



The Crucible

American Chemical Society – Pittsburgh Section

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February 2020

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2020 ACS Central Regional Meeting (CERM)

May 27-29

Greater Columbus Convention Center in Columbus, OH

cerm2020.org



The Central Region of the ACS consists of 25 local ACS sections, including the Pittsburgh section! The CERM is the premier showcase for chemistry educators, professional chemists, and chemical enterprises of all types and sizes within the central region. The Columbus local section of the ACS sponsors CERM 2020.

The theme for CERM 2020 is “Envision Tomorrow’s Chemistry” and will highlight emerging chemical discoveries and advances as we enter the next decade. Keynote speakers include Professor Samuel I. Stupp, Frederick Bertley, Ph.D., and Dr. Seble Wagaw.

Abstracts for both oral and poster presentations will be accepted from January 13th, 2020 to March 2nd, 2020. Both invited and contributed presentations are encouraged. Please submit abstracts using the ACS Meeting Abstracts Programming System at maps.acs.org.

Registration will open within the next few weeks. See below for registration fees.

ACS MEMBER REGISTRATION FEES	Advance (by April 24)	Regular (after April 24)	NON-MEMBER REGISTRATION FEES	Advance (by April 24)	Regular (after April 24)
<input type="checkbox"/> 50-Year Member	\$0	\$0			
<input type="checkbox"/> ACS Member*	\$150.00	\$200.00	<input type="checkbox"/> Non Member*	\$205.00	\$325.00
<input type="checkbox"/> Post-doctoral Fellow*	\$100.00	\$125.00	<input type="checkbox"/> Post-doctoral Fellow*	\$125.00	\$150.00
<input type="checkbox"/> Graduate Student*	\$50.00	\$65.00	<input type="checkbox"/> Graduate Student*	\$75.00	\$100.00
<input type="checkbox"/> Undergraduate Student*	\$30.00	\$45.00	<input type="checkbox"/> Undergraduate Student*	\$45.00	\$60.00
<input type="checkbox"/> Pre-College Teacher	\$30.00	\$50.00	<input type="checkbox"/> Pre-College Teacher	\$45.00	\$60.00
<input type="checkbox"/> Retired / Emeritus / Unemployed*				\$40.00	\$55.00
<input type="checkbox"/> High School Student				\$20.00	\$30.00
<input type="checkbox"/> GUEST (Max 1 per registrant) Please list Name of Guest: _____				\$75.00	\$100.00

Spring 2020 ACS National Meeting and Expo

March 22-26

Pennsylvania Convention Center in Philadelphia, PA

[Webpage](#)



The ACS National Meeting is coming back to Pennsylvania! The Spring 2020 ACS National Meeting is themed “Macromolecular Chemistry: The Second Century”, and it will be held in Philadelphia on March 22 through March 26.

You can still register to attend. ACS Members or Society Affiliates can attend the full meeting for \$605. All other registration information can be found [here](#).

Covestro Pittsburgh Regional Science & Engineering Fair

Wednesday, March 25 at the Carnegie Science Center

The Covestro Pittsburgh Regional Science & Engineering Fair (PRSEF) will celebrate its 81st year of open competition of research projects in the fields of science, mathematics, and engineering in March. This competition is open to all students in grades 6-12 from the 21 counties within Western Pennsylvania and Garrett County, Maryland. The Science Fair has been a Pittsburgh tradition since 1940. It is also the third oldest science fair in the United States under the affiliation of Society for Science and the Public, which runs the Intel International Science & Engineering Fair (ISEF) and the Broadcom MASTERS middle school competition.

The Science Fair is **looking for judges** to award a variety of prizes on Competition Day, Wed., March 25, 2020. The competition takes place at Carnegie Science Center. Refreshments will be provided FREE! Visit the [registration page](#) to sign up.

Category Judges: A Category Judge will judge students in a particular project category and will award a 1st place, 2nd place, 3rd place and 4th place winner in that category.

The Senior (9th-12th grades) and Intermediate (7th-8th grades) Division categories are Behavioral & Social Sciences, Biology, Chemistry, Physics, Computers/Math, Earth/Environment and Physics to Physics and Astronomy, Engineering/Robotics, and Medicine/Health/Microbiology. The Intermediate Division also includes Consumer Science category. The Junior Division (6th grade) categories are Behavioral & Consumer Sciences, Biological Sciences, Chemistry, Physical Sciences & Engineering.

