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Striving to Be the Best Division for You

ACS Division of Analytical Chemistry Mission Statement Improving people's lives through the transforming power of analytical chemistry and promoting the community of analytical scientists

My statement gives you a progress report on our work to better serve you, the members of the division of Analytical Chemistry (ANYL).

A Strategic Planning meeting was held on February 27 and 28, 2010 during Pittcon. ANYL decided to undertake three initiatives over the next three years:

- ANYL will become an important professional support system for analytical chemistry.
- ANYL will be a financially sustainable organization that serves the members of the division.
- ANYL will be a more visible organization with broader engagement with members, the general public and the scientific community.



Dr. Dorothy J. Phillips Division Chair

While we are still flushing out and establishing metrics for these initiatives progress is being made. Two new standing committees have been established to drive them: Finance Committee with Treasurer as Chair and Program Committee with Program Chair and Chair-Elect in the leadership roles. Filling the vacant Fund-raising Committee Chair role will strengthen the Finance Committee (would you like to serve in this position?). The web editor is working diligently with the related committee to develop the content of a members-only section of our website that will add value to your membership. The Division has a five-year contract with an organization that is efficiently performing our administrative functions. Scientific Association Management has made my year as Chair run smoother than I could have anticipated and I am sure it will be a positive addition to your experience in ANYL as well.

Please check the website frequently for more updates. <u>http://www.analyticalsciences.org/</u>

I thank you for electing me to serve as the Chair of your division. I will continue to help ANYL with our three initiatives as Immediate-Past Chair.

2010 ACS Fellows

Paul A Bouis Michelle Vaughan Buchanan Donald G. Hicks Donna J Nelson Dorothy Jean Phillips Paul S. Weiss Charles L Wilkins

Division Awards

Stephen P. Cramer Christy L. Haynes Charles R. Martin Richard A. Mathies Royce W. Murray Lawrence W. Potts HIGHLIGHTS IN THIS ISSUE ACS Fellows and Awards DAC Awards ACS 2010 2010 Election Results PittCon 2010 2011 Meeting Programs SCSC Report

ACS Awards: Udo Brinkman, Catherine Costello, Richard P. van Duyne, David R. Walt

and the entire division.

CONSIDER JOINING THE ANALYTICAL DIVISION EXECUTIVE COMMITTEE

Wow! Time flies when you are having fun. These words truly express my feelings with regard to serving on the Executive Committee of the ACS Division of Analytical Chemistry. Over the past four years, I have served you and the division in the capacity of Chair-Elect, Program Chair, Chair, and Past-Chair. Each of these offices has required different skill sets and different variations in time commitments. All of them have required balancing my other responsibilities at LSU with the responsibilities of the particular division office. I will not say that this has been easy. However, it has been very rewarding and easier to implement than I expected in light of the changes which have been made in the responsibilities of officers on the Executive Committee. Indeed, it has been an honor and pleasure to serve you Log



Dr. Isiah M. Warner Louisiana State University

As I reflect on the time spent in these various capacities in service to the division, there is no doubt that the greatest pleasure has come from interacting with other members of the division, as well as other officers with whom I have served. I will not attempt to mention all of these individuals by name here since I would surely forget someone important. It has always been great to know these individuals from a distance through their work and/or through their publications in the literature. However, it is an even greater pleasure to work with them and get to know them up close and personal, as individuals with their own unique talents and personalities.

While changes were already being implemented when I initially joined the Executive Committee, it has been my great pleasure to play a small role in helping the Executive Committee to implement these changes which have allowed the Executive Committee to evolve into the new and vibrant entity which exists today. This evolution has resulted in an Executive Committee with offices better designed to serve its members and at the same time better designed to minimize the workload of each officer. I challenge you to find another division within ACS that has undergone as many recent positive changes as the analytical division.

