



Pittsburgh Section of the American Chemical Society
Volume CIX, No. 9
April 2023

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Get to Know A Member – Christina Holstine



1. What is your work and ACS (if applicable) title?

ACS Student Chapter President at Penn West University - California

2. How many years have you been in the ACS?

3 years

3. What is the biggest benefit of ACS Membership?

The biggest benefit of ACS Membership is being able to attend meetings and events to network with chemistry professionals and gain additional knowledge about the career field.

4. What did you want to be when you were a child?

When I was a child, I wanted to be a surgeon.

5. What made you fall in love with Chemistry?

I first fell in love with Chemistry when I was a kid and learned about atoms and molecules in a middle school science class.

6. What is your favorite part of your career or job?

My favorite part about being the Student Chapter president is being able to help other undergraduate students love chemistry and provide outreach opportunities to engage the general public in chemistry related experiences.

7. Which chemist, past or present, would you like to meet and why?

I would love to meet Marie Curie and Rosalind Franklin because Marie Curie has also been one of my biggest inspirations in chemistry by being the first woman to win a Nobel prize and then went on to win a second one for her work. I would love to meet Rosalind Franklin because learning about her work with X-ray crystallography inspired me and influenced my senior research project.

Do you want to be our featured member? Please email hljuzwa@shimadzu.com to get onto the schedule!



Call for Nominations

Pittsburgh Award

The Pittsburgh Award was established in 1932 by the Pittsburgh Section of ACS to recognize outstanding leadership in chemical affairs in the local and larger professional community. This Award symbolizes the honor and appreciation accorded to those who have rendered distinguished service to the field of chemistry. The Award consists of a plaque presented annually at a section dinner. Members of the Pittsburgh Section, or in exceptional cases, nonmembers, who have done work worthy of recognition toward increasing chemical knowledge, promoting the chemical industry, benefiting humanity, or advancing the Pittsburgh Section, are eligible for consideration.

Distinguished Service Award

The Distinguished Service Award was established in 2007 by the Pittsburgh Section of the ACS to expand and replace the predecessor Chairman's Award of the section. Both recognize outstanding volunteer service to the Section. The Award, consisting of a plaque, is presented annually at a Section dinner, which is open to the public. Members of the Pittsburgh Section, past or present, who have provided outstanding service in advancing the Pittsburgh Section, are eligible for consideration.

Nominations for both awards are solicited from the membership of the Pittsburgh Section. Nomination packets and more information about the awards, including information on past winners, can be found on the Pittsburgh ACS website: <https://pittsburghacs.org/awards/>

Please send all nominations (or questions about nomination process) to Pittsburgh Section Chair-Elect, Alysia Mandato, atm75@pitt.edu. Nominations are due no later than **Tuesday, August 15, 2023**.



2023 CCEW Illustrated Poem Contest The Curious Chemistry of Amazing Algae

The Pittsburgh Local Section of the American Chemical Society (ACS) is sponsoring an illustrated poem contest for students in kindergarten through 12th grade.

Contest Deadline: Sunday, April 30, 2023, at 11:59 PM ET

Prizes: \$50 for 1st place in each of four grade categories: K-2nd, 3rd-5th, 6th-8th, and 9th-12th

Contact: Alysia Mandato, CCEW coordinator, ccew@pittsburghacs.org

Submissions: <https://forms.gle/HKchkBF3ruDcLxS8>

Winners of the Pittsburgh Local Section's Illustrated Poem Contest will advance to the National Illustrated Poem Contest for a chance to be featured on the ACS website and to win prizes!