Judges must have a bachelor's degree in the field in which they are judging or related experience. In the junior or intermediate levels (Grade 6-8), a non-science degree may be acceptable. If you are in doubt of your eligibility to judge, inquire to the chair of Judge Advisory Committee (ISEF@Pitt.edu). Active K-12 educators are not eligible to judge.

If you have an understanding of a field of Science or Engineering and confidence in your ability to chat with a bright young person and you meet the qualifications above, then you can judge! A large percentage of our judges return every year. They love doing it and look forward to the Fair.

Much more information is available on the [webpage](#)! Email PRSEF@CarnegieScienceCenter.org with any questions!

Society for Analytical Chemists of Pittsburgh Spectroscopy Society of Pittsburgh

February Meeting

Wednesday, February 12, 2020

Duquesne University

SSP Technology Forum 5:30 PM

SACP Technical Program 7:45 PM

SSP TECHNOLOGY FORUM

“Medical Cannabis in PA: A Scientist Perspective”

Andrew Hiser, CannaTech Extracts, LLC

Abstract:

This presentation is intended for those trying to navigate the CBD- or THC-containing cannabis market. Whether you are the consumer, caregiver, or just someone who wants to learn more about the industry, the best way to understand it is to research this highly functional plant at home. That is easy enough to say, but to actually do it; well, where would you even start? At the beginning of course.

I intend to help the participants to learn what research is needed and some facts and myths to shed some light on the cannabis “stigma”. Following a quick history on cannabis, some of the details of the plants structure are highlighted. The history and structure of the plant are both important to fully understand the products that you are going to purchase.

The structure of cannabis operates as the perfect segue into the Endocannabinoid System (ECS) and Phytocannabinoids. After quickly covering some products and how they are made, the more analytical side of the industry will be looked at. A general knowledge of the processing path can help consumers know what to expect in their product whereas analytical testing tells them exactly what is in the product.

It is my hope that this presentation creates a new understanding of cannabis, its structure, the ECS, and how products are made. You should leave with enough knowledge to research the use and effects of cannabis and choose a safe and natural medication.

It is only through education that we can end the cannabis stigma. After all, the discovery of the ECS has caused many textbooks to add new chapters.

Biography:

About 7 years ago Andrew Hiser entered the steel industry as a laboratory technician fresh out of Geneva College with a bachelor's in Biochemistry. It took Andrew a little over a year to grow into a Senior Research Technician. From there, Andrew gained some credits at Auburn University's online program for Materials Engineering. After 5 years Andrew was invested in the steel industry. Although Andrew enjoyed his job in the steel industry, he stumbled across an article online that there was a need for an extraction manager at a new medical cannabis

processing facility, a short distance from his home. Andrew applied for the job and was offered an extraction technician position. Even though Andrew did not have knowledge about the industry, he was ready to accept the job. Except he did not accept it. Instead, Andrew decided to do research from the beginning to learn the basics. He read a few cannabis business books and followed that with brushing up on his ISO and GLP. He wrote a letter to the Chief Scientific Officer of Holistic Industries which contained a presentation on Current Good Manufacturing Practice (cGMP) in the pharmaceutical industry. This letter was based on information provided by Shimadzu and a few articles on management. The letter also highlighted his experience in compliance, expertise in navigating and mastering computer software and his analytical knowledge. He also mentioned his limited experience operating the equipment and his lack of managerial experience. A few days later Andrew was hired as the Laboratory Operations Manager. As the Operations Manager at Holistic Industries Andrew was able to develop new extraction methods to increase efficiencies, new products, and implement new safety practices. Andrew also aided in the build out of the processing facility and helped the contractors throughout the process. After a year he found himself as an interim General Manager/Lab Manager, having no time to extract or to develop. He no longer enjoyed his job. Andrew was lucky enough to find an incredible group of individuals through a mutual friend. They had already been in the cannabis industry a few years and seemed to understand Andrew's desire to help others heal. They granted the funds and opened a company called CannaTech Extracts. Every day Andrew asks himself "Can a Tech Extract"? Yes, he can!

SACP TECHNICAL PROGRAM

“Development/Deployment of Inexpensive, Robust Instruments for Combating Disease on a Global Scale”

Dr. Jim Cybulski, CEO Foldscope

Abstract:

Foldscope was created with a vision to solve an accessibility problem in science. What began as a simple idea has now grown into a company that provides powerful low-cost tools to communities around the world, all in an effort to help advance education, health, and opportunity! We believe that the most important part of our company is not the tools themselves, but the communities that use them. Through our production of low-cost tools, we aim to break down the price barrier between people & the curiosity and excitement of scientific exploration. In other words, allowing people (especially children) to "do" science as opposed to simply learning about science.