If you have continued to read my message up to this point, you are probably absolutely convinced that I am trying the old Tom Sawyer "paint the fence" trick in asking you to participate on the Executive Committee. I assure you that this is not the case. While we do need to continue to see new and younger faces arise from the ranks as officers in the division, it is a challenge and commitment which you alone must make. If you have ever considered serving as an officer in the division, now would be a great time to put your name in the hat for future consideration. If you are truly interested and want to explore your options, stop by sometime as an observer in our committee meetings. The meeting times and locations are published with the ACS meeting agenda.

The ACS Division of Analytical Chemistry invites student applications for its 2011-2012 Graduate Fellowship Program. This program provides both nine-month and summer fellowships to promising analytical chemistry graduate students to support their thesis research. The current stipend levels are \$21,000 for the nine-month fellowships and \$7,000 for the three-month summer fellowships.

Faculty advisors who are members of the Division may nominate one graduate student for a fellowship award. Applications are due on December 10, 2010, and complete information about the program, eligibility criteria, instructions for preparing the application package, and downloadable application forms may be found at the program web site:

www.southwestern.edu/departments/chemistry/acsgraduatefellowship/

From Emily D. Niemeyer, chair of the ACS DAC Graduate Fellowship Committee

Secretary's Report Fall 2010

2010 Election Results

For the sixth year the Division conducted elections via electronic balloting through Vote-now.com. On behalf of Division of Analytical Chemistry - ACS, Campus-Vote/Vote-now conducted an election for the positions of Chair-Elect, Treasurer, one Councilor and one alternate Councilor positions, from 12:01 am June 14, 2010 to 11:59 PM, July 16, 2010. In addition, also on the ballot was a revision of the current bylaws to make the Chair of the Subdivision of Chromatography and Separations Chemistry a voting member of the executive board and change language to reflect the new category of student members.

1180 total voters made a selection for one or more candidates (13.4 % of the 8794 members), while 8 abstained (0.1%). Member participation in elections has been declining in the last three years, although still up from 2005-2007 records: in 2009 13.9% of the membership voted (1321 out of 9514 members); in 2008 14.2% (1371 out of 9622). In 2007, 1204 total voters participated (11.9% of the 10092 members); in 2006 1332 members participated (12.9% of the 10292 members), and in 2005 1327 members (12.5% of the 10581 members) participated. Twenty-eight election comments were received, most with very positive feedback on the way the elections were conducted.

The bylaws revisions were approved with 95% of yes votes.

The elected candidates are as follows:

Chair-Elect:	Dr. Cynthia Larive, University of California Riverside
Treasurer:	Dr. Al Ribes, The Dow Chemical Company
Councilor:	Dr. Catherine Fenselau, University of Maryland
Alternate Councilor:	Dr. Kimberly Agnew-Heard, Boston Scientific



Respectfully submitted,

Anna G. Cavinato, Secretary, ACS Division of Analytical Chemistry

Subdivision of Chromatography and Separations Chemistry

Brian Bidlingmeyer, the SCSC Chair



So far it has been a busy year for the Subdivision on Chromatography and Separation Chemistry (SCSC) We have had our annual meeting and completed programming for the Boston ACS meeting and for PittCon 2011. Additionally the Young Investigator Award jury has announced the 2010 awardee.

<u>Annual Meeting.</u> The SCSC had its annual open meeting at the 2010 Pittsburgh Conference in Orlando. There were 24 attendees and Dionex Corporation sponsored the pizza lunch. Following introductions, the programming activities were discussed by Neil Danielson, Chair-elect. Numerous suggestions were made. Neil will sort through the

suggestions and work with the PittCon committee to get the SCSC program in place. John Hinshaw reviewed ASTM's interest in creating standard practices and volunteered to act as a liaison to ASTM. He will coordinate any SCSC member's interest in participating on ASTM committees. There is a current need to re-draft the standard vocabulary document for several techniques (eg., GC, LC, etc). Anyone who is interested in being involved on this committee please

contact John whose contact information is on the Analytical Division's web site (http://www.analyticalsciences.org) under the pull down menu for the Separation Subdivision.

