



The Crucible

www.pittsburghacs.org

Volume: XCVIII No. 3

November 2012

Pittsburgh Section Student Travel Grant Awardees Report on The ACS National Meeting

The following reports are by Steve Owens and Minjiang Zhong. Both were awarded student travel grants from the Pittsburgh Section ACS and attended the Fall ACS Meeting.

Report by Steve Owens

I attended the 2012 Fall ACS Meeting in Philadelphia, PA (August 20-22) thanks to a student travel grant from the Pittsburgh Section of ACS. During the conference I was able to attend talks both within and outside my area of research (polymers and materials) as well as network with fellow chemists and suppliers we use for our lab. To start off the week I was able to attend the graduate and postdoctoral reception where I was able to talk to representatives from my division as well as meet other graduate students who were attending the meeting. Monday night was the Sci-Mix poster session, which showcases the best posters from all the divisions. I was able to see posters ranging from polymer synthesis to computational chemistry to chemical education. On Tuesday I was able to attend a session on non-traditional chemistry careers. The panel consisted of an independent consultant, an analytical chemist turned forensic investigator with the Philadelphia Police Department, and a chemist turned patent lawyer. It was very interesting learning the broad array of things I can do with my chemistry background if I were to choose not to stay at the bench. Tuesday afternoon I attended a session on chemical informatics where my advisor, Prof. Hutchison was giving a talk. While my research is in materials synthesis, I took the opportunity at the meeting to learn about areas of interest that are not part of my research. On Wednesday I was able to talk to some vendors we use at the exhibition (I even saw a giant rotovap) and attend a talk given by one of my fellow group members (Xinfeng Quan). Wednesday afternoon I gave my talk entitled "Synthesis and computational screening towards new D-A and D-D conjugated polymers with elucidation of the sequence effect" in the POLY division. It was a great experience to give my talk to a group of people totally unfamiliar with my research and then get the opportunity to answer their questions. I was also able to attend another one of Prof. Hutchison's talks on Wednesday. This time he focused more on the group's research. I always find it really interesting and helpful to hear someone else (especially my advisor) talk about my research.

Please see Minjiang Zhong's Report on Page 16

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POWERING INNOVATIONS IN ANALYTICAL CHEMISTRY

To enhance your Pittcon 2013 experience, we will be co-programming with The American Chemical Society's Division of Analytical Chemistry (ACS-DAC). Attend one of the many ACS-DAC sessions such as:

- Bioanalytical Method Validation: Concepts, Expectations and Challenges in Small Molecule and Macromolecule
- Forensic Science: Preparing Students for the Job
- Mass Spectroscopy of Proteins in the Pharmaceutical Sciences
- Supercritical Fluid Chromatography
- Translating Microfluidics into the Analytical Curriculum: Making Innovation Practical

For more information on technical sessions, exhibitors and short courses, visit www.pittcon.org.



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MARCH 17-21



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Join the WCC for our fall social event ...



The Church Brew Works Saturday, November 10th



11:30 am: Registration
11:45 am: Tour & Lunch

The Church Brew Works is nestled in historic Lawrenceville. This turn of the century cathedral church turned brewpub is known for their award winning handcrafted brews and eclectic cuisine. Join us as we get a tour of the brewing facilities by one of Church Brew Works own brewmasters, followed by a sit-down lunch.

Cost: \$15 per person

*Registration is limited to the first 40 people.
Guests are welcome!*

The Church Brew Works is located at
3525 Liberty Avenue, Pittsburgh, PA 15201

Please make check payable to Greater Pittsburgh WCC and mail along with this order form to: Dr. Michelle Ward / Room 107 / 219 Parkman Avenue / Pittsburgh, PA 15260. Alternatively, you can email this form to pghwcc@pitt.edu and utilize the PayPal link on our site (www.pitt.edu/~pghwcc). Reservations must be received by Friday, November 2nd.

Name: _____

Email: _____ Phone: _____ # Attending: _____

Luncheon Choice:

- Chicken Breast (lightly seasoned chargrilled chicken breast served with seasonal vegetables and finished with red wine-tomato demi-glace)
- BBQ Pork Salad (pulled bbq pork served atop mixed greens, corn, tomatoes, and black beans. Served with ranch dressing and topped with jalapeno-cheddar tortilla crisps)
- Tilapia (baked tilapia topped with pesto topping and served with seasonal vegetables)
- Farfalle Pasta (tossed with Pennsylvania mushrooms, leeks and fresh basil; finished with garlic cream sauce and Parmesan cheese)

2013 CANDIDATES FOR OFFICE

Pittsburgh Section
American Chemical Society

The 2012 Nominating Committee of the Pittsburgh Section of the American Chemical Society submits the following slate of candidates for Section office for 2013. All persons nominated are members of the society and have agreed to serve if elected.

Only members of the Pittsburgh section of the American Chemical Society are eligible to vote. Please note that all ballots must be received by November 20, 2012. Unless you receive a paper copy of The Crucible, and assuming you are a member in good standing, you will receive your ballot electronically via an email notification and code from www.vote-now.com. The polls can open on November 5th and close November 20th at 5:00 pm EST. For ballot questions, please contact: Fu-Tyan Lin, Secretary - ACS Pittsburgh Section, ftlml@comcast.net For those receiving a printed copy, please follow instructions printed on the ballot. Ballots received in any other manner than what is stated in the instructions will not be accepted.

Chair - Elect

Partha Basu
Artrease Spann

Partha Basu

Dr. Partha Basu received his Ph.D. in Coordination Chemistry from the Jadavpur University in India. He received his BSc(Honors) and MS from the Calcutta University, India. After completing his Ph.D. he joined the University of Arizona, Tucson as a postdoctoral associate. From Tucson he moved to Pittsburgh as a faculty member starting his independent career at Duquesne University. Currently, Dr. Partha Basu is a professor of Chemistry and Biochemistry at Duquesne University. In 1998 he joined Duquesne as an assistant professor, earned his tenure and promotion in 2003, and promoted to the rank of full professor in 2010.

Professor Basu's research interest is in the broad area of metals in biology. Professor Basu has published 86 peer reviewed research papers, four teaching manuscripts and three patents. He has the pleasure of graduating several Ph.D. students and privilege to work many talented undergraduate students who coauthored several papers with him. He has served as a guest editor for a special volume on 'Arsenic' in the journal 'Molecular Nutrition and Food Science', a Wiley

publication. He is currently serving as a guest editor for a special issue of 'Metallomics' focusing on 'Microbial Metallomics'. He is an associate editor for 'Frontier in Microbial Chemistry' and in the Editorial Advisory board of Metallomics. He has won Duquesne University Presidential Excellence Award, National Research Service Award from the National Institutes of Health, Research Innovation Award from the Research Corporation, Young Scientist Award from the Indian National Science Academy. He was inducted in Duquesne University's Research Hall of Fame.