This presentation will focus on the development and application of Foldscope microscopes for science education, disease prevention and providing accessible portals to the microcosmos.

Biography:

Dr. Cybulski is the co-inventor of the Foldscope and has spent the last 6 years developing and field testing Foldscopes all over the world, first as a PhD engineering student in the Prakash Lab

at Stanford University and now as President and CEO of Foldscope Instruments. His primary role is to lead our efforts to provide access to scientific tools across the globe. Jim received his Ph.D. in Mechanical Engineering from Stanford, has a M.S. in Mechanical Engineering from MIT and B.S. degrees in Mechanical Engineering and Physics from Lehigh University.

Dinner Reservations:

To make dinner reservations, please complete the online reservation form at <http://www.ssp-pgh.org/ssp-monthly-meeting/> **by noon on Tuesday, February 4, 2020**. Should you not have internet access, please call 412-825-3220, ext. 200. Dinner will cost \$10 (\$5 for students) and checks are to be made out to the SSP. If you have any dietary restrictions, please let us know when you leave a 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 ticket. Should any difficulties arise, please contact Duquesne University.



Vince Brisini
Director of
Environmental Affairs
Olympus Power, LLC

Pennsylvania Regional Greenhouse Gas Initiative – Observations, Information, Insight & Questions

ACS-Energy Technology Group
Thursday, February 20, 2020

Abstract

Mr. Vince Brisini will discuss Pennsylvania's participation in the Regional Greenhouse Gas Initiative (RGGI). On October 3, 2019, Governor Tom Wolf took executive action instructing the Pennsylvania Department of Environmental Protection (DEP) to join RGGI, a market-based collaboration among nine Northeast and Mid-Atlantic states to reduce greenhouse gas emissions. PJM Interconnection LLC (PJM), a regional transmission organization, is part of the Eastern Interconnection grid operating an electric transmission system serving all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and the District of Columbia. There are many questions relating to Pennsylvania's participation in the RGGI. Some of these questions can be answered by reviewing the available public domain data and some of the questions will need modeling and estimation of impacts, including whether Pennsylvania's participation in RGGI will result in any reduction of CO₂ in the PJM market, whether any impact relative to temperature and climate impact will occur, what are the total electric prices in RGGI and non-RGGI PJM states, how have the reductions been achieved in the RGGI participating states and whether participation in RGGI is an environmental decision or a business decision.

Biography

Vince Brisini is the Director of Environmental Affairs for Olympus Power, LLC. In that role he manages the environmental issues associated with their various electric generating assets. Previously, he served as the Deputy Secretary for the Office of Waste, Air, Radiation and Remediation at the Pennsylvania Department of Environmental Protection. As Deputy Secretary, Mr. Brisini oversaw the bureaus of Waste Management, Air Quality, Radiation Protection and Environmental Cleanup and Brownfields (Remediation). Prior to his appointment as Deputy Secretary, Mr. Brisini worked 33 years in the electric generating business. His roles included management of all air quality matters including regulatory analysis, policy advocacy, emissions trading policies and strategies as well as technical issues. He has acted in an advisory capacity to U.S. Environmental Protection Agency, the Ozone Transport Commission and also to the Pennsylvania Department of Environmental Protection. Mr. Brisini has served as a member of various committees such as the Acid Rain Advisory Committee/NOx

Subcommittee, the Clean Air Act Advisory Committee, and DEP's Mercury Rule Workgroup and DEP's Air Quality Technical Advisory Committee.

Cost is \$26 (cash or check), walk-ins are welcome but an RSVP with dinner selection is preferred.

Dinner Menu: Soup, salad and choice of: Lasagna, Chicken Romano, Spaghetti w/meatball, Manicotti. Coffee, tea, and soft drinks included.