A lively discussion took place on the current web site. As the Analytical Division is in the process of updating its web page, the SCSC will follow as resources become available. Currently Lisa Holland and Susan Olesik were interested in being active in suggesting improvements. If any members have input to improving the SCSC web site, please contact Lisa or Susan (contact information on the web site). Finally, a full slate of nominees was solicited for filling the open positions of secretary and two executive committee posts. The election will occur as soon as biographical information is obtained for the nominees.

Another discussion took place on the question of whether the SCSC is serving the needs of the membership. A general discussion took place with the suggestion that the SCSC assemble a committee on how best to gather the views of the membership. This committee will be chaired by the chairman of the SCSC. The chair and chair-elect will decide on the makeup of the committee and establish the timeline for action. if any members have an opinion on this subject, please email them to me at brian_bidlingmeyer@agilent.com.

The question arose as to whether the SCSC should program for the Spring National Meeting. Again, if any members have an opinion on this subject, please email them to me at brian_bidlingmeyer@agilent.com.

<u>Programming for the 240th ACS Meeting in Boston</u>. The Subdivision supported the following three organized sessions for the 240th ACS National Meeting in Boston, August 2010. They were "Innovations in Chromatography", presided by Gregory Roman, Mount Holyoke College, "Microfluidics and Lab on a Chip", presided by Gregory Roman, Mount Holyoke College, "mesided by Susan Lunte, University of Kansas.

<u>Programming for PittCon 2011.</u> The Subdivision will be sponsoring the following three invited symposia for PittCon 2011. The first session, entitled "Quality by Design in HPLC: The Balance between Chromatography and Chemometrics" has been organized by Brian Bidlingmeyer, Agilent Technologies. Systematic approaches to evaluate new methods, new initiatives, and new technologies with respect to chromatography will be discussed. The second session, entitled "Second Century Innovations on Chiral Separation" has been organized by Shahab Shamsi, Georgia State University. Presentations will address chiral separations using GC, LC, SFC, and CE. The third session, entitled "Chip Based Separations" has been organized by Carlos Garcia, University of Texas – San Antonio. Talks on microfluidic devices for the analysis of whole organisms, single cells, and biomarkers are anticipated. An organized session entitled "New Self Assembled Nanomaterials for Enhanced Chemical Separations" to be arranged by Lisa Holland will also be supported by the Subdivision for PittCon.

Young Investigator Award sponsored by Agilent Technologies. The criteria for the award and the process for submitting a nomination is found on the Analytical Division's web site under the Awards pull down menu.

The awardee for the 2010 SCSC's Young Investigator Award is Philip Britz-McKibbin who is currently an associate professor of bio-analytical chemistry who joined the Department of Chemistry and Chemical Biology at McMaster University in July 2003. Philip completed his BSc in chemistry at the University of Toronto (1994) followed by Ph.D. studies in analytical chemistry under the supervision of David D.Y. Chen at the University of British Columbia (2000) in Canada. He then served as a visiting lecturer at the University of North Carolina at Greensboro in USA (2000-2001), which was followed by a Japan Society for Promotion of Science (JSPS) post-doctoral fellowship with Shigeru Terabe at Himeji Institute of Technology in Japan (2001-2003). Philip's research interests include fundamental studies of separation science involving capillary electrophoresis and mass spectrometry, which are aimed at the development of novel methodologies relevant to metabolomics, metabolite profiling and biomolecular interactions.

<u>Future</u>. As mentioned earlier, the question the SCSC needs to address is whether the SCSC is serving the needs of its membership. Only through participation can we understand the answer(s) to this question. I encourage all of you to make your feelings known by expressing them to an officer or a member of the executive committee whose contact information is available on the web site (<u>http://www.analyticalsciences.org</u>/).





