



The Crucible

American Chemical Society – Pittsburgh Section

Volume CV, No. 7

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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!

Adopt-A-Vet(eran)

The saying goes “April Showers bring May flowers.”

This April we'd like to shower our vets with a little thank you.
For all they have done, it is the least we can do!



Join with the **ACS Pittsburgh Women Chemists Committee** and the **University of Pittsburgh ACS Student Affiliates**, as we look to bring a little appreciation to the patients at the **VA Hospital in Oakland**. In the past we have delivered 300 gift bags, and 300 is the goal again for this year!

It costs approximately \$7 per gift bag. We take care of all the purchasing, assembling, and delivery of the gifts. Please consider contributing to this event and bringing a little love to those we owe so much to. Collection will be taken through April 1st and gift bags will be delivered April 3rd

Please consider making a donation to help fill the bags. Information on how to donate via PayPal or via check is available on the Upcoming Events page of our website: www.pghWCC.org. Feel free to contact Michelle Ward at michelle.ward@pitt.edu for more information as well.

C3 Couture, Cosmetics, & Chemistry



The Greater Pittsburgh Area WCC will be sponsoring an event on Saturday, April 4th for Girl Scouts to earn their “Science of Style” badge.

This event is also open to 7-10th grade students in the Greater Pittsburgh Area who are interested in attending and expanding their understanding of science.

When: April 4th from 9am-1pm

Refreshments available starting at 8:30am

Where: Chevron Science Center

(Department of Chemistry, University of Pittsburgh
219 Parkman Avenue, Pittsburgh PA 15260)

Cost: Free

(advanced registration required)

The Greater Pittsburgh Area WCC will lead local girl scouts, and local students, through 5 different stations, which were designed to meet the mandated requirements to earn the *Science of Style* badge.

Girls will complete projects such as creating lip balm, perfume, and homemade shrinky-dink pendants (amongst others) – all the while learning the science behind cosmetics and fashion.

NOTE: There are a limited number of spots available for this workshop. Anyone interested in attending should register by March 28th using the link available on the Upcoming Events page of our website: www.pghWCC.org.

Contact Michelle Ward (michelle.ward@pitt.edu) with any questions.

The Greater Pittsburgh Area Women Chemists Committee is pleased to announce two awards to recognize distinguished service in the field of chemistry.



Award for Encouraging Diversity in STEM

This award recognizes significant accomplishments by individuals, male or female, who have stimulated or fostered the interest of a diverse population, promoting their professional developments within various STEM fields. Nominees for the award may come from any professional setting in the greater Pittsburgh area: academia, industry, government, clinical, or other independent facility. Nominees need not be a member of the WCC or the ACS.

Award for Excellence in the Chemical Sciences

This award recognizes the achievements of female chemists and chemical engineers in the greater Pittsburgh area who have a record of accomplishment in their field. Nominees for the award may come from any professional setting in the greater Pittsburgh area: academia, industry, government, clinical, or other independent facility. Nominees need not be a member of the WCC or the ACS.



Call for Nominations Deadline: April 15th

Nomination packets should include a nomination letter and a minimum of one supporting letter, an up-to-date copy of the nominee's CV/resume, your full contact information, and contact information for the nominee.

Please submit your packet electronically to Dr. Michelle Ward at michelle.ward@pitt.edu

Our mission is to be leaders to be leaders in attracting, developing, and promoting women in the chemical sciences.

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 is now open. <https://cerm2020.org/pricing-registration/>

| 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 |

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).

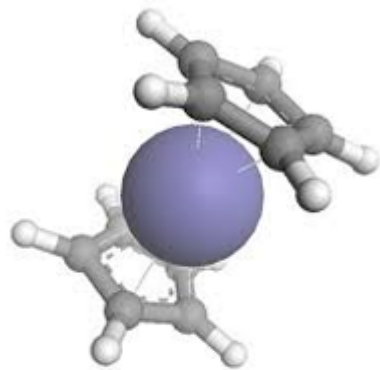
If you have any questions or suggestions, then you can contact either Paul Johnson (johnson1@dug.edu), Ellen Gawalt (gawalte@dug.edu), or myself (evanseck@dug.edu).