RSVP by Monday February 17, 2020 with names of those planning to attend and your dinner choice(s) to: ACS.ETG@gmail.com

Agenda: Check In: 6:00-6:30 PM, Dinner: 6:30-7:15 PM, Presentation: 7:30-8:30 PM

Location: [Lombardozi's Restaurant](#) - Bloomfield, 4786 Liberty Ave, Pittsburgh, 15224



ACS Local Section
Pittsburgh



DUQUESNE
UNIVERSITY

BAYER SCHOOL OF NATURAL AND
ENVIRONMENTAL SCIENCES



Job Searching For STEM PROFESSIONALS

Presented by

The Spectroscopy Society of Pittsburgh
The American Chemical Society, Pittsburgh Section
The Society for Analytical Chemists of Pittsburgh
BSNES Association of Graduate Students, Duquesne University

Saturday, February 22, 2020

Pre-Registration is Required for this Free Event

Maurice Lecture Hall, Mellon Hall
Duquesne University
600 Forbes Ave, Pittsburgh, PA 15282

Parking is available in Forbes Garage (bring ticket to registration table)

PROGRAM

8:30 A.M.	Registration
9:00 A.M.	MANAGING AN EFFECTIVE JOB SEARCH Lisa Balbes, Ph.D. Balbes Consultants LLC Career Consultant, American Chemical Society
12:30 P.M.	Networking Lunch
1:00 P.M.	Resume Review and Personal Consultation
3:30 P.M.	Close

Please bring resume and/or CV to participate in the afternoon program
(Undergraduates without a resume may participate in the afternoon group resume review)

To Pre-Register for the Job Searching for Stem Professionals Workshop

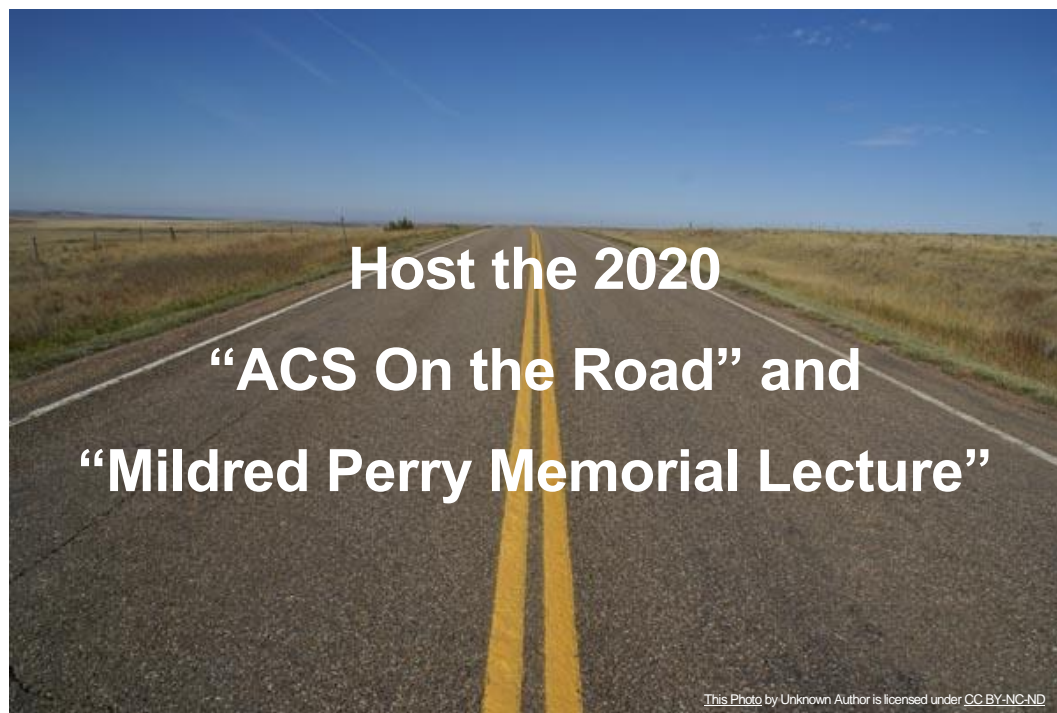
Send an email to Joshua Imperatore

at: imperat1@duq.edu

Your pre-registration must be received by Monday, February 17, 2020 and include your full name and complete contact information including address, phone number, email address and whether or not you expect to participate in the resume review. Academic registrants - please include university affiliation and university department. Let us know when you expect to complete your B.S., M.S., Ph.D., post-doc, or other assignment.



ACS Local Section
Pittsburgh



Each year the Pittsburgh local section features an "On the Road" event, which includes the "Mildred E. Perry" memorial lecture. This is a great opportunity for local section chemists to visit your site or campus. The organizers choose the speaker and program details. Past organizers would be happy to share their experience and websites if the host location is interested. This event was hosted by Saint Francis University in 2019 and featured Dr. Megan Matthews from the University of Pennsylvania. If your institution is located in the Pittsburgh Local Section and you would like to host the 2020 ACS "On the Road" event, please contact ACS Chair, Matthew Price (price@calu.edu).