2010 Fall ACS

Dr. Susan Lunte, 2010 Division Program Chair















ACS and Division Honor Achievements in Analytical Chemsitry at Boston



Alan Marshall, 2. Charles L. Wilkins, 3. Dorothy Jean Philips, 4. Isiah Warner, 5. Joseph S. Francisco, 6. Catherine Costello
Don Harris, 8. David R. Walt, 9. Richard P. van Duyne, 10. Udo Brinkman, 11. Christy L. Haynes, 12. Royce W. Murray,
Stephen P. Cramer, 14. Charles R. Martin, 15. Lawrence W. Potts, 16. Richard A. Mathies

Award in Spectrochemical Analysis



Stephen P. Cramer University of California, Davis

Dr. Cramer's Ph. D. thesis work involved the first EXAFS studies of nitrogenase at the newly founded Stanford Synchrotron Radiation Project (now SSRL). He also did Raman spectroscopy and CARS with Bruce Hudson. During a postdoc at Cal Tech, working with Harry Gray he studied Mo enzymes and aqueous Mo chemistry. In 1989 his academic aspirations came true, and he joined the Department of Applied Science, UC Davis as Advanced Light Source Professor, in a joint position with Lawrence Berkeley National Laboratory. Since then he has shuttled between UC Davis and the Advanced Light Source in Berkeley, where he supervises a soft x-ray project for Advanced Biochemical and Environmental X-Ray Spectroscopy (ABEX). He was a visiting professor at MIT in 1995, working with William Orme-Johnson on nitrogenase. He has also been a visiting professor

and taught in the chemistry departments at Williams College (2001) and UC Berkeley (2002,2004), and he has enjoyed multiple mini-sabbaticals with Edward Solomon at Stanford. His current research interests involve the application of synchrotron radiation spectroscopy and other bench-scale spectroscopic methods to nitrogenase, hydrogenase, and bioinorganic chemistry in general.

Cramer obtained his B.S. from Williams College and Ph.D. in physical chemistry at Stanford University, working under Keith Hodgson. He did post-doctoral research with Harry Gray at California Institute Technology. He worked at Exxon Research, Schlumberger-Doll Research, National Synchrotron Light Source at Brookhaven National Lab, before joining UC Davis and Lawrence Berkeley National Laboratory.



Award Lecture

Chemical Applications of Synchrotron Radiation Spectroscopy. Over the past 35 years, the brightness of synchrotron x-ray radiation sources has increased by about 10 orders of magnitude. My group has used this phenomenal trend to develop the chemical and bioinorganic applications of a variety of x-ray spectroscopies.

C.T. Chen, and x-ray

with Jerry Hastings.

more recent work on nuclear spectroscopy

with

and

experiments

illustrating

collaboration

fluorescence

RIXS

After



at SPring-8 and the APS and imaging at SSRL, the talk will conclude with an attempt at prognostication.

This talk will trace the progression of this work, starting with EXAFS spectroscopy as a thesis project at Stanford with Keith Hodgson. I will then discuss projects begun while at Brookhaven National Lab, including soft x-ray absorption and XMCD work in



Arthur F. Findeis Award for Achievements by a Young Analytical Scientist Sponsored by Philip Morris USA

Christy L. Haynes University of Minnesota

Dr. Haynes is a recently tenured Associate Professor of Chemistry at the University of Minnesota. Prof. Haynes began her academic career as an undergraduate at Macalester College. She performed her doctoral work with Prof. Richard P. Van Duyne at Northwestern University, finishing her thesis on nanoparticle optics and surface-enhanced Raman spectroscopy in 2003. Her thesis work was recognized with the ACS Nobel Laureat Signature Award in Graduate Education. Prof. Haynes performed postdoctoral work as a NIH NRSA fellow with Prof. R. Mark Wightman at UNC, Chapel Hill, focusing on single cell measurements of exocytosis. She began her faculty appointment at the University of Minnesota in Fall 2005, and her group focuses on a wide array



of analytical studies in both biological and environmental contexts. Prof. Haynes has been recognized with multiple prestigious awards in addition to the 2010 Findeis Award, including a Searle Scholars Award, a 3M Non-Tenured Faculty Award, an NIH New Innovator Award, a Sloan Foundation Award, a Dreyfus Teacher-Scholar Award, and the SEAC Young Investigator Award.

