



The Crucible

American Chemical Society - Pittsburgh Section
Volume CVIII, No. 4
November 2021

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ACS Local Section

Pittsburgh

2021 Ballot of Officers

The 2021 Nominating Committee of the Pittsburgh Section of the American Chemical Society submits the following slate of candidates for the Section office for 2022. 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. The polls will open November 15, 2021. Please note that all ballots must be received by November 21, 2021 when polls close.

Chair-Elect (Vote for 1)

Edward Zovinka

Secretary-Elect (Vote for 1)

Jiahan Xie

Directors (Vote for up to 2)

Fu-Tyan Lin

Logan Miller

Evonne Baldauff

Councilors (Vote for 1)

Ashley M Smith

Kristin Nuzzio

Assuming you are a member in good standing, you will receive your ballot electronically. The polls will open on at 8:00 AM on November 15 and close November 21 at 11:59 PM.

For ballot questions, please contact:

Alysia Mandato

Secretary – ACS Pittsburgh Section

ATM75@pitt.edu

Candidate Biographies

Chair-Elect

Edward P. Zovinka

Edward P. Zovinka received a B.S. degree in Chemistry at Roanoke College (VA) and earned his Ph.D. degree in inorganic chemistry from the University of California at Davis. Edward's educational career has taken him from Roanoke College to Argonne National Lab, from UC-Davis to North Carolina State. From there he taught at Davidson College before joining the faculty at Saint Francis University (SFU). He has advised over 40 undergraduate students leading to many local, regional, and national presentations and authoring 33 publications spanning journals from the *Journal of the American Chemical Society* to *The Chemical Educator*. During his career at SFU, he has been the Principal Investigator or co-PI on successful proposals to NSF, ACS, and the PA Department of Education for research, equipment, and community outreach program grants. He has authored and co-authored two books on chemistry for the 8-12 year old audience and is passionate about chemistry outreach.

Edward has been an active member of the Spectroscopy Society of Pittsburgh, the Society for Analytical Chemists of Pittsburgh, and the American Chemical Society. Currently he is the Program Chair-elect for 2023 Pittcon as well as Chairing the ACS-Pittsburgh Mildred Perry "On the Road" Program. Edward has also served as Secretary for the SSP.

Edward was awarded the *Pennsylvania Professor the Year* by the Council for Advancement and Support of Education, the J. Kevin Scanlon Award for the Promotion of Science by SSP, and honored by the Carnegie Science Center Awards for Excellence in the University/Post-secondary Educator category. He serves on the Board of Directors for "A Quaint Corner Children's Museum & Discovery Center" in Altoona and is on the Executive Board of the CSB2 STEM Ecosystem for the Cambria, Somerset, Blair, and Bedford county region.

Secretary-Elect

Jiahan Xie

Jiahan received his bachelor's degree in chemistry from Peking University in 2013 and completed his doctoral degree at University of Virginia in 2017. His doctoral research focused on the fundamental understanding of heterogeneous catalysts to upgrade biomass-derived chemicals via selective oxidation. His mechanistic findings on oxidation reaction and catalyst deactivation provided important insights on the ration optimization of the catalytic system. In 2018-2019, he joined the laboratory for science and applications of catalysts at University of California, Berkeley, as a postdoctoral researcher, where he further explored the effect of microporous environment on reactivity and diffusion during dehydrocyclodimerization of light alkane on metal-acid bifunctional catalyst. His catalysis research continues after joining Braskem, with a more industry-oriented goal to develop reactive and robust catalysts for production of intermediates and chemicals following disciplines of sustainable development.

Directors

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 in 2004. She currently serves as the Assistant Provost for Online Learning and Curriculum Development as well as the Chair of the Department of Chemistry & Forensic Science at Waynesburg University where she is a Professor of Chemistry. Her research interests range from developing novel inorganic materials to characterization of roasted and brewed coffee to studying learning outcomes in the general chemistry laboratory. Baldauff has advised the Waynesburg University ACS student chapter since 2007, during which time the group was recognized twelve times as an "Outstanding Student Chapter." Recently she served as the Undergraduate Student Program Co-Chair for the ACS Spring 2021 virtual meeting. Baldauff has been active in the Pittsburgh ACS Local Section since 2013, serving in various officer roles including secretary and chair and is currently in her second term as treasurer. She assumed the role of NCW coordinator for the section in 2019, earning recognition for the "Outstanding Ongoing NCW Event" ChemLuminary award that same year.