Write and illustrate a poem using the CCEW theme, "**The Curious Chemistry of Amazing Algae.**" Your poem must be **no more** than 40 words and in the following styles to be considered:

HAIKU - LIMERICK - ODE - ABC POEM - FREE VERSE - END RHYME - BLANK VERSE

Possible topics related to the theme include:

- Seaweed
- Micro- or macro- algae
- Photosynthesis
- Bioluminescent algae
- Algae as food & habitat for animals
- Consumer products from algae
- Oxygen from algae
- Biofuels from algae

Entries will be judged based upon:

- Artistic Merit - use of color, quality of drawing, design, and layout
- Poem Message - fun, motivational, inspiring about yearly theme
- Originality Creativity - unique, clever and/or creative design
- Neatness - free of spelling and grammatical errors

Contest rules:

- All poems must be no more than 40 words, and in one of the following styles to be considered: Haiku, Limerick, Ode, ABC poem, Free verse, End rhyme, and Blank verse.
- Entries are judged based upon relevance to and incorporation of the CCEW theme, word choice and imagery, colorful artwork, adherence to poem style, originality and creativity, and overall presentation.
- All entries must be original works without aid from others. Poems may be submitted by hand on an unlined sheet of paper not larger than 11" by 14" or scanned and sent via email. Illustrations may be created using crayons, watercolors, other types of paint, colored pencils, or markers. The illustration may also be electronically created by using a digital painting and drawing app on a computer, tablet, or mobile device.
- The text of the poem should be easy-to-read and may be typed before the hand-drawn or digital illustration is added, or the poem may be written on lined paper, which is cut out and pasted onto the unlined paper with the illustration.
- No clipart or unoriginal images can be used.
- Only one entry per student will be accepted; all entries must include an entry form.
- If the illustration is created using a digital painting or drawing app, the name of the program must be included on the entry form.
- Acceptance of prizes constitutes consent to use winners' first name and last initial, along with the name of the ACS Local Section, on the ACS web pages and in the magazine, Chemical & Engineering News





Evonne Baldauff of the Pittsburgh Section of the ACS was named the Global Outreach Volunteer of the Year!

From [C&EN release](#) on March 9:

The American Chemical Society's Committee on Community Activities recognizes 27 members with its 2023 Outreach Volunteer of the Year Awards. The program rewards local section and international chapter volunteers for their extraordinary outreach efforts in chemistry.

Each year, one awardee is named the Global Outreach Volunteer of the Year. **Evonne Baldauff**, a professor of chemistry at Waynesburg University, is the 2023 global winner. She is being honored for her contributions to National Chemistry Week (NCW) activities in the ACS Pittsburgh Section, both as a volunteer for the past 15 years and as a coordinator since 2019.

For NCW 2022, Baldauff organized an in-person event for around 70 high school students and their teachers at Carnegie Science Center's laboratory facilities. She also worked with undergraduate ACS student chapters to mail 100 science experiment kits to school teachers around the Pittsburgh region so they could conduct NCW-themed activities in their classrooms.

"I love it when I show a kid a simple point about chemistry that they've never thought about before, and they get it, and give you a smile, and you see a spark in their eyes," Baldauff says. "Those moments are what I love about outreach."

ACS Travel Grant Recipient: Sarah Evans

From March 25-28, 2023, I had the opportunity to travel to Indianapolis, Indiana to attend the American Chemical Society Spring 2023 National Conference. This conference provided me with experiences and opportunities for which I am very grateful. I presented not one, but two, posters at the conference, one about my undergraduate research and the other about the chemistry outreach program (Rural Outreach Chemistry for Kids (R.O.C.K.)) that I currently direct at Saint Francis University. Through presenting these posters, I was able to talk with many different people about their perspectives on the topics that I research and am passionate about. I was also able to collect many new ideas from people all over the globe and bring them back to my peers and professors on our small campus in rural Pennsylvania.



Figure 1: My peers (Isabelle Cunningham-left and Katarina Zerbee-right) and I (center) at the convention center before presenting our undergraduate research posters on Monday, March 27th.

On Sunday, March 26, two of my peers, our faculty advisor, and I attended the Student Chapter Awards Ceremony, where I got to watch one of my peers accept Saint Francis University's Outstanding Student Chapter award. My peers and I then attended the student social afterwards where we got to meet and mingle with students from other universities in a relaxed setting.