Christy Haynes (University of Minnesota) will present a plenary lecture at FACSS 2010, in Raleigh, NC at 8:30 AM, October 18, 2010. This will recognize her receipt of the Arthur F. Findeis Award for Achievement by a Young Analytical Scientist. Her talk is entitled: "Electroanalytical Eavesdropping on Cellular Communications". A day- long symposium organized by Charles Wilkins in her honor will follow.

Morning session

10:30 Neuropeptide discovery: from new characterization approaches to function; Jonathan Sweedler1; University of Illinois

11:10 Sensitivity of carbon-fiber electrodes; Mark Wightman; University of North Carolina at Chapel Hill

11:50 Design of Multifunctional Nanoparticle Probes for Molecular Imaging and Sensing in Single Living Organisms; Dr. X. Nancy Xu, Prakash D. Nallathamby, Tao Huang, Kerry J. Lee, Lauren M. Browning; Old Dominion University



FACSS 2010

Afternoon Session

2:00 Determination of Encapsulation Efficiency by Single Vesicle Analysis; Michael Heien; University of Arizona

2:40 Segmented Flow for High Throughput Analysis at the Nanoliter Scale; Robert Kennedy; University of Michigan

3:20 Electrochemical evaluation of dopamine and serotonin neurotransmission in the fruit fly brain; B. Jill Venton, Trisha Vickrey, Huai-fang Fang; University of Virginia

Communicated by Charles Wilkins

Raleigh Convention Center, Raleigh, NC, October 17 - 21, 2010 TOMORROW'S ANALYTICAL SCIENCES TODAY

Award in Electrochemistry



Charles R. Martin University of Florida

Dr. Martin research interests are in electrochemistry, nanoscience and bioanalytical chemistry. Beginning in the 1980s, his research group pioneered a powerful and versatile approach for preparing nanomaterials called template synthesis. This method has since become a workhorse procedure for preparing nanomaterials, and is used in laboratories throughout the world. His research currently focuses on applications of template-prepared nanotubes and nanotube membranes to electrochemical biosensors and to electrochemical energy.

Professor Martin was the 2009 recipient of the Charles N. Reilley Award of the Society for Electroanalytical Chemistry, the 2005 recipient of the Florida Award of the Florida Section of the American Chemical Society, and the 1999 recipient of the Carl Wagner Memorial Award of the Electrochemical Society. He was promoted to University

Distinguished Professor in 2006. In 2007 he received a Nano 50 Innovator Award from Nanotech Briefs. He is a Fellow of the Electrochemical Society, and served, or is serving, on the editorial advisory boards of Chemistry of Materials, Advanced Materials and Small. He is also the Senior Editor of the journal Nanomedicine. He is also an ISI highly cited author in materials science. Martin obtained his B.S. from Centre College of Kentucky and

Ph.D. in analytical chemistry under Prof. Henry Freiser at University of Arizona.

Award Lecture

Electrochemistry and Nano Science. When I started my academic career in 1981, clever electrochemists were already thinking about one of the core concepts of a research discipline that was yet to be invented. We now call that research discipline "nano science." And the core concept that clever electrochemists were considering back then was - how

template

electrodes

make

such

orders

higher

would electrochemistry be different if the size of an electrode approached molecular dimensions? Electrochemists were way ahead of the curve, and they forced me to be ahead of the curve too.

So as an assistant professor, I stayed up late nights worrying about how I might make really tiny electrodes? That worry led to the invention of the template-synthesis method, a versatile and power nanomaterials-synthesis strategy that is now used in laboratories all over the world. In the 1980s, my group used the template method to make disk-shaped gold

synthesis

for

batteries. We showed that

electrodes could deliver

power

of

nanostructured

nanostructured

magnitude

than

to

Li-ion



electrodes of conventional design. We are currently using template synthesis to make nanotube membranes that can electrochemically count single protein molecules. I hope to review all of these subjects in my presentation.

