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The 2014 Nominating Committee of the Pittsburgh Section of the American Chemical Society submits the following slate of candidates for Section office for 2015. 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 17, 2014. 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 will open on November 3rd and close November 17th at Midnight EST. For ballot questions, please contact: Logan Miller, Secretary - ACS Pittsburgh Section, miller.logant@gmail.com. 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
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 of the Department of Chemistry & Forensic Science at Waynesburg University where she is an Associate Professor of chemistry. Her research interests range from characterizing inorganic materials to studying learning outcomes in the general chemistry laboratory. She serves as Chair of the Department of Chemistry & Forensic Science at Waynesburg University where she is an Associate Professor of chemistry. Her research interests range from characterizing inorganic materials to studying learning outcomes in the general chemistry laboratory. She served as the ACS Pittsburgh Section Secretary in 2013, Treasurer-elect in 2014, and advises the Waynesburg University ACS student chapter.

Secretary
Logan Miller

Logan Miller received his B.S. in Chemistry with an emphasis in biochemistry and forensic chemistry from Slippery Rock University of Pennsylvania (SRU). While at SRU Logan was involved in a multi-year, independent research project involving intracellular protein analysis for apoptotic response in human myelogenous leukemia cells. In addition, he attended two academic meetings at Experimental Biology as a first author presenter. Logan also successful wrote and received three independent grants to fund his research while at SRU. Currently, he is a third year chemistry Ph.D. student at Duquesne University. He is working in Dr. H.M. “Skip” Kingston’s research group, which focuses on analytical techniques for the betterment of environmental human health measurements. His research interests range from developing separation methods for the quantification of human biomarkers using nanoESI-LC/MS/MS technology to laser ablation/MALDI quantification using Speciated Isotope Dilution Mass Spectrometry. He has attended and presented at both the PittCon Conference as well the American Society for Mass Spectrometry conference. Logan is actively involved in numerous committees with both SACP and SSP. In addition, he is currently the secretary for Duquesne University’s Department of Chemistry and Biochemistry Phi Lambda Upsilon chemistry honor society. Logan is a founding member of Duquesne University’s graduate student mass spectrometry committee that helps in overseeing operation of the mass spectrometry facility. In addition, he currently serves as the mass spectrometry graduate assistant that manages daily operation and routine maintenance of the facility; additional responsibilities include analyzing samples submitted from inorganic and organic chemistry groups within the department on high resolution mass spectrometers. In addition to the mass spectrometry committee he is also a founding member of the chemistry department’s safety committee. He is also currently serving as the secretary of the Pittsburgh Section of the ACS.

Treasurer - Elect
Kelly Colopietro
Ivy Stelzner

Kelley Colopietro received her B.S. in Chemistry from the University of Pittsburgh in April of 2013. As a full-time undergraduate she worked in multiple research labs including the McGowan Institute of Regenerative Medicine as well as the University of Pittsburgh Bioengineering Laboratories. She was also an undergraduate teaching assistant for the analytical chemistry labs at the University of Pittsburgh for three years. After graduation Kelley temporarily joined Phigenics as an analyst who performed tests on the water at the Pittsburgh VA hospital system. She is currently employed at Environmental Service Labs as an Environmental Engineer. Kelley will begin attending the Swanson School of Engineering this upcoming spring in

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BALLOT
For Offices of the
2015
Pittsburgh Section, American Chemical Society

Chair-Elect
(Vote for 1)
Evonne Baldauff □

Secretary
(Vote for 1)
Logan Miller □

Treasurer - Elect
(Vote for 1)
Kelly Colopietro □
Ivy Stelzner □

Director
(Vote for 1)
Heather Juzwa □

Councilor
(Vote for 3)
Michelle Coffman □
Michael Mautino □
Brian Strohmeier □
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, Logan Miller. 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 17, 2014.
KELLEY COLAPIETRO BIO
Continued from Page 2

pursuit of her graduate degree in the field of nuclear engineering. She currently serves on the Executive Board of the Greater Pittsburgh Area Women Chemists Committee as their Fundraising Chair. She is active in the Society of Women Engineers as well as the American Nuclear Society. She is looking to become more involved with the ACS and is enthusiastic about making a positive impact as well as promoting the sciences in the Pittsburgh community.