Best wishes,

Jeff Evanseck, Paul Johnson, and Ellen Gawalt

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



Historical Carbon Footprinting & Implications for Sustainability Planning: *A Case Study of the Pittsburgh Region*

Dr. Rachel Hoesly

ACS-Energy Technology Group

Thursday, April 23, 2020

Abstract

This presentation will discuss estimates of fossil-based CO₂ emissions and energy use from 1900-2000 for Allegheny County, PA. Total energy use and emissions increased from 1900 to 1970, reflecting the significant industrial, economic, and population growth that occurred in Allegheny County. From 1970 to 2000, Allegheny County experienced a 30% decrease in total emissions and energy use from peak values, primarily because of a decline in industrial activity (40% decrease in value added) and the loss of a quarter of its population. Despite these dramatic economic and demographic transitions, per capita emissions remained stable from 1970 to 2000, buoyed by relatively stable or slightly increasing emissions in the commercial and transportation sectors. Allegheny County's history suggests the scale of change needed to achieve local emissions reductions may be significant; given years of major technological, economic, and demographic changes, per capita emissions in 1940 were nearly the same in 2000. Most local governments are planning emissions reductions rates that exceed 1% per year, which deviate significantly from historical trends. Results suggest additional resources and improved planning paradigms are likely necessary to achieve significant emissions reductions, especially for areas where emissions are still increasing. <https://pubs.acs.org/doi/abs/10.1021/es203943g>

Biography

Dr. Rachel Hoesly is a senior engineer at KeyLogic Systems Team supporting the Mission Execution and Strategic Analysis (MESA) contract with the National Energy Technology Laboratory and works in several areas including, energy markets and infrastructure analysis with a focus on electricity systems. Previously, Dr. Hoesly was a researcher Pacific Northwest National Laboratory – PNNL where she was a lead developer of the Community Emissions Data System (CEDS). A data system that develops global historical emissions data set for use in air quality and climate models. Emissions estimates include annual data for 9 emissions species from 1750 – 2014 for 221 countries/regions, 55 sectors, and 9 fuels spatially distributed to a global 0.5-degree grid. www.globalchange.umd.edu/ceds/github.com/jgcri/ceds Dr. Hoesly is an alumnus of Carnegie Mellon University (B.S. M.S., PhD) in Civil and Environmental Engineering.

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 April 20, 2020 to: ACS.ETG@gmail.com.

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

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

FREE TO



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carnegielibrary.org

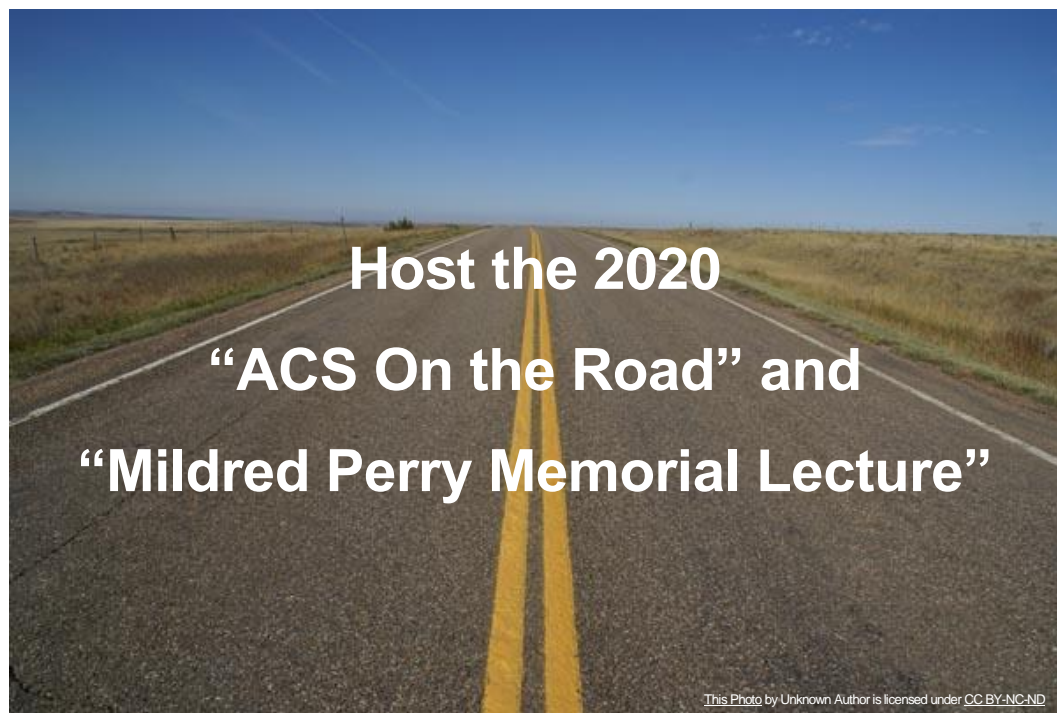
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FREE TO THE PEOPLE



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

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International Year of
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www.acs.org/iyc2011



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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724-938-4153
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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 April 2020 issue must be to the editor by March 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

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|-----------|-------|-------|-------|------|
| 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](#)