American Chemical Society

1155 Sixteenth Street, N.W. Washington, D.C. 20036 T [123] 123 4567 F [123] 123 4567 www.acs.org


International Year of
CHEMISTRY
2011
www.acs.org/iyc2011

ACS Program-in-a-Box

February 25 at 7:00 pm



ACS
Chemistry for Life®

ACS Program-in-a-Box™ is a simple and cost-effective way to engage your student chapter or local section members. Subject matter experts provide stimulating science discussions matched with activities that demonstrate how chemistry is applied in everyday life. Hosting an event is easy because it's all in the box!

- ACS provides the content & speakers.
- ACS provides the promotional materials.
- ACS provides the activities and raffle prizes.
- You acquire the space, gather the audience, and enjoy the program!

Who can participate?

Anyone can participate but physical boxes will only be sent to ACS Local Sections, Technical Divisions, and Student Chapters.

Not an ACS Local Section, Technical Division, or Student Chapter? That's okay! We want chemists to join the party and connect with each other. We'll send you a "digital box" to download handouts included in the physical box for you to print and share with your attendees. We can also help you use ACS Program-in-a-Box™ to start your Student Chapter or get your Local Section or Student Chapter back into an active status, so next time you'll see an ACS Program-in-a-Box™ on your doorstep!"

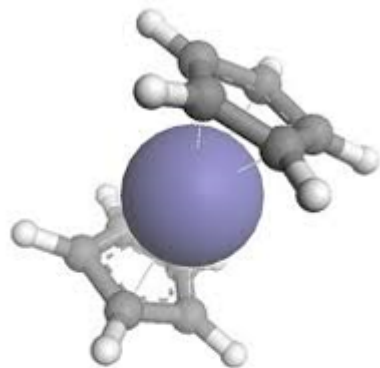
Where to Start

Register your group for our next event exploring the [Future of Food](#), live on Tuesday, February 25 @ 7:00pm ET.

Registration ends on **February 7**, so reserve your box quickly!

ACS Ferrocene Award Celebration

Duquesne University April 21, 2020



Ferrocene structure
Iron (blue), carbon (grey)
& hydrogen (white)

- In recognition of the historical significance of the discovery of the compound ferrocene at Duquesne University in 1951, the American Chemical Society will present a plaque to the Department of Chemistry and Biochemistry.
- Please join us for a brief award ceremony, including refreshments and remarks by distinguished organometallic chemist, Professor Robert H. Crabtree. Abstract included [here](#).
 - Registration and Hors d'oeuvres at 5:00 PM
 - Dinner and Program Begin at 5:30 PM
- When: Tuesday April 21st, 2020 from 5:00 PM to 8:00 PM
- Where: Duquesne University Student Union, Africa Room
- RSVP : chemistry@duq.edu Mail \$10 Dinner Fee to :
Duquesne University, c/o Aimee Ciesielski, 600 Forbes Ave., Pittsburgh, PA 15282

34th Annual Undergraduate Research Symposium

Duquesne University

Saturday, April 4, 2020



Dear All,

We are pleased to announce the 34th Annual Undergraduate Research Symposium at Duquesne University sponsored by the Pittsburgh Section of the ACS.

This year, the Symposium will be held on **Saturday, April 4th, 2020**. The date was selected due to Easter. Please save the date and spread the word to your colleagues and students.

We will send more details in March (including details on registration).

If you have any questions or suggestions, then you can contact either Paul Johnson (johnson1@dug.edu), Ellen Gawalt (gawalte@dug.edu), or myself (evanseck@dug.edu).

Best wishes,

Jeff Evanseck, Paul Johnson, and Ellen Gawalt



American Chemical Society Pittsburgh Section

www.pittsburghacs.org

Dear Academic ACS Pittsburgh Section Members,

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. Awards will be made based on the scientific merit of the paper/poster to be presented, financial need, and preference will be given to ACS members.

To apply for the funds, applicants should complete the attached application and return it by the relevant deadline. The deadlines for receipt of applications are as follows:

- **06/01 (for travel to be completed by 12/31)**
- **12/01 (for travel to be completed by 06/30)**

As noted on the application, students should include an abstract and confirmation (if received) of the paper/poster being accepted for the Meeting. In addition to the application form, applicants should include a recommendation letter from the PI of the project being presented and/or a recommendation letter from another and a personal statement as to the anticipated benefits of meeting attendance.