IVY STELZNER

Ivy Stelzner received her B.S. in Chemistry and B.S. in Forensic and Investigative Science with an emphasis in Forensic Chemistry from West Virginia University. While at WVU, she was a member of Phi Lambda Upsilon and Alpha Phi Omega. She completed an internship at the Naval Criminal Investigative Service as a Forensic and Biometric intern. After graduating, she worked for 3 years at Precision Therapeutics, Inc. performing their ChemoFX® chemosensitivity and response assay. Currently, she works for Kop-Coat, Inc. as their Analytical Chemist. Ivy just completed a Sci-Mind Separation Sciences course through the ACS. She is excited to become more involved with the ACS and the Pittsburgh section. During her free time she enjoys a mixture of reading, watching any Pittsburgh sports’ team, and any activity that can get her outdoors such as skiing, running, and hiking.

HEATHER JUZWALA

Heather Juzwa is a Senior Field Sales Engineer at Shimadzu Scientific Instruments and has been since October of 2006. She graduated from the University of Pittsburgh in 2000 with an honors bachelors’ degree in Chemistry. While performing undergraduate research with Dr. Paul Rasmussen, she created alternative experiments for the undergraduate Instrumental Analysis laboratory. Having a passion for instrumentation, she was hired by Hitachi Instruments upon graduation. Heather has also held a position at Digilab, a division of Bio-Rad, which was subsequently purchased by Varian. Heather’s service to the field of chemistry began as an undergraduate and has continued throughout her career. She served as the Secretary of the American Chemical Society – Student Affiliates while a senior at the University of Pittsburgh and has remained in the ACS since then. In 2008, she was Treasurer of the newly formed Younger Chemists Committee. She served as Chair of the Pittsburgh Section in 2011 and currently serves as Webmaster for the Pittsburgh Section website. As webmaster, Heather worked with the Executive Committee to implement more uniform reporting for ACS National, paving the way for the section to tout their hard work and thus receive an esteemed ChemLuminary for being an Outstanding Large Local Section for 2012. It was by Heather’s efforts that The Crucible newsletter was made electronic, saving the section thousands of dollars in printing costs. Heather also served as Chair of the Society for Analytical Chemists of Pittsburgh in 2013-2014. For many years, she has happily served on and chaired many committees of the Society for Analytical Chemists of Pittsburgh, the Spectroscopy Society of Pittsburgh, and the Pittcon committee and looks forward to playing key roles in these organizations for years to come. These committees include including the Mass Spec Discussion Group, Technology Forum, Technical Program, Membership and Directory, Student Affiliates, Employment, Continuing Education, Tripartite Symposium, Carnegie Science Fair, Marketing, Short Courses and Faraday Lecture Series. Currently, Heather is the General co-Chair of the Central Regional Meeting that is coming to Pittsburgh in October 2014. Heather Juzwa is interested in serving as a Councilor of the ACS to continue and expand her service to the field of chemistry and to foster a collegial community for Pittsburgh’s scientists.

COUNCILOR
Michelle Coffman
Michael Mautino
Brian Strohmeier
Michelle Ward

MICHELLE COFFMAN

Michelle Coffman received her B.S. in Chemistry from Gannon University, her M.S. in Chemistry from the University of Pittsburgh, and her M.Ed. in Secondary Education from Slippery Rock University. Michelle was the Program Director of the Chemical Laboratory Technician Program at Bidwell Training Center, Inc., from 2000 until 2008. This program trains entry-level technicians in a variety of fields within the chemical industry. While at Bidwell, Michelle and her students were involved and belonged to the Western Pennsylvania Technician Affiliate Group of the ACS and volunteered during National Chemistry Week at Carnegie Science Center. She has also volunteered as a judge and has been Chair of the Senior Chemistry division at the Pittsburgh Regional Science and Engineering Fair since 2007. Michelle has previously worked as an Environmental Scientist at Baker Environmental, Inc., and currently works for Tetra Tech, Inc., an environmental consulting firm where she works on a variety of environmental projects. Michelle has been a member of ACS for over years 19. Michelle currently serves on the Committee of Technician Affairs (CTA) and

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Director
Heather Juzwa

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November 2014 / The Crucible
Congratulations to Dr. Jeffry Madura recipient of the 2014 Pittsburgh Award and to the winners of the 2014 Distinguished Service Award, Robert Baudoux and Heather Juzwa.