Figure 2: My peers (Isabelle Cunningham-left and Katarina Zerbee- right) and me at the student social

On Monday, March 27, I was able to experience a few talks at the conference, and I especially enjoyed a presentation titled “Everything is a chemical: Communicating science”. This presentation contained a lot of useful information pertaining to how to effectively communicate science to both those who have a background in the subject and those who do not. I found this extremely informative, especially because I frequently have to explain science to K-12 students through our R.O.C.K. program, and I was able to bring back tips and tricks on how to enhance my explanations during our events.

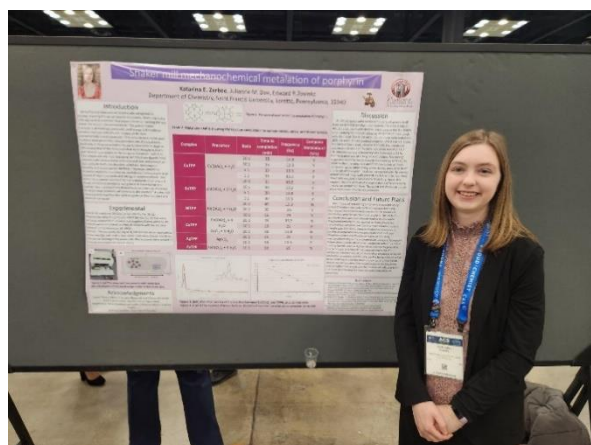
Overall, I gained a lot from this experience. I got to witness a part of the country I had never seen before, connect with people I otherwise would have never met, present posters about topics I am passionate about, and learn more about chemistry.

ACS Travel Grant Recipient: Katie Zerbee

From March 25-28, I was able to attend the National ACS Meeting in Indianapolis. I am grateful that I was able to have this opportunity to explore the larger world of chemistry and spending time in the city, a completely different environment than the small town where I attend school. This was my first time presenting a research poster at a larger conference outside of my school. I was nervous, but I felt comfortable talking to others about the research I have been involved in for the last 2 years. The expo at the conference provided an insight into just how broad the chemistry world is and what opportunities are out there. We attended the student chapter award ceremony where Saint Francis University was honored with one of the Outstanding Chemistry Club Awards. I enjoyed seeing the hard work that I put into the Chemistry Club as vice president pay off and get recognized.

While presenting, I talked to other students and scientists of higher degrees. I liked hearing their perspective on my project and about the research they had done related to my project. Being surrounded by so many people in my field of study was exciting. We also had the opportunity to go to dinner with the Vice President of Saint Francis University, a chemist who also attended the conference. It was interesting to hear about some of his experiences in the chemistry field.

In our free time, other students from my school and I got to explore downtown Indianapolis. One of our activities was visiting the Indianapolis Motor Speedway with its museum and activity center. Walking around downtown and visiting Monument Circle allowed us to get a feel for the city and enjoy the nicer weather. Shopping and eating a variety of foods independently in a big city was also a new experience for us. Attending this conference has certainly expanded my knowledge of the chemistry world and presented me with many more opportunities for my future career.

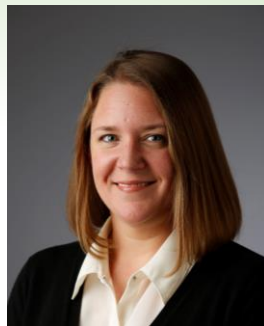


Effective and Sustainable Treatment of PFAS with Granular Activated Carbon

May 3, 2023, 7:00-8:00pm (EST)



John Matthis, MBA
Director
Global Business
Development
Calgon Carbon Corp.



Rebecca DiStefano, MBA
Sr. Application Engineer
Industrial Solutions and
Diversified Applications
Calgon Carbon Corp.

PFAS (Per and Polyfluoroalkyl Substances) are a unique class of manmade chemicals ubiquitously used in various industries and applications. Due to the high stability of the carbon-fluorine bond, these compounds do not breakdown under ambient conditions and have been found problematic to human health. The US EPA announced in March 2023 new Maximum Contaminant Levels (MCLs) for two specific PFAS (PFOA & PFOS) and a hazard index value for four other compounds (PFNA, PFHxS, PFBS and GenX) in drinking water. Granular activated carbon (GAC) is recognized as one of three best available treatment technologies for PFAS treatment and a whole host of other species as well. Activated carbon is also used to treat various streams including drinking water, wastewater, and air emissions. The goal of this presentation is to provide a brief overview of the class of chemicals known as PFAS, what activated carbon is/how it removes PFAS, and how this technology is differentiated to the other best available treatment technologies (Ion Exchange resin and RO membranes).

