry in the Department of Chemistry and Biochemistry at the University of Texas at Arlington has

been named the recipient of the 2012 Division of Analytical Chemistry Award for Young Investigators in Separation Science. The award is sponsored annually by Agilent Technologies and recognizes outstanding contributions to the field by an investigator within the first 10 years past their highest degree. Dr Schug's research focuses not only on the fundamentals of liquid phase separations, sample preparation, and trace quantitative analysis, but also on mechanistic aspects of soft ionization mass spectrometry. The Award Symposium will take place Wednesday, March 20, 2013, beginning at 8:00 AM in Room 114.

**Laurence A. Nafie**, Emeritus Distinguished Professor at Syracuse University, will receive the 2013 Pittsburgh Spectroscopy Award presented by the Spectroscopy Society of Pittsburgh (SSP) in recognition of his outstanding contributions in the field of spectroscopy. Professor Nafie's research interests are focused on the development and application of vibrational optical activity (VOA). He is, at present, Editor-in-Chief of the Journal of Raman Spectroscopy. The award to Dr. Nafie will be presented during a session held in his honor on Tuesday, March 2013 at 2 PM in Room 214.

The Pittsburgh Analytical Chemistry Award recipient for 2013 is **David R. Walt** of Tufts University. He is the Robinson Professor of Chemistry in the Department of Chemistry, a Howard Hughes Medical Institute Professor, and an Adjunct Professor of Biomedical Engineering. He is also the founder of Illumina Inc. and Quanterix Corp and is a member of the National Academy of Engineering. Dr. Walt, whose area of interest is the use of optical fiber microarrays for the detection and analysis of single molecules, has published over 250 scientific papers and holds over 50 patents. He will be honored during a symposium to be held on Tuesday, March 19, 2013, beginning at 8:00 AM, Room 114.

The Chromatography Forum of the Delaware Valley will present its Dal Nogare Award to **Irving W. Wainer** of the National Institutes of Health. The Award, which is presented for contributions to the fundamental understanding the chromatographic process, is named for Stephen Dal Nogare. Dr. Wainer is a Senior Investigator of Clinical Investigation at the National Institute on Aging and is founding editor of the journal Chirality. His research includes the study of disease progression and aging on drug metabolism in critically ill patients. The award symposium will be held Monday, March 18, 2013 at 8 AM in Room 126A.

**Sarah Trimpin**, Wayne State University, will receive the 2013 Pittsburgh Conference Achievement Award. This award is sponsored jointly by the Pittsburgh Conference and the Society for Analytical Chemists of Pittsburgh (SACP). The award recognizes individuals within 10 years of their PhD. Dr. Trimpin's research interests are in the area of approaches to chemical analyses that avoid the use of solvents. Her award will be presented on Monday March 18 during a symposium in her honor which begins at 8 AM in Room 114.

The 2013 Pittcon Heritage Award will be presented posthumously to **Guenther Laukien**, founder of Bruker, and will be accepted by his son, Frank H. Laukien, Bruker

Corporation. Although he is most noted for his contributions to the field on NMR, Bruker expanded under Guenther Laukien's watch to mass spectrometry, FT-IR and X-ray spectroscopy. The Award will be presented on Sunday March 17, 2013 at 4:30 in Ballroom B, Level 300.

**Brooks H. Pate**, William R. Kenan, Jr. Professor of Chemistry at the University of Virginia, will receive the 2013 Bomem-Michelson Award, of the Coblenz Society/ABB. ABB sponsors the Award, which is dedicated to the memory of Professor A.E. Michelson, developer of the Michelson Interferometer is presented annually to a scientist who has advanced the technique(s) of vibrational, molecular, Raman or electronic spectroscopy Dr. Pate's research group has developed new techniques in broadband molecular rotational spectroscopy with applications to the structure of molecular clusters, chemical reaction dynamics of vibrationally excited molecules, and reaction mechanisms in interstellar chemistry. The award symposium will be held on Tuesday, March 19, 2013 beginning at 8:00 AM in Room 126B.

The Society for Electroanalytical Chemistry (SEAC) will present its 2013 Charles N. Reilly Award to **Andrew G. Ewing**, Professor of Analytical Chemistry at Chalmers University and the University of Gothenburg, Sweden. The award is sponsored and presented by the Society for Electroanalytical Chemistry (SEAC). His group has pioneered chemical measurements at single cells, capillary electrophoresis, single cell electrochemical imaging and new electrochemical strategies to quantify the contents of nanometer transmitter vesicles. The award will be presented to Dr. Ewing during the Reilly Award Symposium on Monday, March 18, 2013, beginning at 2:00 PM, Room 114. During this same session SEAC will present its Young Investigator Award **Bo Zhang**, University of Washington. Recipient of a Sloan Fellowship in 2012, his current research is focused on new nanoelectrodes for studying electrocatalysis and neuronal communication, and his group has invented a fluorescence-based method to report electrochemical kinetics.