The Pittsburgh Section will celebrate their achievements at the Awards Dinner as part of CERM. The dinner will be on Thursday, October 30th at the DoubleTree by Hilton in Greentree. The reservation form can be found on the Pittsburgh Section website. If you are attending CERM, you can simply add this to your registration package.

The Pittsburgh Section is proud to have such great members in our section and is looking forward to showing the region the great work they are doing.

2014 Pittsburgh Award Recipient – Dr. Jeffry Madura

Jeffry is the Lambert F. Minucci Endowed Chair in Engineering and Computational Sciences and Professor in the Department of Chemistry and Biochemistry at Duquesne University. He earned a B.A. from Thiel College, a Ph.D. in Physical Chemistry from Purdue University and was a postdoctoral fellow at the University of Houston. He has published 100+ papers in physical chemistry and received over $6M in external research funding. He was a recipient of a Dreyfus Teacher-Scholar Award, was the chair of the ACS COMP Division and is an ACS Fellow. He is co-author to a textbook titled “General Chemistry: Principles and Modern Applications” as well as a co-author to a physical chemistry solutions manual. He received the Bayer School of Natural and Environmental Sciences and the Duquesne University Presidential Award for Excellence in Scholarship in 2007 and the Bayer School of Natural and Environmental Sciences Award for Excellence in Service in 2004. He is currently co-editor to the Journal of Molecular Graphics and Modeling.

2014 Distinguished Service Award Recipient – Robert Baudoux


2014 Distinguished Service Award Recipient – Heather Juzwa

Heather is a Senior Field Sales Engineer at Shimadzu. Heather’s service to chemistry began as an undergraduate in 1997 and has continued throughout her career. She served as the Secretary of the ACS Student Affiliates as a senior at the University of Pittsburgh in 2000. In 2008, she was Treasurer of the newly formed Pittsburgh YCC, and she served as Chair of the Pittsburgh Section in 2011. As Chair, Heather designed the new Pittsburgh Section website and has remained the Webmaster ever since. She is also entering her third year on the National ACS Award in Chromatography Committee. Heather feels honored to use her talents to help the section succeed and enjoys being a part of the team.
Most teenagers devote their summer breaks to working in ice cream shops or playing sports.

Not Zakiya Thompson and Tyler Coleman.

The two high school students have spent the past eight weeks interning at the Bayer Materials Science (BMS) Pittsburgh site through the Project SEED initiative. This program, administered by the American Chemical Society (ACS), aims to “plant the seed” for science education by placing high-achieving high school students alongside professionals in a chemical laboratory setting.

Tyler Coleman, an incoming junior at Winchester Thurston High School, is all smiles as he describes his experience working with Bayer employees. “The first day we were here, at least 15 people offered to help us out before I even knew their names,” he laughs.

“I don’t think I have ever walked past a person without them saying hi. It’s a great vibe,” adds Zakiya Thompson, who will be a senior at Our Lady of the Sacred Heart High School.

Throughout the summer, the students have spent the majority of their time in Polyurethane labs testing the heat resistance of rigid foams used in roofing.

“We started out only knowing the basics about polyurethanes and the testing process,” said Thompson, “but now we’re really beginning to have an in-depth understanding! I sat in a Polyurethanes meeting yesterday and as I was listening, I realized that I knew exactly what everyone was talking about. It was a great feeling.”

Besides completing research in the labs, the students also learned how to compile and present the results of their findings, spent full days shadowing BMS employees, attended various networking events and put together an extensive research report about their experience at BMS.

“If’s also a program that is aligned with Bayer’s STEM initiatives. We hope these students decide to pursue a career in chemistry-related sciences and become part of the future STEM workforce.”

So what’s next for the BMS Project SEED interns?