Fu-Tyan Lin

Fu-Tyan received his bachelor degree of science in 1963 in Physics/Chemistry and Teaching from the National Taiwan Normal University, Taipei, Taiwan. He enjoyed seven years of teaching in high schools and colleges in Taiwan. He came to the United States for his graduate study in August, 1969. Fu-Tyan received his MS in Physics in 1971 and Ph.D. in Polymer Science in 1979 from the University of Akron, Akron, OH. During his graduate study, he worked as a technician for the Physics Department from 1971 to 1973 and as an NMR (Nuclear Magnetic Resonance) Spectroscopist for the Institute of Polymer Science from 1973 to 1978 at the University of Akron. He was the Chemistry Instrumentation Manager at the University of Louisville, Louisville, KY in 1978-1980. He was the Director of the NMR Lab and a Research Assistant Professor in the Chemistry Department at the University of Pittsburgh from June, 1980. He was promoted to the Research Associate Professor in November, 1986. He retired from the University of Pittsburgh in January, 2005. In 2005, Fu-Tyan founded LIST NMR, an NMR Services and Consulting Lab. His current research interest is the separation and characterization of natural products. Fu-Tyan is the author and co-author for more than sixty papers, and presented more than twelve papers at the academic institutes and conferences. In October, 2005, he gave a plenary lecture for the Beijing Conference and Exhibition on Instrumental Analysis (BCEIA) in Beijing, China. He gave another lecture of International Forum for BCEIA on October 12th, 2011 in Beijing. Fu-Tyan organized PITTCON US Symposium at JASIS 2016 Exposition/Conference (Japan Analytical and Science Instruments Show) in September, 2016 in Tokyo-Makuhari.

Fu-Tyan has been an active member of the American Chemical Society (ACS) since 1978, a member of the Spectroscopy Society of Pittsburgh (SSP) since 1982, a member of the Society for the Analytical Chemists of Pittsburgh (SACP) since 1999, and a member of the Pittsburgh Conference (PITTCON) 1993-2020. He served as various committee chairs last several years for PITTCON, SSP, SACP and ACS Pittsburgh Section. He was Chairman of the SSP in 2003-2004, and was Chairman for SACP 2011-2012. He was the Chairman for the Pittsburgh Section of ACS in 2008. He served as a Chairman for Pittsburgh ACS Polymer Group in 1985-1986. He was President of The Chinese Monte Jade Science and Technology Association, Pittsburgh Chapter, in 1999. He is Selection Committee member for Carnegie Science Awards 2013-2017. Fu-Tyan enjoys sewing, cooking, reading and listening to classical music.

Logan Miller

Logan Miller received his B.S. in Chemistry with a major in biochemistry and forensic chemistry from Slippery Rock University of Pennsylvania (SRU). He is in the process of completing his dissertation from Duquesne University on the topic of developing separation methods for the quantification of human biomarkers using LC/MS/MS technology for forensics and clinical markers. He has attended and presented numerous oral and poster presentations at both *PittCon* as well as *American Society for Mass Spectrometry* conferences.

Logan currently works for Shimadzu Scientific Instruments as the Mid-Atlantic regions Mass Spectrometry Technical Support Scientist. During his time with Shimadzu, he has been involved in numerous LCMS projects in the environmental, cannabis, and clinical toxicology markets. He currently is lead application scientist for the development of Shimadzu's newest multiplexing LCMS instrumentation.

Logan is actively involved in numerous committees with both SACP and SSP and has been a member since 2013. He currently is serving as Chair for Mass Spec Discussion group and recently finished one year position as Treasurer for the SSP. He is currently serving as the editor of the Pittsburgh Section of the ACS Crucible newsletter. He has been an ACS member since 2009. Additional roles within the Pittsburgh ACS involve being chair of publicity/marketing committee for Pittsburgh ACS. At the national ACS level, he is a member of the Younger Chemists Committee and serves as subcommittee chair for the communications group. He constantly champions for the Pittsburgh ACS section and looks forward to the future growth and expansion of the section and to serve as one of the Pittsburgh ACS's Directors.

Councilors

Ashley M. Smith

Ashley is a graduate of Washington & Jefferson College with an ACS certified B.A. in Chemistry and a minor in English. She earned her Ph.D. in Inorganic/Materials Chemistry from the University of Pittsburgh. After completing postdoctoral research in the Department of Civil and Environmental Engineering at the University of Pittsburgh, Ashley started her teaching career by returning to Washington & Jefferson College as a visiting assistant professor in the Chemistry Department. In 2020, she joined the faculty at Saint Francis University (SFU). Ashley has been a member of the Society for Analytical Chemists of Pittsburgh since 2020.