**John Peter Coates** will receive the 2013 Williams Wright Award from the Coblenz Society. This annual award is presented to an industrial spectroscopist who has made significant contributions to vibrational spectroscopy while working in industry. Educated in the UK, he has worked for Castrol Oil (UK) and Perkin-Elmer (UK), as well as other major instrument companies. Since 1996, he has run Coates Consulting LLC, a company focused on instrument and sensor development. The award symposium for Dr. Coates will be held Wednesday, March 20, 2013 at 2 PM in Room 114.

## **CHRISTY HAYNES NAMED KAVLI EMERGING LEADER IN CHEMISTRY LECTURER**

Christy Haynes, Associate Professor of Chemistry at the University of Minnesota, has been named the 2012 Kavli Foundation Emerging Leader in Chemistry Lecturer. Dr. Haynes' research interests lie in the areas of nanoparticle toxicity and nanotherapeutics. She has pioneered the technique of carbon-fiber microelectrode amperometry to study the effect of nanoparticle uptake on cellular physiology. In her seven years as an independent scientist,

she has been designated a Kinship Foundation Searle Scholar, an NIH New Innovator and an Alfred P. Sloan Fellow. She has won numerous awards including a Camille and Henry Dreyfus Teacher-Scholar Award, a Pittsburgh Conference Achievement Award and was most recently featured in *Popular Science's* "Brilliant 10".

Dr. Haynes will deliver the inaugural lecture in the Kavli Foundation Emerging Leader in Chemistry Series during the ACS National Meeting in New Orleans with the proposed title: Biological and ecological toxicity of engineered nanomaterials. Her lecture will precede the keynote address, The Kavli Foundation Innovations in Chemistry Lecture, on April 8, 2013.

## **TWO PROMINENT ELECTROCHEMISTS TO RECEIVE THE NATIONAL MEDAL OF SCIENCE**

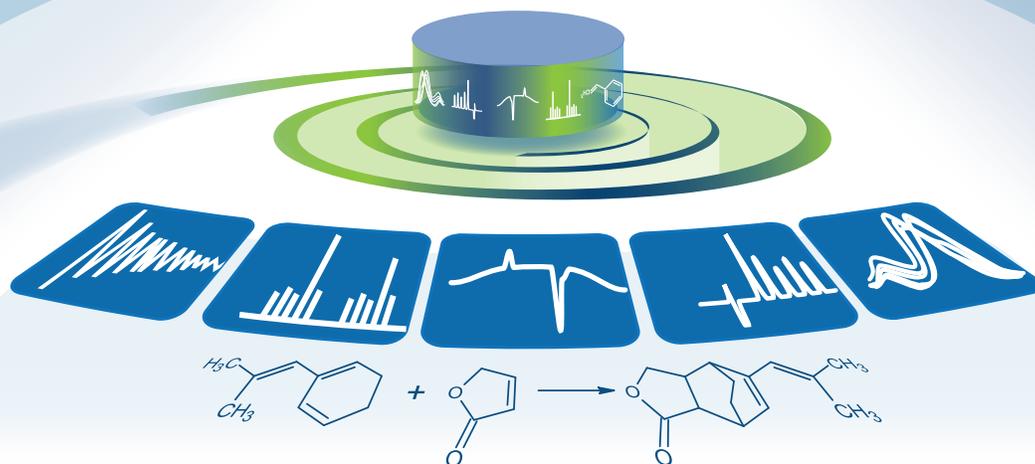
Allen J. Bard and John B. Goodenough, both faculty members at The University of Texas at Austin, are among twelve eminent researchers named by President Obama as the next recipients of the National Medal of Science. The National Medal of Science, administered for the White House by the National Science Foundation, is the highest honor bestowed by the United States Government upon scientists and engineers.

Allen Bard holds the Hackerman-Welch Regents Chair in Chemistry and is Director of the Center for Electrochemistry. John Goodenough holds the Virginia H. Cockrell Centennial Chair in Engineering. Both are well known for their contributions to electrochemistry and electrochemical systems.

President Obama commented, "They represent the ingenuity and imagination that has long made this Nation great—and they remind us of the enormous impact a few good ideas can have when these creative qualities are unleashed in an entrepreneurial environment."

Awarded annually, the Medal recognizes individuals who have made outstanding contributions to science and engineering. A committee of Presidential appointees selects nominees on the basis of their extraordinary knowledge in and contributions to chemistry, engineering, computing, mathematics, or the biological, behavioral/social, and physical sciences.

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