While Thompson excels in the sciences, she spends her spare time singing in church choir and participating in music and arts-based activities.

“Post-graduation, I would like to pursue something in the arts, or perhaps combine art and science in a field like music therapy,” she explains. “This fellowship has given me a completely new set of tools to use, and I’ve gained a whole new perspective on the sciences.”

Coleman, on the other hand, enjoys the predictability and control one has when manipulating numbers and equations. The vice president of his high school science club, Coleman aims to study physics and quantum theory after he graduates.

“I want to understand how the universe works,” he says matter-of-factly, “This summer at Bayer has solidified in my mind that I love the sciences and want to follow that career path.”

It appears that the seed has been planted.
**Abstract:** Matrix-assisted laser desorption ionization and electrospray ionization have enabled mass spectrometry (MS) analyses for a wide variety of synthetic polymers, but considerable challenges still exist. Polymerizations often create complex mixtures that are impossible to characterize by single-stage MS because of superimposed compositions or discrimination effects in the ionization or detection steps. These problems can partly be resolved by tandem mass spectrometry (MS2); depending on the polymer, MS2 may lead to fragmentation patterns that permit unequivocal identification of the corresponding architecture and comonomer sequence. For the characterization of more complex systems, MS must be combined with separation methods, such as liquid chromatography (LC) or ion mobility (IM) spectrometry. Particularly powerful for such studies are approaches that couple ultrahigh performance LC (UPLC), which significantly reduces elution times, with the ion mobility dimension, which enhances separation and spectral decongestion. Different combinations of LC, IM, and MS2 can be used to address questions about polymer composition, structure, and 3D architecture. Analyses involving top-down methods (the entire analysis is performed in the mass spectrometer) as well as methods including prior LC separation or mild, in situ thermal desorption/degradation will be demonstrated with a variety of synthetic polymers, including new amphiphilic copolymers, hybrid materials containing bioactive peptides, and supramolecular systems.

**Biography:** Dr. Wesdemiotis received his B.S. in Chemistry in November 1972, his M.S. in Organic/Analytical Chemistry Technical University in March 1976 and Ph.D. in Analytical Chemistry in December 1979 at Technical University of Berlin. His Postdoctoral fellow with Fred W. McLafferty at Cornell University in 1980-1981, His Military Service with the Greek Army in 1981-1983. Senior Research Associate at Cornell University in 1983-1989. Dr. Wesdemiotis has held the following positions at The University of Akron: Assistant Professor of Chemistry from 1989-1994; Associate Professor of Chemistry from 1994-1999; Professor of Chemistry from 1999-2008; Distinguished Professor of Chemistry from 2008 to present; Distinguished Professor of Polymer Science from 2009 to present; Director, Mass Spectrometry Center, April 1998 to present. Dr. Wesdemiotis has received the American Society for Mass Spectrometry Research Award, Buchtel College of Arts and Sciences Research Award (2001), The University of Akron Outstanding Researcher Award (2004), NSF Special Creativity Award (2008-2010). He received recognition as “best reviewer” by the Journal of the American Society for Mass Spectrometry (2010). He has been member of AAAS Fellow since 2011; Editor of European Journal of Mass Spectrometry; Member of the Editorial Boards of Journal of the American Society for Mass Spectrometry; International Journal of Mass Spectrometry; Mass Spectrometry Reviews.

**Dinner Reservations:** Please email the SACP Administrative Assistant, Valarie Daugherty at daugherty@pittcon.org by Monday, October 27, 2014 to make dinner reservations. Should you not have email, please call 412-825-3220, ext 204. Dinner will cost $10 ($5 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.
2014 Fall Symposium
Polymer Mass Spectrometry
Thursday, November 13, 2014
Old Town Buffet
860 Saw Mill Run Blvd, Pittsburgh PA 15226
(Rt. 51 South, Near the Liberty Tunnels)