Professor Basu is an active member of the ACS. He has organized two symposia at the ACS National Meetings, serves including chairing in many committees for the SSP and SACP, and directs the Center for Metals in Biological Systems at Duquesne University.

Artrease Spann

Artrease Spann received her B.S. in biochemistry from Spelman College, M.S. in Chemistry from Georgia Institute of Technology. She has a Ph.D. in physical chemistry from Florida State University under the advisement of Nobel Laureate Sir Harold Kroto, researching the development of self-healing materials containing carbon nanotubes. In addition to research and teaching, Artrease was selected to be a

Gubernatorial Fellow in Florida, working under the executive office of the governor writing policy to improve Florida's science education, as well as oversee the state's science curriculum. Artrease has been heavily involved in community outreach, serving as vice president for Florida State's Graduate Women in Science and mentoring undergraduates in science as a part of the Alliance for Minority Participation. She has also served on the national executive board for the Nation Society of Black Physicist and was a founding member of Georgia Tech's National Organization of Black Chemist and Chemical Engineers Student Chapter. She is currently chair of the Pittsburgh chapter of the Younger Chemist Committee. Artrease works for Heinz as a packaging engineer.

Secretary

Evonne Baldauff

Evonne Baldauff

Evonne Baldauff received her B.S. in Chemistry from Grove City College in 2000 followed by a Ph.D. in Inorganic Chemistry from Purdue University. She currently serves as Chair the Department of Chemistry & Forensic Science at Waynesburg University where she is an Assistant Professor of Chemistry. Her research interests range from characterizing inorganic materials to studying learning outcomes in

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BALLOT
For Offices of the
2013
Pittsburgh Section, American Chemical Society

Chair-Elect

(Vote for 1)

Partha Basu

Artrease Spann

Secretary

(Vote for 1)

Evonne Baldauff

Treasurer

(Vote for 1)

Amy Rupert

Zhiyuan (Zack) Sun

Treasurer - Elect

(Vote for 1)

Angelica Andreoli

Director

(Vote for 1)

Huayun Yu

Councilor

(Vote for 3)

Richard (Rich) Danchik

Joseph (Joe) Jolson

Robert Mathers

Michelle Ward

INSTRUCTIONS

Instructions are for Pittsburgh Members who receive a paper copy of The Crucible. Those receiving electronic copies will receive their ballot electronically via an email notification and code from www.vote-now. Ballot must be placed and sealed in the enclosed blank envelope. Do not write on the blank envelope. Place the blank envelope in the enclosed printed envelope which is addressed to Pittsburgh Section Secretary, Fu-Tyan Lin. **Print your return address in the upper left hand corner and sign your name on the line provided. Ballots received in any other manner will be disqualified. Ballots must be received by November 20, 2012.**

Candidate Bio's Continued from Page 4

the general chemistry laboratory. She lives close to farms, but not on one, in Eighty Four with her husband and young son and greatly enjoys cooking for them.

Treasurer

Amy Rupert
Zhiyuan (Zack) Sun

Amy Rupert

Amy Rupert just completed her Ph.D. work at the University of Pittsburgh in the chemistry under the direction of Stephen Weber and will be officially receiving her degree in December 2012. She has plans to begin post-doctoral research in the lab of Dr. Michael Zigmond of the University of Pittsburgh neurology department in November, studying Parkinson's disease as well as the effects of stress on addictive behaviors. She enjoys being involved in her professional community, attending conferences, holding memberships in many local organizations, as well as serving on the executive committee of several of these organizations. As an undergraduate, she was vice president of a professional chemistry fraternity, responsible for the education of new incoming members. At the University of Pittsburgh, she held secretary position and helped organize many events for the honors fraternity for chemistry graduate students, Phi Lambda Upsilon (PLU). She has also served on the first executive committees of the Pittsburgh sections of the WCC and YCC, both of which are in their infant stages. She is enthusiastic about promoting the sciences and enjoys the social and networking aspects of these organizations. She is also prides herself on being organized and efficient and thinks she would both enjoy and help fulfill a need if elected into the treasurer position on the executive board of the local ACS section.

Zhiyuan (Zack) Sun

Zhiyuan (Zack) Sun is a research chemist of the Genomics and Proteomics Core Laboratory at the University of Pittsburgh. He is originally from China, and recently graduated from the University of Illinois at Chicago with a M.S degree in Medicinal Chemistry. Zack's research interest focuses on mass spectrometry application on proteomics studies. Zack has been participating ACS student affiliates activities since 2009. He also attends other academic meeting like the American Society of Mass Spectrometry (ASMS). He recently joined the ACS and is interested in serving in the ACS.

Treasurer - Elect

Angelica Andreoli

Angelica Andreoli

Angelica graduated from the University of Pittsburgh with a Bachelor of Science in Chemistry with ACS certification. She has been a member of ACS since her sophomore year of college. As a full-time undergraduate student, she worked for UPMC for three years in an immunology laboratory where they studied tuberculosis. She was also an undergraduate teaching assistant for physical-chemistry lab I and researched in a pharmaceutical lab that studied novel targets for cancer therapy. During her final year, she interned at Fluorous Technologies Inc. analyzing products synthesized using fluoruous tags and separation media; this internship launched her analytical career. After graduation, Angelica temporarily worked at PPG analyzing metals in paints and coatings. She is now employed as an Analytical Chemist at Boron Specialties LLC where she develops methods for NMR analysis of novel boron chemicals. Angelica is currently taking Sci-Mind separation courses through ACS and is an active member of both SSP and SACP.

Angelica minored in Italian Language so that she could communicate with her relatives living in Italy. Her grandparents immigrated to America during WWII and have only been back to visit their relatives a couple of times. Her studies in the language have allowed her to reconnect her grandparents with their immediate family using online video-chats.

During her spare time, Angelica enjoys cooking and baking. She belongs to a writing group "The Blank Pages" and has also volunteered as a peer educator and emerging leader.

Director

Huayun Yu

Huayun Yu

Huayun Yu is a Scientist at Ferro Corporation. He graduated from Clemson University in 2002 with a Ph.D. in Chemistry. He worked as a Principal Scientist at IRIX Pharmaceuticals, Inc. Florence, SC. Subsequently Huayun came to the Fine Chemicals Division and the the Optical Products Division of PPG Industries, Inc. Recently, he joined the Special Coating and Ink Division at Ferro. He volunteered at organizations such as Pittsburgh Regional Alliance and Pittsburgh Chemical Day.

Huayun is interested in serving as a Director of the ACS to serve people's needs in the chemical field in the Pittsburgh area.

