



## ACS - DAC DIVISION NEWSLETTER March 2013

#### A LETTER FROM THE CHAIR



Birthdays are so much fun! During 2013 we celebrate the 75<sup>th</sup> anniversary of the ACS Division of Analytical Chemistry and our birthday party officially gets underway at Pittcon – a meeting that itself is a great celebration of measurement science and technology. The contributions of analytical chemistry to science and society continue to be a great source of pride to those of us who call ourselves analytical chemists. It is therefore befitting that *Analytical Chemistry* has recently

published an open access feature article by Roland Hirsch, "75 Years of the Division of Analytical Chemistry of the American Chemical Society" that describes the founding of the Division and its history (http://pubs.acs.org/doi/pdf/10.1021/ac4002386)

The Division will have a booth (#1014) as part of the Pittcon Expo and we hope that you will stop by to find out more about the Division's activities and how you can become more involved. There will also be two special events at Pittcon in celebration of our 75<sup>th</sup> anniversary and we hope that you will be able to join us. On Tuesday from 2 - 4 pm, please come to Booth 2559 (the Pittcon Mixer Booth) inside the Exhibition and have piece of "birthday" cake. We will also host a reception Tuesday evening from 6 to 8 pm in the Washington Ballroom BC. Both are great networking activities so please stop by to join in the fun and meet your fellow analytical chemists. Both events are open to non-members. If you are not a Division member – now is a great time to join and support the Division through your membership. Remember ACS membership is not a required to join the Division.

Our 75<sup>th</sup> anniversary celebration will continue with special programming and events at the Fall ACS meeting in Indianapolis, September 8-12. The Division's program chair, Thom Rossi, has organized a really exciting set of invited symposia and contributed sessions covering a wide range of analytical chemistry techniques and applications. We hope you will join us

#### In this issue:

- Undergraduate Awards in Analytical Chemistry program
- DAC at PITTCON
- DAC at the ACS National Meeting
- Charles Mann Award Recipient Announced Volker Deckert
- Call for submissions for the May issue (DUE by April 29.

in Indy –submit your abstract at <a href="http://abstracts.acs.org">http://abstracts.acs.org</a> prior to the March 25 deadline. Thom has also organized an exciting program for the Spring National meeting, April 7-11 in New Orleans, including symposia recognizing three National award winners: Isiah

Warner (ACS Award in Analytical Chemistry) and David Russell (Frank H. Field and Joe L. Franklin Award for Outstanding Achievement in Mass Spectrometry) and Paul Haddad (ACS Award in Chromatography). The Division is also cosponsor with I&EC of a symposium recognizing Fred Regnier, winner of the ACS Award in Separations Science. In addition to these special awards symopsia there will a full complement of invited and contributed papers – plus the great food and night life of New Orleans!

### SPOTLIGHT ON - UNDERGRADUATE AWARDS IN ANALYTICAL CHEMISTRY

The Undergraduate Awards in Analytical Chemistry Program, co-sponsored by the American Chemical Society Division of Analytical Chemistry and the journal *Analytical Chemistry* enters its 46<sup>th</sup> year in 2013. The awards are intended to encourage student interest in analytical chemistry and to recognize students who display an aptitude for a career in the field. All American Chemical Society accredited institutions are invited each year to identify and recognize an undergraduate student, with no cost to the school. Awards recipients are expected to have completed a course in analytical chemistry and to be enrolled during the following academic year, but each institution is free to devise their own criteria for selection. Of the roughly 700 invited schools, approximately half nominate an undergraduate award recipient each year.

The award consists of a personalized award certificate, signed by the Chair of the Division, and the Editor of *Analytical Chemistry*, a medallion, and nine months of email highlights from *Analytical Chemistry*. Nominations are collected during the spring and early summer, with awards mailed out in the fall, although many institutions announce the award at a spring awards ceremony.

A list of the 2012 Undergraduate Awardees can be found on the ASDL website at <a href="http://www.analyticalsciences.org/ACS-DAC%202012%20undergraduate%20awards%20list.pdf">http://www.analyticalsciences.org/ACS-DAC%202012%20undergraduate%20awards%20list.pdf</a>.

#### **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.

Days, time and locations are given in the table below. Unless otherwise indicated, all room numbers are in the Convention Center.

In addition, there will be two special events in celebration of the 75<sup>th</sup> anniversary of the Division. On Tuesday from 2 to 4 pm, please come to Booth 2559 (the Pittcon Mixer Booth) inside the Exhibition and have piece of cake with your fellow members. The Division's will also holds a reception on Tuesday evening from 6 to 8 pm in the Washington Ballroom BC. And stop by the Division's Pittcon booth (#1014) to learn about our activities! The Executive Committee of the Division will meet in room 101 of the Philadelphia Convention Center from 4:00 to 7:00 pm on Monday March 18, 2013.