John Matthis is the Global Business Development Director for Calgon Carbon Corporation. He spearheads the Calgon Carbon PFAS task force and has contributed to Perfluoroalkyl Substances in the Environment Theory, Practice, and Innovation, 2018. He has conducted more than 10 webinars on PFAS treatment with activated carbon and has spoken at NEWMOA PFAS Technical Workshop (2017), the 33rd International Conference on Solid Waste Technology and Management (2018), and the International Water Conference (2021). Mr. Matthis earned his double BS in Chemistry and Mathematics from Duquesne University, his MBA from the University of Pittsburgh, and his MS in Chemical Engineering from the University of Pittsburgh.

Rebecca DiStefano is a Sr. Applications Engineer at Calgon Carbon Corporation in the Industrial Solutions and Diversified Applications Business Unit. Prior to this position, Rebecca was Sr. Group Leader of Carbon Applications and Testing, overseeing testing to evaluate carbon performance for PFAS removal. Rebecca received her BS degree in chemical engineering in 2000 from The Pennsylvania State University in State College, PA and her MBA in 2021 from Robert Morris University in Moon Township, PA.

How to join:

Please register at <https://forms.gle/h42ZEpuh5ePMZnao7>

Or contact dr.Ronghong.lin@gmail.com to receive a link.

**SSP/SACP Joint Meeting
Former Chair Night
Wednesday, April 26, 2023
Duquesne University**



5:30 PM – Social Hour
6:30 PM – Dinner
7:15 PM – Business Meeting &
Recognition of Former Chairs
8:00 PM – Technical Program

SACP Technical Program

“Green Liquid Chromatography - An Unexpected Journey”

Dr. Milton Lee, Brigham Young University



Biography:

Milton L. Lee received a B.A. Degree in Chemistry from the University of Utah and a Ph.D. in Analytical Chemistry from Indiana University. He was a postdoctoral researcher at MIT before accepting a faculty position at Brigham Young University. Dr. Lee's research centers on capillary separation techniques and mass spectrometry detection. He has co-authored over 600 publications and has received various awards including the ACS Award in Chromatography, ACS Award in Chemical Instrumentation, Pittsburgh Analytical Chemistry Award, ACS Award in Separations Science and Technology both LCGC Europe and North America Lifetime Achievement Awards, and the 2019 ACS Award in Analytical Chemistry. Dr. Lee has mentored over 100 graduate

students and post-doctoral researchers. Professor Lee is also an entrepreneur and has been involved in transferring technology from his university research laboratory to the private sector, co-founding four analytical instrument companies. He was named five times on the *Analytical Scientist* Power List, the latest in 2021.

Abstract:

The global high performance liquid chromatography (HPLC) market is the largest among the chromatographic techniques currently over \$4 billion USD annually with additional mobile phase solvent purchase/handling/disposal costs approaching \$1 billion USD. From a “green” perspective, reduction in use of solvents and electrical power by chromatographers is necessary to do our part to protect the environment and conserve our natural resources as the HPLC market continues to grow.

The ACS's Green Chemistry Institute has prepared an on-line Analytical Method Greenness Score (AMGS) calculator for LC. Using this calculator and comparing solvent waste reduction plus instrument energy reduction between conventional LC and capillary LC, the AMGS score for capillary LC is over 150 times greener. Considering the number of liquid chromatographs worldwide, switching to more compact LC instrumentation would be a significant contribution to the protection of the environment and conservation of valuable non-renewable resources.