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Candidate Bio's Continued from Page 6

Councilor

Richard (Rich) Danchik
Joseph (Joe) Jolson
Robert Mathers
Michelle Ward

Richard (Rich) Danchik

Dr. Danchik received his B.S. in Chemistry from Duquesne University and earned his Ph.D. in Analytical Chemistry from Wayne State University. He joined ALCOA in the Analytical Chemistry Division of Alcoa Laboratories where his research interests included atomic absorption spectrophotometry, electroanalytical techniques, selective ion electrodes and the development of automated process control systems.

Dr. Danchik became Manager of ALCOA's Environmental Health Laboratory and had the responsibility for the development of new methodology and instrumentation in the field of industrial hygiene chemistry. He also managed the development and operation of the Laboratory. He is now consulting in the areas of analytical chemistry, environmental and industrial hygiene chemistry.

Societies: American Chemical Society (Councilor-1991 to present;), American Industrial Hygiene Association, American Institute of Chemists (Fellow), American Society for Testing Materials(Fellow)-D-19,Committee on Water Analysis and D-22,Committee on Air Quality(Chairman- 2000 to 2005, Vice-Technical Chair- 2005 to present), Sigma Xi, Society for Analytical Chemists of Pittsburgh(SACP), Spectroscopy Society of Pittsburgh(SSP), and Phi Lambda Upsilon.

Dr. Danchik was the 1991 Chairman of the Pittsburgh Section of the ACS. He has been actively involved with Pittcon and was the 1986 Conference President. He has chaired numerous committees for the SSP. He was the 1979-1980 Chairman of the SACP. He is also active in the National ACS and is a member of the International Activities Committee (1991-2000; 2005 to present) and was the Subcommittee Chairman of the Meetings and Exposition Committee (2000 -2006). He was a Pittsburgh Section Director for the ACS (1992-2004). He represents the United States on the International Standards Organization (ISO) for Workplace Atmospheres. He received the Moyer Thomas Award from ASTM in 2008. He has been a member of the Advisory Board of Analytical Chemistry and has authored or co-authored a number of technical articles and has previously authored the Nonferrous Metallurgy Review for Analytical Chemistry. He was also a member of the Editorial Board of the Applied Occupational and Environmental Hygiene Journal.

Joseph (Joe) Jolson

In 2004, Dr. Joseph D. Jolson founded Custom Client Solutions (CCS) to provide product support, investment, intellectual property, and litigation services to clients in the battery, gas detection, and respiratory protection business. More information on CCS can be found at www.customclientsolutions.net.

From 2000 – 2004, as technical director of CSE Corporation, Dr. Jolson oversaw the development of emergency-breathing devices & air quality monitors. In this capacity, he improved product quality, solved manufacturing problems, and reduced costs; enabling CSE's sales to grow from \$6.8 to \$13 million/year.

From 1996 – 2000, as trace gas analysis marketing and applications laboratory manager of the Mine Safety Appliances Company, Inc., Dr. Jolson was responsible for business development

and product management. He analyzed detection technologies for anesthetic agents, chemical warfare agents, explosives, illicit drugs, pesticides, and VOCs. He oversaw qualification testing and applications support for a \$100 million/year division.

From 1989 – 1996, Dr. Jolson held several R&D management positions. During this time, the teams he supervised developed over a dozen commercially successful catalytic combustible and electrochemical gas sensors, and several gas detection instruments. Dr. Jolson invented the lithium-silver oxide battery and improved lithium-iodine and thermally activated batteries.

From 1985 – 1988, Dr. Jolson set up and operated a facility to produce specialty batteries for the U.S. Government. He has 11 U.S. Patents, 13 publications, and 21 presentations. He earned a Ph.D. in Analytical Chemistry from the SUNY at Buffalo.

Dr. Jolson became active in the ACS – Pittsburgh Section professional relations committee in 2000. Since becoming chair of the committee in 2004, he made changes to the Job Searching for Chemical Professionals workshop that increased attendance from 10-15 to 62-73 job seekers per year. In 2008, he became an ACS National Career Counselor. In this capacity, he provides support to job seekers by phone, e-mail and at National meetings.

In 2007, Dr. Jolson became active in the ACS – Pittsburgh Section Energy Technology Group. This enabled him to champion the formation of the Pittsburgh Energy Technology Group and help organize the 2008 Future of Energy Symposium. In 2009, he served as ACS – Pittsburgh Section secretary. Since 2010 and 2011, he has been an ACS – Pittsburgh Section alternate councilor and director, respectively. He has chaired the SACP employment committee since the 2010-11 year.

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CARNEGIE MELLON



PART-TIME STUDY

This interdisciplinary program of part-time study (currently in its 39th year) can lead to a Master of Science degree in Colloids, Polymers and Surfaces (CPS) offered by Carnegie Mellon University or can be taken for enrichment only. Course work is relevant to many industries that involve the application of nanoparticles, macromolecules and interfaces to product manufacturing and development such as:

- nanotechnology
- coatings and pigments
- pharmaceuticals
- surfactant-based products
- food science
- environmental science
- polymers/advanced materials and biomaterials.

Participating faculty are drawn mainly from the Departments of Chemical Engineering and Chemistry.

Applications for Spring 2013 enrollment are now being taken. Classes begin January 14, 2013, and new students may enroll in the entry-level course, Physical Chemistry of Colloids and Surfaces.

For additional information, contact:
Dr. Annette M. Jacobson, Director
CPS Program

Carnegie Mellon University

Email: jacobson@andrew.cmu.edu

Website: www.cheme.cmu.edu/education/mscpscatalog.htm

Candidate Bio's Continued from Page 7

Robert Mathers

Robert Mathers graduated from North Carolina State University with a B.S. in chemistry in 1996. He worked for a year in industry as a chemist before entering graduate school. After obtaining a PhD in Polymer Science at The University of Akron in 2002, he spent two years as a postdoctoral researcher at Cornell University in the Department of Chemistry and Chemical Biology. Robert is an Associate Professor of Chemistry at The Pennsylvania State University in New Kensington. His research interests include utilizing renewable resources for sustainable polymeric materials. Recently, he spent a one-year sabbatical at Carnegie Mellon University. He regularly attends and presents at ACS National meetings. Robert has served as secretary (2008 and 2010) and alternate councilor (2011) for the Pittsburgh ACS section.

Michelle Ward

Michelle Ward joined the Department of Chemistry at the University of Pittsburgh as a faculty member in the summer of 2009. Michelle is an analytical lecturer and the coordinator for the Introductory Analytical Chemistry and Instrumental Analysis laboratory courses. She was awarded the J. Kevin Scanlon Award for dedication in enhancing science education in 2011. Michelle received a B.S.Chem. in 1994 and a B.S.Ed. with credentials in secondary education in 1996, both from the University of North Dakota. She taught high school chemistry in the greater Pittsburgh area, prior to enrolling in the graduate program at the University of Pittsburgh. Michelle received a M.S. in 2003 and completed her Ph.D. in late 2008, under the direction of Professor Sanford Asher, working on the development of smart photonic crystal hydrogel materials.