Charles R. Martin Colonel Allen R. and Margaret G. Crow Professor of Chemistr Distinguished Professor ersity of Florida nesville, Fl

electrodes with diameters as small as 30 nm, and explored basic electrochemistry at such "nano electrodes." In the 1990s my group used



Award in Chemical Instrumentation Sponsored by the Dow Chemical Company



Richard A. Mathies University of California, Berkeley

Prof. Mathies' work in the area of biotechnology and the Human Genome Project led to the development of new high-speed, high-throughput DNA analysis technologies such as capillary array electrophoresis and energy transfer (ET) fluorescent dye labels for DNA sequencing. In particular, his development of ET fluorescent labels was a critical contribution to the early completion of the Human Genome sequence. He also

pioneered the development of microfabricated capillary electrophoresis devices and microfabricated integrated sample preparation and detection methods for lab-on-a-chip analysis systems that are being applied to DNA sequencing, diagnostics, forensics, pathogen detection and space exploration.

Richard Mathies is author of over 400 publications and patents on photochemistry, photobiology, bioanalytical chemistry and genome analysis technology. His recent honors include Fellow of the Society for Applied Spectroscopy (2008), First Dow Harvard-MIT Lecturer (2007), Eli Lilly/Indiana University Distinguished Lecturer, (2006), Invited Member, Royal Society of Chemistry (2005), Fellow of Optical Society of America (2004), Kolthoff Lecturer (2004), and Ellis R. Lippincott Award from Optical Society of America (2004).

Mathies obtained his B.S. from University of Washington and M.S. and Ph.D. in Physical Chemistry at Cornell University. Following two years of postdoctoral study as a Helen Hay Whitney Postdoctoral Fellow at Yale with Lubert Stryer, Dr Mathies moved to the Chemistry Department at the University of California at Berkeley in 1976 where he is the G. N. Lewis Professor of Chemistry and Dean of the College of Chemistry.



Award Lecture

High-Performance Microfluidic Chemical and Biochemical Analysis Systems.

High-sensitivity fluorescence labeling and detection methods have been the key to enabling the miniaturization and integration of microfluidic chemical and biochemical analysis systems. The technical evolution of microfluidic lab-on-a-chip systems that now include functions such as integrated nanoliter sample preparation, portable operation, and high-throughput analysis will be described. In addition, state-of-the-art applications in the areas of (1) single cell genetic and expression analysis, (2) high throughput and portable forensic analysis,



(3) and the use of microfluidic systems for viral, bacterial and cancer marker detection will be presented.



Award for Distinguished Service in the Advancement of Analytical Chemistry Sponsored By Waters Corporation

Royce W. Murray University of North Carolina



Analytical Chemistry.

Dr. Murray has been colleague to nearly 160 graduate and post-graduate students, with whom he has published over 450 papers. Selected recognitions include the Olin Palladium Medal (The Electrochemical Society), the Charles N. Reilley Award (Society for Electroanalytical Chemistry), the Faraday Medal (Royal Society of Chemistry, UK), the Breyer Medal (Royal Australian Chemical Institute), the American Chemical Society Award in Analytical Chemistry and the ACS Division of Analytical Chemistry Award in Electrochemistry, the North Carolina Award in Science, the Pittsburgh Analytical Chemistry Award, the Southern Chemist Award, the Thomas Jefferson Award by UNC, and the Luigi Galvani Medal of the Italian Chemical Society. He is an elected member of the National Academy of Sciences and of the American Academy of Arts and Sciences. He has served since 1991 as Editor-in-Chief of the journal

Murray's research interests include electroanalytical methods, the molecular design of electrode surfaces and nanoparticles, electrochemically reactive semi-solid media, mass transport and electron transfer dynamics, electrocatalysis and solar cells, and voltammetry in extreme media. His professorial role is to raise resources, keep order, and let good students do the rest.). Murray obtained his B.S. from Birmingham Southern College and

Ph.D. in analytical chemistry from Northwestern University.