Ashley teaches General Chemistry, Quantitative Analysis lecture and lab, and assists with the Chemistry major seminars. Beyond teaching, she has worked on undergraduate research with eight students, helping them to explore nanoparticle synthesis and characterization using Green Chemistry Principles. Ashley and the students have shared their research progress through seven posters and presentations. Within the Chemistry Department and SFU, Ashley is active on five committees, including serving as the chair of the ongoing search for the new Chemistry faculty member.

Kristin Nuzzio

Kristin Nuzzio has been a member of the American Chemical Society for 15 years and has most recently served as the Chair of the National Younger Chemists Committee in 2020 and 2021. She is a Group Leader at PPG in Allison Park, PA where she has worked for six years in a variety of research and supervisory roles, and she currently leads a team of formulation scientists to understand cure and property development of paints and coatings. Kristin received a PhD in Physical Chemistry from the University of Illinois at Urbana-Champaign in 2015 and a BS in Chemistry and BA in Spanish from the University of Delaware in 2009. She also serves as an ACS Career Consultant where she writes regularly for the ACS Industry Matters Newsletter, participates in university recruiting initiatives, and is active in community outreach at PPG as a member and former Chair of the Science Education Council.



*Society for Analytical Chemists of Pittsburgh
Spectroscopy Society of Pittsburgh*



November MEETING (In-Person or Virtual)

Wednesday, November 17, 2021



**DUQUESNE
UNIVERSITY**

in Pittsburgh



PLEASE NOTE THAT
DUQUESNE HAS AN IN-PERSON
MASK MANDATE IN PLACE

*5 p.m. - Social Hour in the Shepperson Suite
5:30 p.m. - Technology Forum in the Union Ballroom
6:30 p.m. - Dinner in the Union Ballroom
7:15 p.m. - Business Meeting in the Union Ballroom
8 p.m. - Technical Program in the Union Ballroom*

SSP TECHNOLOGY FORUM

Victoria Ren, Co-Founder of Stem & Buds

"STEM & Buds: for-youth, by-youth science mentoring initiative"



Biography

Victoria Ren is a senior at the North Allegheny School District. When she was 13, she cofounded STEM & Buds and has since been interested in education (equity), public policy, and social innovation. Outside the classroom, she's been organizing for her community's racial justice coalition and building a guide for all youth to create change. She also enjoys reading New Yorker cartoons and wearing crocs.

Abstract

Founded in 2018, STEM & Buds is a nonprofit that works to redefine inclusivity and accessibility in STEM by bridging students to mentors, shaping ideas into initiatives, and translating science for civics. We've prototyped and ideated, asking questions: how should we balance structure with freedom? How do we replicate individualized learning on a larger scale? Today, we continue to do this. This talk will share what we've learned working with kids these past three years, where we hope to move towards, and ways to become involved.

SACP TECHNICAL PROGRAM



Dr. Robbyn Ananad, Iowa State University

"Ultrasensitive Lateral Flow Assays Based on Electrokinetic Focusing of Viral Biomarkers"

Biography

Robbyn K. Anand She is the Suresh Faculty Fellow at Iowa State University where she joined the Department of Chemistry as an Assistant Professor in August 2015. She earned her Ph.D. in 2010 from the University of Texas at Austin under the guidance of Prof. Richard M. Crooks with the support of an NSF Graduate Research Fellowship. In addition to winning the Pittcon Achievemnet Award in 2021, she also won the Clinical Ohmics Pioneers Under 40, Satinder Ahuja Award for Young Investigators in Separation Science, 2021 Royce W. Murray Young Investigator Award; and many more throughout her distinguished career.

Abstract

Robbyn developed microfluidic devices employing bipolar electrodes for electrokinetic focusing of charged species and membrane-free seawater desalination. Then, as an NIH Postdoctoral Fellow, she worked with Prof. Daniel T. Chiu at the University of Washington on the capture and analysis of circulating tumor cells. She pioneered a technique for dielectrophoretic manipulation of biological cells using extended electric field gradients. At Iowa State, Prof. Anand has led the development of a technology for the selective isolation and analysis of single cells with the aim of obtaining information that can improve outcomes in cancer therapy. Her research group has also advanced methodologies for separations in complex media (e.g., blood plasma) and for previously inaccessible target compounds.