Michelle joined both the Spectroscopy Society of Pittsburgh and the Society for Analytical Chemists of Pittsburgh during graduate school, and has become an active member serving on several committees for both groups since graduation. Committee assignments have included: Publicity Committee Chair, Tripartite Program Chair, Undergraduate Analytical Research Grant Chair, College Chemistry Scholarships Chair-Elect, Membership and Directory Chair-Elect, Summer Intern Program, Technical Program, ACS Graduate Student Summer Fellowship, December Meeting, Publicity, Television, and Media, Web Coordinator, Elementary School Science Education Award, High School Equipment Grants, and Starter Grants. Additionally, Michelle served as conference week staff for the past three years at PITTCON.

Michelle also joined Iota Sigma Pi National Honor Society for Women in Chemistry during graduate school and has been served as the members-at-large web coordinator and newsletter coeditor for two years. Michelle was elected onto the Iota Sigma Pi National Council in 2011, and is currently serving in the role of National Editor.

Michelle has been a member of the American Chemical Society for the past five years, but became actively involved in the Pittsburgh Section of the ACS within the past two years. Michelle is currently serving as Chair of the Pittsburgh Section. In addition to the duties involved in the Chair position, she has organized the newly activated Greater Pittsburgh Area Women Chemists Committee, serving as Chair for both the foundational year and this current year. As her time as Section Chair is coming to end, Michelle looks forward to staying active and contributing to the Pittsburgh Section in other roles.



The Spectroscopy Society of Pittsburgh



November Meeting, Wednesday, November 14, 2012
Duquesne University – Bayer Learning Center (Wolfe Lecture Hall)

Technology Forum Speaker's Presentation 5:30 PM • Social Hour 5:30 PM • Dinner in the City View Café (6th Floor) 6:30 PM
Business Meeting 8:00 PM • Technical Program Speaker's Presentation 8:15 PM

TECHNOLOGY FORUM - 5:30 PM

John Ventre, Expert on Mayan "End of the World" Prediction
"2012 End Time Prophecy"

The Mayan culture lasted from 300 BC to 1500 AD. The period I will review is from 300-900 AD. This Stone Age culture suddenly developed suspension bridges, astronomy, medicine and the most accurate calendar we have ever seen. More accurate than our Gregorian calendar because they started at 12/21/2012 and counted backward. Mayan records say that a dark rift exists in the center of the sky. In 2002 we discovered a black hole at the center of our Milky Way Galaxy. In 1993 we discovered that from the earth's view, the sun will rise in the center plane of the Milky Way Galaxy on the morning of 12/21/2012. This happens every 25,800 years due to the fact that our rotation changes by one degree every 72 years. The Mayans have three calendars which end on 12/21/2012 and one is on a 25,800 year cycle. The last Ice Age started 25,800 years ago and marked the end of Neanderthal and the rise of Cro-Magnon man whose rise and departure was too quick to be explained by evolution. The Myans never said there will be an apocalypse but will there be another change for Homo sapiens? The Jewish 7000 year calendar also ends around 2012 and the Kyoto treaty expires in 2012. The solar cycle of sun spots peaks in 2012 and every summer has been hotter than the previous since 2000 (except 2009).

The most sacred Mayan text is the Popul Vuh which tells of extraterrestrials coming to earth and creating a perfect human species and then destroying it and replacing it with a "dumbed down" version. This is a similar story to older Sumerian tablets found 10,000 miles away.

The Mayan long count is on a 5125 year cycle and also ends on 12/21/2012. Stone Henge and the Great Pyramids of Giza were built 5125 years ago. Some believe that there will be a vibrational shift in our consciousness caused by the thirteen perfectly carved crystal skulls unearthed years ago. The Mayan legend of Kukulcan says that a Caucasian male with blond hair rose from the sea and had an elongated skull. He gave the Mayans their technology and before returning to the sea, he said that he would return. When the Spaniard Cortez arrived in 1519 he was mistaken for the return of Kukulcan. Cortez brought with him diseases that killed 90% of the Aztec population and what remained of the Mayans while he raided their gold and burned their libraries similar to the burning of the Library of Alexandria by the Romans.

Bio: Please see Bio on Page 15

TECHNICAL PROGRAM - 8:15 PM

"Providing Answers in the Field: Advances in Handheld Spectrometers"

Dr. Richard Crocombe, ThermoFisher

"Small" spectrometers fall into three broad classes: small versions of laboratory instruments, providing data; dedicated analyzers, providing actionable information; process analyzers, providing quantitative or semi-quantitative information to a process controller. The emphasis of this talk is on handheld dedicated analyzers. Increasingly, the lab is moving to the field. If you take a product that's historically been large, expensive and complicated to use and you make it small, affordable, rugged and easy-to-use, you can dramatically improve the efficiency of the testing process. We have found that if you can deliver lab-quality testing directly to the field, giving people reasonably priced, reliable, easy-to-understand, real-time results, then you transform the way they do business. For elemental analyzers (x-ray fluorescence), these applications can be as varied as heavy metals in toys, jewelry assay and field geology. For molecular analyzers (Raman, FT-IR and near-infrared) this can be narcotics identification, counterfeit pharmaceutical detection, hazardous and explosive materials identification and raw material confirmation in chemical and pharmaceutical manufacturing. This talk will describe these applications, the technologies in handheld analyzers and prospects for the future.

Bio: Please see Bio on Page 15

Dinner Reservations: Please register on-line at <http://www.pittcon.org/misc/societies/ssprsvp.php> to make dinner reservations NO LATER THAN FRIDAY, November 9, 2012. This month's entrée is Shiitake Stuffed Chicken. Dinner will cost \$8 and checks can be made out to the SSP. If you have any dietary restrictions, please indicate them when you RSVP. **Parking Instructions:** The Duquesne University Parking Garage is located on Forbes Avenue. Upon entering the garage, receive parking ticket and drive to upper floors. Pick up a parking chit at the dinner or meeting.

Greater Pittsburgh Younger Chemists Committee



The Younger Chemists Committee (YCC) is a group within the American Chemical Society (ACS) that advocates for and provides resources to early-career chemists (under 35) and professionals in the chemical sciences and related fields in both academia and industry.

November Meeting

November 29th

6:30 pm

307 Eberly Hall

University of Pittsburgh

Our November meeting will feature a speaker on the ACS executive board. We will provide a light dinner. This event is free for members, and \$5 for non-members. Please RSVP for the November meeting *here*.