Applications can be made electronically (*preferred*) by emailing the application to Heather Juzwa (hjuzwa@shimadzu.com or heather_sapko@hotmail.com) or by mailing a hard-copy application (Pittsburgh Section ACS Travel Grants / Heather Juzwa / Center / 321 Winners Circle / Canonsburg, PA 15317).

Since 2013, the Pittsburgh Section of the ACS has awarded up to four \$500 grants each year to aid our undergraduate/graduate student members in presenting papers or posters at ACS Meetings. This is an ongoing program in our Section, and details will be updated on our website (www.pittsburghACS.org) as necessary.

Applicants will be notified via email that their application was received. All efforts will be made to announce awards within two weeks of the application deadline, and all applicants will be notified of the final committee decisions. 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 me.

Sincerely,

Heather Juzwa, ACS Pittsburgh Section Student Travel Grants, Chair
Senior Field Sales Engineer, Shimadzu Scientific Instruments, Inc



American Chemical Society
Pittsburgh Section

www.pittsburghacs.org

Application Deadline	Travel Completion Date
December 1	June 30 (subsequent year)
June 1	December 31 (same year)

Name of Applicant: _____

Name of Institution: _____

_____ Undergraduate Student / Year

_____ Graduate Student / Year

Mailing Address to Receive Payment if Awarded:

Email: _____ Phone: _____

PI: _____

ACS Membership No.*: _____

**If you do not know your ACS number, please email hljuzwa@shimadzu.com to receive it by email.*

Meeting Location: _____ Meeting Date: _____

Project Title: _____

_____ Paper Presentation _____ Poster Presentation

**Please attach a copy of your project abstract to the application.*

Has your project been accepted? Yes No

**Attach documentation regarding acceptance if received at point of application.*

Will this be your first presentation at an ACS national or regional meeting? Yes No

If no, please list conferences at which you have presented: _____

Purpose of grant: _____

Other funding sources (if any): _____

Personal Statement of anticipated benefits of meeting attendance: _____

Has the applicant received a travel grant from the ACS Pittsburgh Section in the past? Yes No

If your application was selected, the Pittsburgh Section of the ACS would like you to write a short (one page) description of your activity upon completion of the conference for publication in our monthly newsletter, The Crucible, and on our website. The description is due within 30 days of the meeting attended. Photos are welcomed and encouraged.

I am willing to complete this report: Yes No

Signature: _____

Date: _____

Send completed hard-copy applications and supporting documentation to:

Pittsburgh Section ACS Travel Grants

Heather Juzwa, 321 Winners Circle, Canonsburg, PA 15317

Electronic copies of completed applications should be sent to hljuzwa@shimadzu.com and heather_sapko@hotmail.com. Be sure to place "Pittsburgh Section ACS Travel Grants" in the subject line.

Pittsburgh Section Officers

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250 University Ave
California, PA 15419
724-938-4153
price@calu.edu

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51 W. College St.
Waynesburg, PA 15370
724-852-7617
ebaldauff@waynesburg.edu

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 Deadline

The deadline for items submitted to The Crucible is the 15th of the month prior to publication. For example, all items for the March 2020 issue must be to the editor by February 15th, 2020.

The Crucible

The Crucible is published monthly, August through May. All statements and opinions expressed herein are those of the editors or contributors and do not necessarily reflect the position of the Pittsburgh Section.

Design Editor: Alysia Mandato, crucible@pittsburghacs.org



Spectroscopy Society of Pittsburgh

Professional Networking
within the Spectroscopy
Community

Monthly Symposia by
Prominent Researchers

Promoting Science Education

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Ext. 200



Society for Analytical Chemists of Pittsburgh

Calling New Members!

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Assistant at 412-825-3220
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Advertise in The Crucible

	1X	3X	6X	10X
Full Page	\$120	\$115	\$100	\$75
Half Page	\$75	\$70	\$60	\$45
3.5" x 2"	\$50	\$45	\$25	\$20

ACS Member-Get-a-Member

Recruit a new member to the American Chemical Society and receive a free 2020 Periodic Table of the Elements blanket!

See [here](#) for more information

ACS Regional Awards – Apply Today!

More information can be found [here](#)