11:00 AM  Registration
11:30 AM  Lunch
12:30 PM  “Gel Permeation Chromatography Coupled to Mass Spectrometry for Polymer Characterization”  Dr. Bill Simonsick, Lubrizol Advanced Materials
1:30 PM  Break
1:45 PM  “Structure Characterization of Silicone Polymers using Compositional Separation Combined with High Resolution and Accurate Mass”  Dr. Andrew Hoteling, Bausch & Lomb
2:45 PM  Wrap-Up

Open to the Public.  Registration MUST be completed in advance
Registration Fee is $10.00 and required with advanced registration
Symposium details will be posted on the SSP websites.
Registration Deadline: November 8, 2014

To register, complete the form below, and send it and a check for $10.00 to Ms. Shana Tokarski, SSP, 300 Penn Center Blvd., Suite 332, Pittsburgh, PA 15235, no later than December 8, 2014. Checks can be made payable to SSP.

__________________________________________________________________________________________

Name _________________________________________ Phone No. ______________________________________

Institution ________________________________________ E-mail address _______________________________

Guest Name ______________________________________ Institution/E-mail ___________________________


Michael Mautino

Michael Mautino has worked for Bayer MaterialScience LLC for the past twenty four years. He began his career at Bayer as a chemical laboratory technician, later progressing to a chemist position, formulating polyurethane foam systems for a variety of applications. He developed a number of polyurethane systems that have been successfully commercialized and currently holds two patents in the area of polyurethane rigid foam insulation.

After obtaining Bachelor of Science in Business Management from the University of Phoenix in 2004, Michael became a Marketing Representative at Bayer and for the past two years has been a Product Line Manager in Bayer’s Polyurethanes Regional Product Management Group.

Michael is an active member of the ACS at both the local and national levels. For the past 15 years he has developed and managed the Pittsburgh ACS’s community outreach activities into national ACS award winning programming, recognized for reaching out to the public to promote education and careers in the STEM areas. Under Michael’s guidance the Pittsburgh Section has won thirteen national ACS ChemLuminary awards for its National Chemistry Week (NCW) and Chemists Celebrate Earth Day (CCED) programs. Michael has served as a Pittsburgh ACS Councilor since 2003. In 2014 Michael was named the Pittsburgh ACS’s “Outreach Volunteer of the Year.”

Nationally, Michael is a recognized leader in ACS community outreach initiatives and promoting the applied chemical technology profession. He was chair of the ACS’s Division of Chemical Technicians (2001-02), chair of the Committee on Community Activities (2004-06), chair of the Committee on Technician Affairs (2007-09), and is currently serving a second term as an elected member of the national ACS’s Committee on Committees. He is proud of the ACS’s Chemists Celebrate Earth Day program, which celebrated its 10th anniversary in 2013 and in which all 189 local chapters of the ACS participate in...a program that was developed under his leadership as chair of the oversight committee. Due to his community outreach efforts and promotion of the applied chemical technology profession on a national level, Michael was named an ACS Fellow in 2010.

Dr. Brian R. Strohmeier

Dr. Brian R. Strohmeier is employed as a Senior Applications Scientist for Surface Analysis Products at Thermo Fisher Scientific. Brian has more than 30 years experience in the field of applied surface science. Before joining Thermo Fisher Scientific, he was previously employed in various research and/or managerial positions at RJ Lee Group, Inc., ION-TOF USA, the Department of Chemistry at the University of Pittsburgh, PPG Glass Technology Center, Alcoa Technical Center, and the Chemical Engineering Department at the University of Delaware. Brian holds a Ph.D. degree in Analytical Chemistry from the University of Pittsburgh, an M.S. degree in Analytical Chemistry from Lehigh University, an M.A. degree in Business Leadership from Duquesne University, a B.S. degree in Chemistry from Delaware Valley College of Science and Agriculture, and an A.A. degree in Chemistry from Bucks County Community College.