For meeting details and other upcoming events please see the ycc website at www.pghycc.org.

New Pittsburgh Section ACS Operations Manual

The Executive Committee of the Pittsburgh Section ACS has approved a new operations manual. The manual is posted on the section's website at <http://www.pittsburghacs.org/administrative/operations-manual/>

25th Annual Faraday Lecture

“From Fire to Fuel Cells”



David D'Emilio
University of Pittsburgh

Spectacular demonstrations will delight and enrich students, teachers, and the general public. Come learn about combustion, exploding balloons, and other spectacular scientific phenomena. You will sit at the edge of your seat and will see science in action.

Tuesday, November 13, 2012

7:30 pm

Soldiers and Sailors Memorial Hall
4141 Fifth Avenue in Oakland, PA

FREE & OPEN TO THE PUBLIC

Complimentary Tickets at the Door

Sponsored by

The Spectroscopy Society of Pittsburgh
The Society for Analytical Chemists of Pittsburgh
www.sacp.org or www.ssp-pgh.org



Mass Spectrometry Discussion Group of Pittsburgh



POLYMER MASS SPECTROMETRY: A SHORT COURSE

Sponsored by the Spectroscopy Society of Pittsburgh and **Open to the Public**

Monday, November 19, 2012, 8:30 AM - 12:30 PM

Duquesne University, Africa Room, Student Union

600 Forbes Avenue, Pittsburgh PA 15282

**must park in Forbes Avenue Parking Garage for free parking*

SCHEDULE

9:00-10:30	Basics of MS for polymer analysis; GC/MS of polymers
10:30-12:00	MALDI fundamentals and applications
12:00-1:00	Lunch
1:00-3:00	Polymer analysis by tandem MS, LC-MS, and ion mobility MS
3:00-4:00	Expert Panel Discussion and Q&A Session

Lecturers: Phil Price, Kureha PGA, Kevin Owens, Drexel University, Chrys Wesdemiotis, University of Akron

'Polymer Mass Spectrometry: a Short Course' will provide both seasoned and novice scientists with an introduction and overview of the theory, practical approaches and use of MALDI and liquid chromatography/mass spectrometer detection (LC/MS) in the polymer laboratory. Real world examples and approaches will be covered. The course will conclude with an open question and answer session with our experts.

Our lecturers have a combined 110 years of polymer mass spectrometry experience. Dr. Price spent 33 years at Union Carbide which later became Dow Chemical. Since 2009, he has been with Kureha PGA LLC. Dr. Owens has been running the mass spectrometry core facility at Drexel University in Philadelphia for 23 years. Dr. Wesdemiotis has been running the mass spectrometry core facility at the University of Akron for 23 years.

Registration Fee: \$25 – Lunch & Parking Included

Please make check payable to SSP and mail the form below by **November 14** to:

Jenna Sabot

MSDG – Continuing Education Symposium

300 Penn Center Boulevard, Suite 332, Pittsburgh, PA 15235

For more information, visit the MSDG website at <http://chemed.chem.pitt.edu/ssp-msdg/> or contact Heather Juzwa by email at hljuzwa@shimadzu.com.

SSP Continuing Education Registration Form – November 19, 2012

Name: _____ Affiliation: _____

Mailing Address: _____

Email: _____ Phone: _____

Dietary Restrictions: _____



Society for Analytical Chemists of Pittsburgh



November Meeting

Monday, November 5, 2012

8:00 PM

Duquesne University, Laura Falk Building

“Sensing Virus Capsids and Monitoring Their Assembly with Nanofluidic Devices”

Dr. Stephen Jacobson

Department of Chemistry, Indiana University

Abstract:

Substantial attention is being paid to ion transport, sensing, and separations in nanofluidic devices because of the unique transport properties these nanoscale conduits exhibit and their potential analytical applications. Of particular interest is developing label-free, nondestructive techniques for rapid sensing, characterization, and sorting of particles with nanometer dimensions. The resistive-pulse technique measures changes in ion current resulting from transit of particles through an electrically biased nanochannel filled with electrolyte. To develop devices to sense and characterize individual hepatitis B virus (HBV) capsids, two V-shaped microchannels are machined into a substrate by microfabrication techniques. Nanochannels are then fabricated to bridge the ~30- μ m gap between the microchannels. For resistive-pulse sensing of the virus particles, we use nanochannels with one, two, and three pores in series. With two or more pores in series, we can track individual particles and measure their physical properties, e.g., electrophoretic mobility. In other designs, we are able to mix dimers of the core protein and monitor the assembly of single HBV particles in real time and at biologically relevant concentrations.

Biography:

Stephen C. Jacobson received a B.S. in mathematics from Georgetown University in 1988 and a Ph.D. in chemistry from the University of Tennessee in 1992. After graduate school, Stephen was awarded an Alexander Hollaender Distinguished Postdoctoral Fellowship at Oak Ridge National Laboratory (ORNL), and in 1995, he became a research staff member at ORNL. In 2003, Stephen joined the faculty at Indiana University and is currently a professor in the Department of Chemistry. His research efforts are directed toward miniaturization of analytical instrumentation with an emphasis on micro- and nanofluidic devices. Stephen and his research group are currently working in the areas of microfluidic separations, nanofluidic transport, cancer screening, virus sensing, and bacterial adhesion.

Dinner Reservations:

Please email the SACP Administrative Assistant, Valarie Daugherty at daugherty@pittcon.org by Wednesday, October 31, 2012 to make dinner reservations. Should you not have email, please call 412-825-3220, ext. 204. Dinner will cost \$8 (\$4 for students) and checks are to be made out to the SACP. If you have any dietary restrictions, please let Valarie know when you leave message.

Parking:

Duquesne University Parking Garage entrance is on Forbes Avenue. Upon entering the garage, you will need to get a parking ticket and drive to upper floors. Bring your parking ticket to the dinner or meeting for a validation sticker. Please contact Duquesne University, if any difficulties should arise.

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Section's Website:
www.pittsburghacs.org

Facebook Page:
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CERM 2014

Save the Date!

The Central Regional Meeting of the ACS will be held from October 1-4, 2014 at the Doubletree by Hilton Green Tree, Pittsburgh.

For more information, visit the CERM website at www.acscerm2014.org.



Report on: ACS Fall 2012 NATIONAL MEETING – Philadelphia, PA

Four of ACS Pittsburgh Section Councilors were in attendance at Philadelphia, PA.

The meeting attracted approximately 13,300 attendees and an exposition of 438 booths.

The Candidates for 2013 President-Elect are Thomas J. Barton and Luis A. Echegoyen.

The candidates for Directors-at-Large for 2013-2015 term: Carol A Duane, Valerie J. Kuck, Helen A. Lawlor, and Ingrid Montes. The election of two Directors-at-Large will be conducted in the Fall. Ballots will be mailed to the Council on or before October 10, 2012.