MEETING RESERVATIONS: For both in-person and virtual reservations, please [CLICK HERE](#) by **BY NO LATER THAN** Wednesday, November 10,2021. In-person entree choices include Roasted Turkey or Goat Cheese Tart. Please let us know if you have any dietary restrictions. Dinner will cost \$10 (\$5 for undergraduate students). Checks can be made payable to either SACP or SSP, depending on your membership. Please note the dinner policy included in your document links regarding cancellations.

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. The Power Center can be accessed from the 8th Floor of the Forbes Garage. Bring your parking ticket to the dinner or meeting for a valedation sticker. Please contact Duquesne University, if any difficulties should arise. If there is a special event, please note that you are there for an SSP or SACP meeting to get a parking ticket.

For any questions or problems, please contact Colleen, the Society Coordinator, at 412-825-3220 (Ext. 215).



National Chemistry Week 2021: Fast or Slow, Chemistry Makes it Go!

The ACS Pittsburgh Local Section celebrated National Chemistry Week by partnering with the Carnegie Science Center to host ChemFest for the 23rd year running. This year, ChemFest was held as a two-day event on October 21st & 22nd as a combination of both in-person and virtual experiences. Participating teachers could choose which option was best for their class. A total of 1,890 students registered to participate from 26 individual schools, with 669 students joining in-person and 1,221 students tuning in virtually. Eleven exhibitors hosted tables during the in-person festivities and many more volunteers supplied video demonstrations for virtual attendees to view directly in classrooms. Two career connections activities were held each day of ChemFest wherein panelists shared stories of their pathways to becoming scientists. These sessions were held in-person while simultaneously being broadcast to remote viewers. For a special follow-up with all teachers who attended the event both in person and virtually, several local ACS student chapters have volunteered to package and mail activity kits that correspond to this year's theme for use directly in classrooms.

We extend a heart-felt thank you to the numerous volunteers who contributed to make this event a success, particularly all exhibitors, panelists, and virtual content creators. Similarly, we recognize the Carnegie Science Center, specifically Lorren Kezmoh and Stuart McNeill, for their major role in organizing and coordinating ChemFest.

The ACS Pittsburgh Local Section also wishes to acknowledge and thank our financial contribution partners, without whom ChemFest could not be possible:

The Society for Analytical Chemists of Pittsburgh
The Spectroscopy Society of Pittsburgh
PPG Secondary Education Council
PPG Industries

Their support went directly to cover the costs of both student admission and remote access.



ACS Local Section
Pittsburgh

To advance the broader chemistry enterprise
and its practitioners for the benefit of Pittsburgh
region and its people.

2021 Virtual Meeting Registration Grant Program Application

Conference Funding to attend virtual ACS meetings (local and national)

Undergraduates, graduates, and post-doctoral researchers are invited to apply for conference funding to attend upcoming virtual ACS meetings for the 2021 year. We anticipate up to 30 grants can be awarded and we are looking to support our local members. The goal of the funding is to defray the cost of registration for regional and national ACS meetings to enable more students to make presentations and learn about the broader field of study to which they belong. Please complete an application and submit to Kevin Noonan (noonan@andrew.cmu.edu) and Heather Juzwa (hjuzwa@shimadzu.com) via email. Applications will be accepted on a rolling cycle and considered throughout the entire 2021 year until all the funds have been disbursed.

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 hjuzwa@shimadzu.com to receive it by email.*

American Chemical Society

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T [123] 123 4567 F [123] 123 4567 www.acs.org



ACS Meeting: _____ 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 meeting? Yes No

Other funding sources (if any): _____

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 at least one photo of your meeting experience.

I am willing to submit at least one photo of my meeting experience: Yes No

In under 1000 words, please write a personal paragraph or justification for why the Travel Grant Committee should fund your registration?



Signature: _____

Date: _____

2021 Pittsburgh Section Officers

Chair

Kevin Noonan
noonan@andrew.cmu.edu

Secretary

Sara Smith
90 Emerson Ln
Bridgeville, PA 15017
sara.smith@perkinelmer.com

Treasurer

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

Volunteers Needed!

We recently updated our website and are looking for someone to help with maintenance! 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 25th of the month prior to publication. For example, all items for the May 2021 issue must be to the editor by April 25th, 2021.

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
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Promoting Science Education

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Ext. 200



Society for Analytical Chemists of Pittsburgh

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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 2021 Periodic Table of the Elements blanket!

See [here](#) for more information

ACS Regional Awards – Apply Today!

More information can be found [here](#)