Dr. Strohmeier is the co-inventor of one patent and the author/co-author of 65 publications involving surface and microscopic characterization studies, as well as scientific leadership and management topics. He has also authored/co-authored more than 120 conference presentations (47 invited) and has served as an expert witness in litigation involving surface analysis methods. Brian’s research interests involve applications of surface analytical and microscopic techniques for industrial problem solving, product/process development, and the characterization of complex materials. His expertise includes X-ray photoelectron spectroscopy (XPS or ESCA), Auger electron spectroscopy (AES), secondary ion mass spectrometry (SIMS), scanning electron microscopy (SEM), energy dispersive X-ray spectroscopy (EDS), transmission electron microscopy (TEM), and various other spectroscopic techniques. His technical experience includes the study of adhesion, corrosion, oxidation, and wetting phenomena; chemical and plasma modification of material surfaces; and the surface and microscopic characterization of asbestos and associated minerals, catalysts, ceramics, glass and fiberglass, metals, oxides, paints and organic coatings, polymers, semiconductors, and vacuum-deposited thin film materials.

Brian is an active member of the American Association for the Advancement of Science (AAAS), the American Chemical Society (ACS), The American Society for Testing and Materials (ASTM), the American Vacuum Society (AVS), the Microanalysis Society (MAS), the PittCON General Organizing Committee, the Society for Analytical Chemists of Pittsburgh (SACP), the Spectroscopy Society of Pittsburgh (SSP), and the Three Rivers Microscopy Society (3RMS). Brian has Chaired and served on numerous Committees of the SACP and SSP since 1986. He has also served on numerous Committees of the PittCON General Organizing Committee since 1991 and has Chaired...
First, I would like to thank the Pittsburgh ACS section for supporting my attendance at this year’s National ACS meeting in San Francisco, California. As this was my first ACS meeting, the experience was extremely rewarding and valuable in numerous ways. The opportunity to hear top researchers in my field present their latest findings is unparalleled at the National meeting. During the day, I spent a great deal of time in the POLY division symposia, specifically in the Metal-Containing and Metallo-Supramolecular Polymers and Materials Symposium, garnering new information and ideas for my own research. I heard talks given by key pioneers in my field, including Christoph Weder, Ulrich Schubert, Ian Manners, and Stuart Rowan. Outside of my field, I attended one of the Presidential lecture series focused on hydraulic fracturing and its associated hazards. I also attended one of the Kavli lectures given by Dr. Ali Khademhosseini on hydrogels for tissue regeneration, where he detailed the design of an electrically stimulated, beating, pumping, hydrogel cell matrix to mimic heart tissue, which I considered a rather impressive feat. Additionally, I listened to John Hartwig’s talk on “Connecting organometallic complexes with catalytic reactions”, which I found riveting even as a materials chemist as his group does some very intriguing and selective transformations.

One of the most fulfilling aspects of science, aside from actually performing the research and seeing the results, is effectively communicating your work and findings with others. As a graduate student, to maximize my potential audience I decided to present my work and engage in discussion about my research. I was fortunate to meet Ian Manners, a prominent researcher in my field, who I believe was impressed with my poster presentation, which helped me win one of the poster prizes from Wiley VCH in my symposium.

The ACS meeting also hosts a variety of other events throughout the week. The graduate student networking session was a great chance to practice networking skills, and I made several new contacts who I hope to see at future ACS meetings. Of course, visiting the Expo floor was a must, where I spoke with potential employers and checked out all of the new research equipment I wished I could buy, chatting with the vendors along the way. I spotted Professor Molenium, the ACS mascot, at one of the poster sessions, and found to my great surprise that the organizers of the Med Chem/Organic division poster session planned a reception with a live band afterwards. Following my own poster session, I explored some of the night life in the downtown area, stopping in at a nearby jazz bar with some new friends to enjoy the music and a few drinks.

After the meeting I took a couple of days to explore San Francisco and the nearby region. As a Floridian surfer, I took a chance to fulfill a life-long dream and surf the west coast. An old friend of mine also happens to live in the city and he gave me a personal bike tour of San Francisco, from Haight-Ashbury, to Golden Gate Park, the Golden Gate Bridge, The Wharf, North Beach, Chinatown, Alamo Square, and though several other famous neighborhoods and vistas. I also visited Muir woods and went for a run among the redwood trees.

Overall, the experience was very informative and inspiring, especially as I move forward with my career in chemistry. I’m looking forward to attending my next National ACS meeting and Thanks again to the Pittsburgh ACS section for your generous support.