The Subdivision on Chromatography and Separations Chemistry (SCSC) will hold its annual business meeting at the Marriott Downtown in Liberty Ballroom B from noon to 2:00 pm on Monday March 18, 2012. Anyone with an interest in chemical separations is welcome to attend. Ideas and subjects for the agenda can be made by contacting Kate Rimmer.

Day	Time	Room	Title	
Sunday	1 PM	123	Forensic Science: Preparing Students for the Job (Invite 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)	
	2 PM- 4PM	Booth 2559 (Exhibit)	75 <sup>th</sup> Anniversary Celebration of the Division	
	6-8	Washington Ballroom BC – Loews Philadelphia	Division of Analytical Chemistry Reception	
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)	

#### ...AND THEN OFF TO NEW ORLEANS

Thom Rossi has organized an exciting array of offerings for the Spring National meeting April 7-11 in New Orleans, including symposia recognizing three National award winners: Isiah Warner (ACS Award in Analytical Chemistry) and David Russell (Frank H. Field and Joe L. Franklin Award for Outstanding Achievement in Mass Spectrometry) and Paul Haddad (ACS Award in Chromatography). The Division is also the cosponsor (with I&EC) of a symposium recognizing Fred Regnier, winner of the ACS Award in Separations Science. In addition to these special awards symposia there also will be a wide selection of oral and poster sessions, sponsored both by DAC and co-sponsored with other ACS Technical Divisions. Unless otherwise indicated, all oral sessions will be in the Downtown Marriott at the Convention Center. The poster sessions will be held in the Morial Convention Center itself in the indicated areas.

Day	Time	Room	Title	Organizer	Туре
Sunday	9-12	Fulton	Adv. In Analytical Spectroscopy	Susmita Das	Oral
	1-5:30	Morial, Hall D	General Posters	Thomas Rossi	Poster
	1-4	Fulton	Adv. In Separation Science	Cynthia Larive	Oral
	1-4:40	Julia	Adv. In Biopharmaceutical and Pharmaceutical Analysis	Thomas Rossi	Oral
Monday	8:30- 11:05	Fulton	Adv. In Analytical Spectroscopy	Susmita Das	Oral
	8:30- 11:25	Julia	Analytical Chemistry of the Deep-Water Horizon Spill (w/ENVR)	Matthew Tarr, Robert Cook, Kermit Murray	Oral
	8- 12:05	Blair Kern D	Field/Franklin Award in Mass Spectrometry: David H. Russell	Brandon Ruotolo	Oral
	9:15- 11:40	Hilton Riverside, Rosedown	WCC Rising Stars Symposium (w/WCC)	Mary Schultz	Co- sponsored
	noon- 2:30	Morial, Hall D	Undergraduate Research Posters (w/CHED)	Jeffrey Evanseck, Elzbieta Cook	Co- sponsored poster
	1:30- 4:10	Julia	Nanomaterials for Applications in Energy Science	Jayne Garno	Oral
	1:30- 4:20	Fulton	Analytical Chemistry of the Deep-Water Horizon Spill (w/ENVR)	Matthew Tarr, Kermit Murray Robert Cook,	Oral

	1-4:25	Blair Kern D	Characterization of Algal Lipids	Michael Bono	Oral
	1:30- 5:35	Blaine Kern E	Environmental Fate of Petroleum Oils and Dispersants in the Marine Environment (w/ENVR)	Robyn Conmy	Co- sponsored
	1-4:25	Morial Conv Center, 236	ACS Award in Separations Science and Technology: Fred E. Regnier (w/I&EC)	Mary Moore	Co- sponsored
	1-5	Blaine Kern A	Heparin Synthesis Analysis and Biological Functions (w/CARB)	Cynthia Larive, Jian Liu, Robert Linhardt	Co- sponsored
	1:15- 3:45	Hilton Riverside, Rosedown	WCC Rising Stars Symposium (w/WCC)	Mary Schultz	Co- sponsored
	8-10 PM	Morial, Hall D	Sci Mix	Thomas Rossi	Poster
	8:30- 11:20	Blair Kern D	ACS Award in Analytical Chemistry: Isiah M. Warner	Attres Tagge	Oral
	8:30- 11:30	Julia	Adv. In Separation Science	Irina Nesterova	Oral
	8- 11:20	Fulton	Adv. In Environmental Chemistry	Noureen Siraj	Oral
Tuesday	9- noon	Blaine Kern A	Heparin Synthesis Analysis and Biological Functions (w/CARB)	Cynthia Larive, Jian Liu, Robert Linhardt	Co- sponsored
	1-3:50	Blair Kern D	ACS Award in Analytical Chemistry: Isiah M. Warner	Attres Tagge	Oral
	1-4:20	Julia	Analytical Challenges in Surface Analysis	Christina Sweeney	Oral
	1:30- 3:10	Fulton	Analytical Applications of Nanoscale Technology	Anna Cavinato	Oral
	1:30- 4:30	Blaine Kern A	Heparin Synthesis Analysis and Biological Functions (w/CARB)	Cynthia Larive, Jian Liu, Robert Linhardt	Co- sponsored
	6-8 PM	Morial Hall A, Section D	Poster Session (w/COMP)	Emilio Espositio	Co- sponsored poster
Wednesday	8:30- 11	Blair Kern D	ACS Award in Chromatography: Paul R. Haddad	Emily Hilder	Oral