The Council elected G. Bryan Balazs, Dawn A Brooks, Michelle V. Buchanan, Alan B. Cooper, and Ingrid Montes for the 2013-2015 term on the Committee on Committees.

The Council elected Frank D. Blum, Mary K Carroll, Lee H. Latimer and Carolyn Ribes for the 2012-2015 term on the Council Policy Committee.

The Council elected Cherlyn Lavaughn Bradley, Milagros Delgado, Carol B. Libby, Les W. McQuire and Donivan R. Porterfield for the 2013-2015 term on the Committee on Nominations and Elections.

The Committee on Meetings & Expositions reported that the total meeting registration was 13,320. Of these, 7,773 were regular registrations, 1,249 were exhibitors, 3,159 were students, 733 were exposition only, and 337 guests. The exposition had 438 booths with 280 companies.

The Council voted not to approve the Petition on Candidate Comment in C&EN which sought to restrict candidates for election to the Board of Directors from publishing comments in C&EN from May through the balloting period. The Council also voted not to approve the Petition on International Chemical Sciences Chapters Funds. This petition sought to clarify that the Board of Directors may grant funds to international chapters for specific purposes.

As part of a regular performance review, the Council voted to continue the Joint Board-Council Committees on Chemists with Disabilities and on Professional Training.

The Council voted to establish a Joint Board-Council Committee on Senior Chemists whose mission is to enrich the educational, technical and cultural lives of the ACS Membership by ministering to and employing the talents of senior ACS members by: sharing with ACS members of all ages a rich variety of personal experiences and expertise gained over many years of professional service; fostering interest and participation in the science of chemistry through community outreach, especially in grades K-12; acting as science advisors/ambassadors for the purpose of cultural exchange at home and abroad; providing senior ACS members with challenging, diverse, and enjoyable professional experiences that enable them to contribute to the cultural experiences of their communities; and recommending policies that address issues of interest to senior chemists. The committee is aimed primarily at members over 60 years of age. Next, the Board of Directors must vote to establish the committee.

One of the Society's long-time concerns has been the decline in the number of domestic Regular Members, that is, members paying full dues. The impact of this decline has been offset, as we have reached record membership levels, by increases in the number of international Regular Members, and the 2009 addition of Student Member Undergraduates. While the number of regular domestic members paying less than full dues has decreased from 33,000 to 29,000 in the last five years, this is still significantly more than the number of student members added.

The Council voted to shift two local sections in District II (Hampton Roads and Western Maryland) to District III. (The two local sections had agreed to the shift.)

The Council passed a resolution to honor the 100th anniversary of the birth of Glenn T. Seaborg, Chemistry Nobel Laureate and past ACS President.

ACS President Bassam Shakhshiri presented and moderated a discussion on "What major efforts should ACS pursue to help alleviate water and other global challenges?" Members of the ACS feel a responsibility as scientists and citizens to help address global challenges facing society in the 21st Century to help sustain Earth and its people. These challenges include increasing population growth, limited natural resources, malnutrition, disease, climate change, violence and war, and the denial of basic human rights, including the right to benefit from scientific and technological progress. This discussion focused primarily on the crisis of available water suitable for drinking, agriculture and industry.

The Chair of the Board gave an update on the ACS vs. Leadscope litigation. As of this meeting, there is still no opinion announced by the Ohio Supreme Court on ACS's appeal in this case, despite the fact that oral arguments were presented nearly a year ago. We have no information on when an opinion might be delivered.

The Board of Directors voted to approve an advance member registration fee of \$370 for national meetings held in 2013. The Board voted to reauthorize funding for inclusion in the 2013 proposed budget the ACS Science Coaches program and the ACS Global Research Experiences, Exchanges, and Training Program (GREET).

The ACS Leadership Institute will be held in Dallas, Texas, January, 25-27, 2013, for new committee, local section, and division chairs, and other volunteer governance members.

The 25th anniversary of National Chemistry Week will be celebrated October 21-27, 2013 with the theme, Nanotechnology- The Smallest BIG Idea in Science." All local sections are encouraged to participate in NCW and plan an event that will recognize their coordinators.

Respectfully submitted,
Richard S. Danchik (Author)
Michelle Coffman
Mike Mautino
James Manner
Pittsburgh Section Councilors

**University of Pittsburgh
Chemistry Department
November Seminars**

November 1, 2012

2:30 pm, Chevron 150
Paul Blakemore, Oregon State
University

*“Ambifunctional Molecular Systems in
Organic Synthesis”*

4:00 pm, Chevron 150

Yin Peng, Harvard University

*“Programming Nucleic Acids Self-
Assembly”*

November 6, 2012

2:30 pm, Chevron 150

Stephen Jacobson, Indiana University

*“Microfluidic Devices for Automated
Synchronization and Analysis of Bac-
teria”*

November 8, 2012

2:30 pm, Chevron 150

Kevin Burgess, Texas A&M University

*“Designing Small Molecules that
Mimic Protein-Protein-Interface
Regions: Should we be Searching for a
Big Fish or Moby Dick?”*

4:00 pm, Chevron 150

Phillip Geissler, University of California
- Berkeley

“TBA”

November 15, 2012

2:30 pm, Chevron 150

Daniel R. Gamelin, University of
Washington

*“Dopants and Charge Carriers in Col-
loidal Quantum Dots”*

4:00 pm, Chevron 150

Richard Crocombe, Thermo Fisher

“TBA”

November 28, 2012

4:00 pm, Chevron 150

34th Annual Bayer Lecture Series

Daniel Nocera, Massachusetts Institute
of Technology

“TBA”

November 29, 2012

2:30 pm, Chevron 150

34th Annual Bayer Lecture Series

Daniel Nocera, Massachusetts Institute
of Technology

“TBA”

**ACS Energy Technology Group
Co-sponsored by the Pittsburgh Chemist Club**

Monday, November 12, 2012

***“Economic Analysis of Baseload Power Plants
Meeting Current & Possible Future GHG Regulations”***

Nicholas Siefert

Department of Energy- NETL

Social Hour 6:00 PM, Dinner 6:30 PM, Talk 7:30 PM

Spaghetti Warehouse

26th & Smallman Streets, Strip District, Pittsburgh PA

Free parking behind the restaurant

Nick Siefert is a mechanical engineer at NETL while obtaining his Mech. Eng. Ph.D. at Carnegie Mellon University. He attended Princeton University while on an AFROTC scholarship. Nick served his active duty commitment at the Air Force Research Laboratory in Dayton, OH while obtaining a Master's Degree in Engineering Physics at the Air Force Institute of Technology. Before joining NETL, Nick worked for a waste-to-energy gasification company, Alter NRG. His current research at NETL is on integrating waste/coal gasification reactors with gas turbines and fuel cells in order to generate low-cost electricity while capturing carbon dioxide for underground sequestration.