Award Lecture

Service and Nanoparticles. I thank the Division of Analytical Chemistry for this recognition, and acknowledge that there exist many equally deserving individuals. I will make a few remarks about professional service, and go on to a more interesting subject, the mass spectrometry of small Au nanoparticles. While nanoscience is today viewed as a very important topic, our knowledge of exactly what nanoparticles are—their composition and structure—is a "dismal science". I

will describe some significant recent progress in using mass



spectrometry of small Au nanoparticles as a compositional weapon in nanoscience. Supported by NSF, ONR.







J. Calvin Giddings Award for Excellence in Education

Lawrence W. Potts Gustavus Adolphus College

Dr. Potts has been on the faculty of Gustavus Adolphus College since 1972. Potts obtained his B.S. from Oberlin College and Ph.D. Daniel from University of Minnesota. He was a postdoctoral research associate with P.W. Carr.

Award Lecture

What Do You Say When They Ask "Should I Go Into College Teaching"? Almost every chemistry professor has had an undergraduate ask, "Should I go into college teaching?" What should we say? How should we explain what it is we do so as to present a balance of practical and philosophical issues, neither too cynical nor too optimistic, to help students make career plans? I have been discussing my profession with students since the 1970s. Those discussions were in response to the first stirrings of the great anxieties about young chemists choosing not to teach in colleges



and universities. The second round of anxieties concerned gender and minority equity in applicant pools in the 1990s, and the most recent anxieties are about changing demographics, online degree programs, and the proliferation of non-tenure track jobs. The overriding anxiety has always been the salary differential between industry and academe. In this talk I will reexamine several of these anxieties, and discuss some recent workshop forums in which I have participated.





Applications are invited for the 2011 I. M. Kolthoff Award for undergraduate research in analytical chemistry. The I.M. Kolthoff Award is given annually to deserving undergraduates who have done undergraduate research in the field of analytical chemistry, broadly defined, in celebration of the life and accomplishments of the late Professor Izaak Maurits Kolthoff, viewed by many as the father of modern analytical chemistry. The Kolthoff awards provide travel funding up to \$750 for undergraduate students to present a poster on their undergraduate research this year at either PITTCON 2011 (March 13 – March 18, 2011; Atlanta, GA) or the 241st ACS National Meeting & Exposition (March 27-31, 2011; Anaheim, CA). 2-3 awards will likely be made between the two meetings.

Directions. A completed application consists of the completed application form (this form), a copy of the abstract submitted for presentation at either PITTCON 2011 or the Spring 2011 ACS National Meeting, and a nomination letter, written by the student's undergraduate research. The nomination letter should be submitted directly by the student's advisor via E-mail to Professor Mabrouk (p.mabrouk@neu.edu). The subject line of the email should state "Letter of Recommendation on Behalf of [Student's Name] for 2011 I. M. Kolthoff Award." All applications and nomination letters must be submitted in electronic form to Professor Pam Mabrouk, Chair of the DAC Education Committee. The deadline for submission of completed applications for the I.M. Kolthoff Award for consideration for the 2011 competition will be October 31, 2010. Please direct all questions to Pam Mabrouk via E-mail (p.mabrouk@neu.edu). Preference will be given to undergraduate chemistry majors with strong academic records who have made significant research contributions in the analytical sciences for whom this would be their first external meeting presentation.

Treasurer's Report

The Division Will End the Year Slightly Favorable to Our Balance *Al Ribes*

The 2010 Budget

The Division is operating this year under a \$ 239,000 budget, which is 28% lower than

the 2009 budget. This adjustment was caused by a decrease in 2009 revenues across the board due to the macroeconomic environment that the nation experienced. A large portion of the decrease was related to the loss of support for a number of graduate fellowships, lower corporate donations, and a minor loss in membership fees. Fortunately the Division had started saving money over the previous years by establishing a more economical undergraduate award and by lowering its publication expenses via electronic newsletters and on-line balloting. Your executive committee has been and is committed to the implementation of the strategic plan of the Division, which has resulted in additional services to the profession and to our members. This includes the support to the Analytical Sciences Digital Library, the scientific programming at Pittcon (which is provided at a very low cost due to the support of the organizing conference), and the establishment of a Divisional Business Office. Forced by these new commitments, The Division had to make difficult decisions such as reducing support for social events as well as a 24% cut in support for guest registrations at national meetings.