	8- 11:10	Fulton	Adv. In Environmental Chemistry	Victoria Broje	Oral
Wednesday (cont.)	8:30- 11:15	Julia	Nanomaterials for Applications in the Biological Sciences	Isiah Warner, Matthew Tarr	Oral
	1-5	Julia	Terahertz Spectroscopy: Problem Solving fo the 21st Century (w/ SCHB)	Anis Rahman	Oral
	1:00- 3:20	Blair Kern D	Analytical Applications of Nanoscale Technology	Anna Cavinato	Oral
	1-4:15	Fulton	Nanomaterials for Applications in the Biological Sciences	Isiah Warner, Matthew Tarr	Oral
	6-8 PM	Morial, Hall D	Environmental Fate of Petroleum Oils and Dispersants in the Marine Environment (w/ENVR)	Robyn Conmy	Co- sponsored
Thursday	8:30- 11:25	Julia	Nanomaterials for Applications in the Biological Sciences	Matthew Tarr	Oral
	8:30- 11:55	Blaine Kern B	Air Monitoring (w/ENVR)	Jennifer Maclachlan	Co- sponsored
	8:30- 10:30	Natchez	Analytical Applications of Nanoscale Technology	Anna Cavinato	Oral
	1-3	Natchez	Analytical Applications of Nanoscale Technology	Anna Cavinato	Oral
	1-5:10	Julia	Terahertz Spectroscopy: Problem Solving fo the 21st Century (w/ SCHB)	Anis Rahman	Oral

#### **CHARLES MANN AWARD RECIPIENT FOR 2013 – VOLKER DECKERT**

The Federation of Analytical Chemistry and Spectroscopy Societies is pleased to announce that the winner of the FACSS Charles Mann Awardee for Applied Raman Spectroscopy is **Volker Deckert**, Institute of Physical Chemistry, Jena University, Germany. This award is presented to an individual who has demonstrated advancements in the field of Raman spectroscopy.

Dr Deckert holds a joint position at the Institute of Physical Chemistry, University of Jena, Germany and the Institute of Photonic Technology also in Jena. He obtained his diploma and Ph.D. degree from the University of Würzburg, working on instrumental developments for Raman spectroscopy. As a postdoc he worked on non-linear and time-resolved laser spectroscopy at the University of Tokyo and KAST, in Kawasaki. During his habilitation at the ETH Zurich, he began to employ near-field optical

techniques and was among the first to combine this high spatial resolution technique with Raman spectroscopy. A major breakthrough was the development of tip-enhanced Raman spectroscopy (TERS), a combination of scanning probe microscopy with plasmonic probes. This technique combines the sensitivity of surface-enhanced Raman scattering with the high lateral resolution of near-field optics, allowing the investigation of phenomena outside the diffraction limit of conventional optics. Since then, his goal has been to push the lateral resolution of Raman spectroscopy into smaller and smaller dimensions. In particular, his interest is to apply the resolution capabilities of TERS towards nanoscale studies of bio-molecules. The Award will be presented at SciX 2013 in Milwaukee, WI.

#### **CALLING ALL PHOTOGRAPHERS AT PITTCON !!!**

Those of you taking photos at symposia or simply snapping shots of Division Members at poster sessions or our reception – please send us your pictures (with names of those in the shots) for inclusion in the May issue.

Members are always welcome to submit copy for the newsletter. Items will be included on a space available basis, and any editing will be cleared with the person submitting their contributions before publication.

Please send items for publication to Faye Rubinson at <a href="mailto:ifr@georgetown.edu">ifr@georgetown.edu</a> by April 29<sup>th</sup>.

# Fill the Knowledge Gap





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