This talk will present a detailed economic analysis of baseload fossil fuel and nuclear power plants that can meet existing EPA regulations on greenhouse gas emissions. Current EPA regulations limit the carbon dioxide emissions from new, large-scale power plants to less than 1 lb of CO₂ per kWh of electricity generated. Conventional baseload power plant designs that meet this criterion are nuclear fission and natural gas combined cycle (NGCC) power plants. The DOE's National Energy Technology Laboratory (NETL) has been developing advanced coal based power plant designs to meet current EPA regulations and that push towards >90% CO₂ capture and sequestration (CCS) from coal-fired power plants, such as the following system configurations: (pulverized coal fired combined cycle with carbon capture and storage) PCC-CCS, (integrated gasification combined cycle) IGCC-CCS, (Advanced) Adv. IGCC-CCS, (integrated gasification fuel cell combined cycle) IGFC-CCS, and (Advanced) Adv. IGFC-CCS. Currently, a conventional NGCC power plant configuration yields the lowest baseload levelized cost of electricity (LCOE). In addition to analyzing the economic viability of these power plant configurations under the current EPA regulations and the current price of natural gas, we also analyze what type of base load power plant configuration yields the lowest LCOE as a function of the price of natural gas and the price of emitting CO₂ into the atmosphere.

For reservations, please contact Elliott Bergman by 1:00 PM on Friday, November 9, 2012 at elliott.acstechnology@gmail.com. Our meetings are open to all. Cash or check payable to: Energy Tech Pgh Section ACS.

The cost of the dinner is \$17 including tax and gratuity. Alcoholic drinks cost extra. Please specify your preference from the following menu choices: Spaghetti with meatballs, 15-layer lasagna, Four-cheese manicotti, Fettuccini Alfredo, or Grilled chicken Caesar salad. Also indicate special needs such as vegetarian, gluten-free, etc.

Spectroscopy Society of Pittsburgh Speaker Bio's Continued from Page

Bio: John Venture

John Venture is the retired State Security and Public Affairs Director for UPS and was his Companies liaison to his local Congressman. John and other Executives would meet quarterly with 4 Senators and 22 Congress people. John used to also head up his companies crisis management team for 3 states. John is a member of the FBI's InfraGard group and the DHS Regional Business Coalition. John is the Pa State Director for the Mutual UFO Network. John is the author of the novel's "12/21/2012 A Prophecy", and "The Day After 2012." John is also a lifetime member of the NRA. John sits on the Board of Directors for JDRF, the Westmoreland Economic Growth Connection, MUFON, and Rotary. John is a United Way Tocqueville Society member for charitable giving. John is the co-inventor of the Thor Wood Splitter and owns the UFO themed Mexican restaurant trademark "Flying Salsa". John appeared in the Discovery Channels "UFOs over Earth" series in 2008 and the History Channels "UFO Hunters" in 2009, and the Anderson Cooper show and Discovery Canada in 2012. John has appeared on numerous radio shows and is a speaker at various UFO and Paranormal conferences such as the MUFON Symposium, UFO Congress and Fortean Conference. John gives four different presentations: 2012 Prophecy, The Case for UFOs, UFOs in Art and History and the 2008 Pa UFO Wave.

Bio: Richard Crocombe

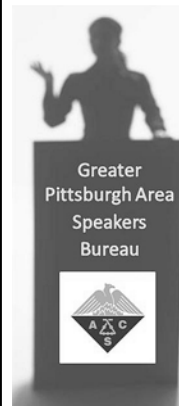
Richard Crocombe studied chemistry at Oxford University in England and then went to the University of Southampton, also in England, for a Ph.D. with Prof. Ian Beattie, working on vibrational spectroscopy of unstable inorganic species. Following that he did a postdoctoral fellowship at the University of Tennessee, with Prof. Gleb Mamantov, working on the development and applications of FT-IR spectroscopy.

He then joined Bio-Rad Digilab Division in Cambridge, MA, and was there for twenty years in a wide variety of roles. Towards the end of that time a major focus was the development of FT-IR spectroscopic imaging. He led a joint development project with Santa Barbara FocalPlane for a series of more reliable, and lower cost, two-dimensional array detectors that could be read out at 5KHz and above, and therefore be used with conventional rapid-scanning FT-IRs, making FT-IR imaging a routine technique.

Following Bio-Rad's sale of its spectroscopy business, he left to join Axsun Technologies, who had developed a chip-sized optical module. He took this technology and moved it into analytical spectroscopy, introducing the first spectrometer of this type at FACSS in October 2003: a chip-sized near-infrared spectrometer. Continuing the theme of miniature instrumentation (but working at much shorter wavelengths!), he joined Thermo Fisher Scientific's handheld x-ray fluorescence (XRF) business in 2007. His initial work there, in a business development role, lead to Thermo Fisher Scientific's acquisitions of Ahura Scientific and Polychromix in 2010, adding portable molecular analysis (Raman, FT-IR, NIR) to portable elemental analysis (XRF).

He has written a series of review articles on miniature optical spectrometers and their enabling technologies, published in 'Spectroscopy' magazine. In addition, Richard is co-chair of the SPIE 'Next-Generation Spectroscopic Technologies' conferences, and co-editor of the resulting conference proceedings publications. These conferences bring together a wide variety of technology, instrument and algorithm developers for new spectrometers, covering the whole range of the electromagnetic spectrum.

Attention: Speakers Wanted



The Pittsburgh Section of the American Chemical Society is establishing a local speakers bureau and we would like for you to consider joining.

The speakers bureau will be available on our web site and will facilitate the connection between those organizing symposia and speakers from our area.

If you would like to be listed in the Bureau, please provide the following information:

- Name
- Affiliation
- Contact Information:
 - Mailing Address
 - Website (if applicable)
 - Email address
 - Phone
- Keywords/categories related to expertise (up to 5)
- Current CV/Resume (in pdf format)

Any questions should be directed to the Pittsburgh Section Chair, Michelle Ward (muscat@pitt.edu or 412-624-8064)

Applications for Student Travel Awards Now Being Accepted

The Pittsburgh Section of the American Chemical Society has budgeted funds to help encourage undergraduate/graduate student participation in national and regional ACS meetings. The awards are intended to help defray meeting registration and travel-related expenses (lodging, transportation, per diem) for eligible students. To apply for the funds, one should simply complete the application (available on our web site at www.pittsburghACS.org) and return it by the relevant deadline to:

Pittsburgh Section ACS
Travel Grants
Attn: Dr. Michelle Ward
Room 107 / Chevron Science
Center
219 Parkman Avenue
Pittsburgh, PA 15260

Each year, the Pittsburgh Section of the ACS will award up to four \$500 grants to aid our undergraduate/graduate student members in presenting papers or posters at ACS Meetings. Awards will be made based on the scientific merit of the paper/poster to be presented and financial need. The deadlines for receipt of applications are 12/01/2012 (for travel to be completed by 06/30/2013) and 06/01/2013 (for travel to be completed by 12/31/2013).