**Get Connected!**

Stay up-to-date on all the happenings of the Pittsburgh Section ACS

**Section’s Website:**
www.pittsburghacs.org

**Facebook Page:**
Pittsburgh Section of the American Chemical Society

**Linked In:**
Pittsburgh Section of the American Chemical Society
TECHNICAL PROGRAM - 8:15 PM

“Microwave Background Polarization and the Beginning of the Universe”
Arthur Kosowsky -- Professor of Physics and Astronomy at the University of Pittsburgh

Abstract: We live in a universe whose properties are remarkably well described by a very early epoch of accelerating expansion, termed inflation. One generic prediction of inflation is a relic background of stochastic gravitational radiation. These gravitational wave perturbations leave a distinctive imprint in the polarization of the microwave background. In March 2014, the BICEP experiment at the South Pole announced the detection of this signal for the first time, although subsequent analysis cast doubt on whether polarized emission from dust in the Milky Way galaxy might be contaminating the signal. I will review the current state of observations and give an overview of upcoming observational efforts at measuring the polarization spectrum which will definitively distinguish the cosmological and galactic signals. If the BICEP signal has a significant cosmological component from inflation, this opens the door to the remarkable possibility of detecting the gravitational radiation background directly with a space-based laser interferometer. Such a measurement would provide a precision probe of physics at energy scales a trillion times higher than those at terrestrial accelerators.

Bio: Arthur Kosowsky received his Ph.D. in physics from the University of Chicago in 1994, was a Junior Fellow in the Society of Fellows at Harvard from 1994 to 1997, and was a faculty member at Rutgers University before joining the faculty of Pitt in 2005. He is the author of many scientific papers about the universe, and particularly how the cosmic microwave background radiation tells us about the properties of the universe and about fundamental physics. When not thinking about the cosmos, he can often be found playing his antique grand piano or bicycling around Pittsburgh. He is married to Theresa Brown, who is a nurse in Pittsburgh and writes the Bedside column for the New York Times.

TECHNOLOGY FORUM - 5:30 PM

“Allegheny Observatory: The Selling of Time and Beginning of EST”
Ken Kobus

Ken Kobus holds a B.S. in mechanical engineering from the University of Pittsburgh. He has been employed in the steel industry his entire life at the Pittsburgh Works of J&L/LTV, the South Chicago Works of LTV and the Clairton Works of USS. At Pittsburgh Ken was the Area Manager of the Byproduct Chemical Plant, in Chicago, the Area Manager of Coke Production & Coal Handling and at Clairton the Process Safety Manager. Ken retired after nearly 45 years of service. Astronomy has been a life-long hobby and he has been a member of the Amateur Astronomers Association of Pittsburgh for 50 years. He has written books on the Pennsylvania railroad and the Pittsburgh steel industry.

Dinner Reservations: Please register on-line at http://www.ssp-pgh.org/monthly-meeting-rsvp/ to make dinner reservations NO LATER THAN Thursday, November 13, 2014 at noon. Dinner will cost $10 ($5 for students) 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.
SACP - SSP presents:
Continuing Education
Joint Symposium

Date: Saturday, December 13, 2014
Time: 9:30 AM – 1:30 PM (lunch included)
Location: Old Town Buffet (formerly Misaki)
860 Saw Mill Run Blvd (Route 51S) Pittsburgh, PA 15226
http://www.misakiexperience.com/

Agenda:
9:30 am    Registration open
10:00 am   Symposium
12:00 pm   Lunch
1:30 pm    Closing

➢ Open to the Public by registration MUST be completed in advance
➢ Registration Fee is $10.00 and required with advanced registration
➢ Symposium details will be posted on the SSP and SACP websites.
   ➢ Registration Deadline: December 8, 2014

To register, complete the form below, and send it and a check for $10.00 to Ms. Shana Tokarski, c/o SSP,
300 Penn Center Blvd., Suite 332, Pittsburgh, PA 15235, no later than December 8, 2014. Checks can be
made payable to SACP or SSP.