Using capillary columns with small diameter (<0.3 mm i.d.), LC mobile phase flow rates are much lower, pumps are smaller, and the overall instrument size and cost can be significantly

reduced. Recently, I have been involved in the development of a novel compact capillary LC that has a small footprint, weighs only 5.4 kg, produces consistent nL to μ L flowrates at pressures up to 1500 bar, utilizes on-column or miniature flow cell optical UV detection, and is very easy to operate. Compactness allows the LC instrument to be easily moved to wherever it is needed, such as to a sample source, to a bench in the laboratory next door, or to another analytical instrument for easy interfacing.

For complete details and to make a dinner reservation, please visit our society's website. Deadline for dinner reservations is Wednesday, April 19, 2023 by noon.

<https://chemistryoutreach.org/meeting/>



SACP/SSP Continuing Education Symposium

Consequences of Climate Change and the Challenge for Pennsylvania

Sponsored by

Society for Analytical Chemists of Pittsburgh (www.chemistryoutreach.org)

Spectroscopy Society of Pittsburgh (www.chemistryoutreach.org)

April 22, 2023–RJ Lee Group Bldg., 800 Presque Isle Dr, Pgh, PA 15239.

**Registration Starts at 8:15 AM and continues until 9:00, There will
be one recess and lunch should begin at about 12:30**

Although this symposium will present different ramifications and general information of climate change, it will focus on how Pennsylvania is and will be affected and what is being done about climate change now and what is planned for the future.

The presenters include the following:

Dr. Josef Werne Professor & Chair, Geology & Environmental Science, University of Pittsburgh

Dr. Roger A. Pielke Sr., Professor Emeritus, Colorado State University (Virtual presentation)

Dr. Maureen Lichtveld (MD, MPH), Dean School of Public Health, University of Pittsburgh

Mr. Jeff Jumper, EM Program Manager – Resiliency, PA Emergency Management Agency

COST: \$11 – for in-person attendance which includes parking, refreshments and lunch.
To attend virtually there is \$0 cost.

To register and to find out more information about the speakers and presentations go to

www.chemistryoutreach.org and click on the callout box on the homepage listing the symposium. If you do not see the callout you can navigate to the information by clicking or touching the **Events tab** → **Lectures + Symposia** → **Climate Change**. If you are using a cell phone or tablet you may need to access the information starting from the three horizontal lines in the upper right corner of the homepage.

The deadline for in-person registration is April 14, 2023 or until there is full capacity. For virtual attendance the registration deadline is up to the beginning of the symposium. If you want to attend in- person it is suggested that you register early, because space is limited.



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 (hljuzwa@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.



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.

Editors: Alysia Mandato and Niharika Botcha, crucible@pittsburghacs.org

2023 Pittsburgh Section Officers

Chair	Ed Zovinka ezovinka@francis.edu
Chair-Elect	Alysia Mandato atm75@pitt.edu
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Treasurer	Matt Price price@pennwest.edu
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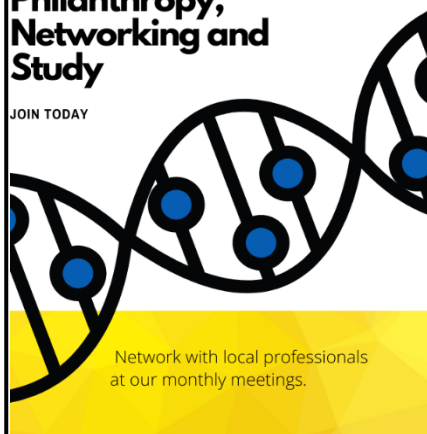
Spectroscopy Society of Pittsburgh



chemistryoutreach.org

Science Outreach through Philanthropy, Networking and Study

JOIN TODAY



Network with local professionals at our monthly meetings.

Society for Analytical Chemists of Pittsburgh
chemistryoutreach.org



Advancing Analytical Chemistry through Science Education

JOIN TODAY



Network with local professionals at our monthly meetings.

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

Volunteer with Us!

We are always looking for new people to join the Pittsburgh Section Executive Committee. Email our Chair to inquire about opportunities.

The Crucible Deadline

The deadline for items submitted to The Crucible is the 25th of the month prior to publication. For example, all items for the February 2023 issue must be to the editor by January 25th, 2023.

ACS Regional Awards – Apply Today!

More information can be found [here](#)