Our Section is looking forward to helping increase the participation of local students in ACS conferences. If you have any questions, please do not hesitate to contact ACS Chair, Dr. Michelle Ward, muscat@pitt.edu or 412-624-8064.

Pittsburgh Student Travel Award Reports Continued from Page 1

Report by Minjiang Zhong

I feel very honored to be funded by The American Chemical Society Pittsburgh Section for the trip to 244th American Chemical Society National Meeting in Philadelphia. As a fifth year graduate student, co-advised by Professor Krzysztof Matyjaszewski and Professor Tomasz Kowalewski in the Department of Chemistry at Carnegie Mellon University, I have been working on the development of polymeric and carbon-based materials for various applications including energy storage, gas purification, and catalysis.

Last year, I presented my results on the prediction of chain end functionality in controlled radical polymerization (CRP) at the 242th American Chemical Society National Meeting in Denver, where I received a best poster prize at the International Symposium on CRP. During the meeting, I networked with colleagues, exchanged ideas, and was inspired to explore new research directions from the myriads talks I attended. Such helpful experience motivated me to attend the following year and update my fellow chemists on my research.

In Philadelphia, I presented my research titled Nitrogen-Enriched Porous Nanocarbon from Block Copolymer Precursors for CO₂ Capture and Electrocatalysis of Oxygen Reduction. In this talk, I summarized my recent research progress on the controlled synthesis and characterization of porous nanocarbon materials. In this work, polyacrylonitrile-block-poly(butyl acrylate) copolymers (PAN-b-PBA) with a phase-separated nanostructure were used as carbon precursors. Taking advantage of the large surface area, bi-continuous morphology and incorporation of nitrogen functionalities originating from PAN precursors, such carbon materials into were utilized in various applications such as electrode materials for CO₂ sorbents and electrocatalytic agents for oxygen reduction. I received positive feedback and useful suggestions from the audience during the question session and further discussed important details with them after my talk. I also attended many talks and poster sessions, where I interacted with many chemists in various fields. These interactions cultivated opportunities and even established collaborations which will facilitate future research.

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PITTSBURGH SECTION OFFICERS

Chair

Dr. Michelle Ward
Room 107
Chevron Science Center
219 Parkman Avenue
Pittsburgh, PA 15260
muscat@pitt.edu
412-624-8064

Chair-Elect

Jay Auses
Department of Chemistry
Dietrich School of Arts and
Sciences
University of Pittsburgh
244 Chevron Science Center
219 Parkman Avenue
Pittsburgh, PA 15260
412-624-8500
jpauses@pitt.edu

Secretary

Fu-Tyan Lin
15 Barton Drive
Pittsburgh, PA 15221
412-731-0620
ftlflml@comcast.net

Treasurer

Emanuel Schreiber
University of Pittsburgh
Genomics and Proteomics
Core Laboratories
3501 Fifth Ave.
BST-3, Room 9035
Pittsburgh, PA 15260
Office phone: 412-624-6862
e-mail: manny@pitt.edu

Services

Volunteers Needed!

There are a number of volunteer opportunities in the Pittsburgh ACS section! If you are interested in volunteering, please contact Jim Manner at manner1@comcast.net!

Crucible Deadline

The deadline for items submitted to The Crucible is the 1st of the month prior to publication.

For example, all items for the December 2012 issue must be to the editor by November 1, 2012.

The Crucible

The Crucible is published monthly, August through May. Circulation, 2,500 copies per month. Subscription price, six dollars per year. All statements and opinions expressed herein are those of the editors or contributors and do not necessarily reflect the position of the Pittsburgh Section.

Editor: Traci Johnsen
124 Moffett Run Rd.
Aliquippa, PA 15001
Phone: 724-378-9334
tracijohnsen@comcast.net

Advertising Editor: Vince Gale
MBO Services
P.O. Box 1150
Marshfield, MA 02050
Phone: 781-837-0424
cust-svc@mbo-services.net

Career Opportunities

SEARCHING FOR THAT SPECIAL JOB?

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- Hospitals for technical and research personnel

There are several web sites that may help you search for these open positions.

- www.mboservices.net/recr_disp.php
- <http://pubs.acs.org/chemjobs/>

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The Crucible

A newsletter of the Pittsburgh Section of the American Chemical Society

124 Moffett Run Rd.
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Change of Address

If you move, notify the American Chemical Society, 1155 Sixteenth Street, N.W., Washington, D.C. 20036.

To avoid interruption in delivery of your CRUCIBLE, please send your new address to Traci Johnsen, 124 Moffett Run Rd., Aliquippa, PA 15001. Allow two months for the change to become effective.

Pittsburgh Area Calendar

Monday, November 5

Society for Analytical Chemists of Pittsburgh

“Sensing Virus Capsids and Monitoring Their Assembly with Nanofluidic Devices”

Dr. Stephen Jacobson, Department of Chemistry, Indiana University

Duquesne University, Laura Falk Building, Pittsburgh, PA

Saturday, November 10

WCC Fall Social Event

The Church Brew Works, Pittsburgh, PA

Monday, November 12

ACS Energy Technology Group Joint With the ACS Pittsburgh Chemists Club

“Economic Analysis of Baseload Power Plants Meeting Current & Possible Future GHG Regulations”

Nicholas Siefert, Department of Energy - NETL
Spaghetti Warehouse, 26th & Smallman Streets, Pittsburgh, PA

Tuesday, November 13

25th Annual Faraday Lecture

“From Fire to Fuel Cells”

Soldiers and Sailors Memorial Hall, 4141 Fifth Ave, Pittsburgh, PA

Wednesday, November 14

The Spectroscopy Society of Pittsburgh

Duquesne University, Bayer Learning Center, Pittsburgh, PA

Technology Forum

“2012 End Time Prophecy”

John Ventre, Expert on Mayan “End of the World” Prediction

Technical Program

“Providing Answers in the Field: Advances in Handheld Spectrometers”

Dr. Richard Crocombe, ThermoFisher

Monday, November 19

Mass Spectrometry Discussion Group of Pittsburgh

“Polymer Mass Spectrometry: A Short Course”

Duquesne University, Africa Room, Student Union, Pittsburgh, PA

Thursday, November 29

Greater Pittsburgh Younger Chemists Committee November Meeting

307 Emberly Hall, University of Pittsburgh