_______________________________________________________________________________________
Name _______________________________________Phone No. ________________________________
Institution ____________________________________E-mail address ______________________________
Guest Name __________________________________Institution/E-mail ______________________________
the Audio-Visual (1998), Activities (2000), Publicity (2002), and Program (2004) Committees. He will serve as Chair of the PITTCON 2016 Registration Committee. Since 2012, Brian has served as the Arrangements Secretary of the ASTM E42 Subcommittee on Surface Analysis and is also the current Chair of the E42 Honors and Awards Committee. Brian was the Chair of the Pittsburgh Section ACS in 2001 and also previously served as interim Councilor in 2004. He was a member of the 2003 ACS Central Regional Meeting (CERM) Program Committee. He is currently a member of the 2014 ACS CERM Program Committee and is also the Exposition Co-Chair. If elected Councilor, he would strive to advance the interests of the Pittsburgh Section and National ACS.

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, the 2013 Students’ Choice Award from the University of Pittsburgh College of General Studies Student Government, and the 2013 Outstanding Service Award from University of Pittsburgh Department of Chemistry American Chemical Society Student Affiliates.

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 has been a member of the American Chemical Society since 2005 and became active in service to the local section in 2011. Michelle served as the Pittsburgh Section Chair in 2012, was appointed to the ACS Society Committee on Education (SOCED) this year, and is currently serving as Program Co-Chair for the ACS 2014 Central Regional Meeting. Michelle founded the Greater Pittsburgh Area Women Chemists Committee (WCC) in 2011 and is serving as Chair of the group for the fourth year.

Michelle is also an active member of both the SACP and SSP, serving multiple committees since joining the societies. Michelle served as the 2013-2014 SACP Secretary and is currently serving as the 2014-2015 SACP Treasurer. Committee assignments in the societies have included: ACS Graduate Student Summer Fellowship, College Chemistry Scholarships (Chair), College Equipment Grants, Continuing Education, December Meeting, Elementary School Science Education Award, Faraday Lecture, Financial Affairs, High School Equipment Grants, Junior Science Activities (Chair), Membership & Directory (Chair), National Chemistry Week (Chair-Elect), PITTCON Lectures (Chair-Elect), Publicity Committee (Chair), SSP Starter Grant, Student Affiliate, Summer Intern Program (Chair), Supplemental Program Development, Technical Program, Technology Forum, Tripartite, Undergraduate Analytical Research Grant (Chair), and Undergraduate Equipment Grant University of Pittsburgh (Chair). Additionally, Michelle served as conference week staff for four years at PITTCON and became a member of the Pittsburgh Conference Committee in 2013.

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:
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  Website (if applicable)
  Email address
  Phone
• Keywords/categories related to expertise (up to 5)
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Any questions should be directed to Michelle Ward (muscat@pitt.edu or 412-624-8064)
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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 2014 issue must be to the editor by November 1, 2014.

Volunteers Needed!

There are a number of volunteer opportunities in the Pittsburgh ACS section! If you are interested in volunteering, please contact Heather Juzwa at hjuzwa@shimadzu.com!

The Crucible

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Pittsburgh Area Calendar

Tuesday, October 28 - Saturday, November 1
CERM 2014
Doubletree by Hilton, Green Tree, PA

Monday, November 3
Society for Analytical Chemists of Pittsburgh
Dr. Chrys Wesdemiotis, The University of Akron
Duquesne University, Pittsburgh, PA

Thursday, November 13
Mass Spectrometry Discussion Group of Pittsburgh
2014 Fall Symposium Polymer Mass Spectrometry
Old Town Buffet, 860 Saw Mill Run Blvd., Pittsburgh, PA

Wednesday, November 19
The Spectroscopy Society of Pittsburgh
Technical Program
“Microwave Background Polarization and the Beginning of the Universe”
Arthur Kosowsky - Professor of Physics and Astronomy at the University of Pittsburgh

Technology Forum
“Allegheny Observatory: The Selling of Time and Beginning of EST”
Ken Kobus
Duquesne University, Laura Falk Hall located in Mellon Hall, Pittsburgh, PA

Saturday, December 13
SACP - SSP Continuing Education Joint Symposium
Old Town Buffet, 860 Saw Mill Run Blvd., Pittsburgh, PA