A Good Turn of Events

In addition to supporting the traditional and new services of the Division, the Division has been able to continue support of graduation students through our graduate fellowship program. Five organizations continue to provide financial support for this long standing program.

The programming chair and symposia organizers, out of necessity, sought corporate support to cover the shortfall in meeting registrations and I am happy to report that over \$25,000 in meeting grants have been raised this year. Also, the income from donations and membership is moderately up from projections. These increases in income are partially offset by lower than expected interest income and a lower annual ACS allocation [a fund of variable size which is distributed yearly among Technical Divisions].

Profit and Loss and the Analytical Division's Assets

This year for the period ending Aug 16, the Division has received income of \$221,806 and has paid expenses of \$134,778, for a surplus to this date of \$87,028. The Division's estimated cash liability as of this date was approximately \$77,500. It appears that the Division will end the year with a slightly positive balance.

On behalf of the division, I would like to thank our fellowship, award, and symposium sponsors. Their names are listed elsewhere in this newsletter and I hope you will join me in recognizing their contributions.



Variable.Pathlength.Extension Academic Partners/Patrons

University of Kansas, Ralph N. Adams Institute for Bioanalytical Chemistry

Texas Tech University, Department of Chemistry and Biochemistry

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University of Arkansas, J. William Fulbright College of Arts & Sciences

University of California - Riverside

University of Illinois at Urbana-Champaign, Department of Chemistry

University of Utah

Note from the 2011 Program Chair

PittCon 2011 Programming (Atlanta, GA)

Analytical Division sponsored programming at the PittCon meeting is nearly complete! Invited symposia include:

- Second Century Innovations on Chiral Separations
- Quality by Design in HPLC: The balance between Chromatography and Chemometrics
- Metallomics Analytical Chemistry of Bio-Metals
- Analytical Chemistry/Characterization at the Interfaces
- Technology and Applications of Ion Mobility Spectrometry (IMS)
- Advances in Differential Ion Mobility Spectrometry (FAIMS)

Contributed session topics are being organized around the following topics:

- New Self Assembled Nanomaterials for Enhanced Chemical Separations
- Chip Based Separations
- Proteomics: From the Bottom (Peptide Level)
- Proteomics: From the Top (Intact Level)
- Chemical Imaging: The Molecular View
- Chemical Imaging: The Elemental/Atomic View
- Metabolomics: Integrated Analytical Approaches

Finally, as usual, an Analytical Division sponsored poster session will be held.

ACS Spring Meeting, March 27-31 2011 (Anaheim, CA)

The theme of this meeting is Chemistry of Natural Resources, and we are currently finalizing Analytical Division symposium topics and organizers! We are particularly interested in cosponsorship of symposia with other ACS divisions. Please contact the program chair if you have ideas or suggestions for either organized or contributed session topics. Abstract submissions begin August 23.

ACS Fall Meeting, August 28-September 1 (Denver, CO)

The theme of the 2011 Fall national meeting is Chemistry of Air, Space, and Water. We are now soliciting Analytical Division symposium topics and organizers, and there is plenty of time available to arrange for co-sponsorship and organization for this meeting. Please contact the program chair to discuss program concepts and topics.

Contact: David W. Koppenaal Pacific Northwest National Laboratory <u>david.koppenaal@pnl.gov</u>; 509-371-6549

Call for Newsletter Contributions

News or photos to share? Information to distribute? Please send your contributions to the DAC Newsletter Editor Xudong Yao by email: <u>x.yao@uconn.edu</u>



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November 15-18, 2010