



# THE DAYTON SECTION

Fostering scientific education and research, and promoting public understanding of science since 1930

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## BULLETIN

*Mask Mandate Edition 2021*

## Meetings and Events

Sept. 19: Joint Meeting/Picnic with Cincinnati

Date TBD: Annual Poster Session

## Section News and Other Stuff

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DATED MATERIAL - MEETING ANNOUNCEMENT - DO NOT DELAY

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## ***Report from Council***

My Councilor duties were the same as they were before the pandemic but spread out and, of course, virtual. My Constitution & Bylaws Committee Meeting was held on Sunday, March 14<sup>th</sup> – a week before the start of the Spring National Meeting. District-II Caucus was held a week later, on the 21<sup>st</sup>. The following Tuesday I attended the Town Hall Meeting, where four nominees for 2022 ACS President-Elect vied for two candidate spots. Finally, Council was held the next day, on Wednesday, March 24<sup>th</sup>.

At the Town Hall, the candidate that impressed me the most was Judith C. Giordan. She was very animated, well spoken, and expressed interesting ideas. From his resume and written statement, I expected better from John Warner, who seemed to give canned answers that didn't fit the questions put to him. Using my patented four-point system, the two nominees who came out on top were Judith Giordan and Gerard Baillely. However, the four nominees' addresses to Council resulted in a surprising reversal of fortunes. Giordan was still impressive, even after a protracted Zoom-video problem, but Warner in this more formal venue made a cogent case for his candidacy. I voted for Giordan and Warner and the majority of Council agreed with me! ACS members make their choice this Fall.

Council overwhelmingly approved the amended *Petition to Harmonize Committee Structures, Processes, and Terms*. This very consequential amendment to the ACS Governing Documents makes the following changes:

- This petition places all committees in one category called "Society Committees" – eliminating the several different types of committees.
- The years of service and the number of committee members on each Society Committee would now be consistent and would match the present terms of the Elected Committees: three-year terms with a two-term maximum for committee members.
- Certain Society Committees will no longer have the "Councilor only" designation, allowing an individual to join and continue service on a committee regardless of their status as a Councilor.
- The Committee on Committees amended the petition prior to bringing it to Council, in response to several committees' concerns. The amendment allowed for service to be extended if the appointing officer(s) determines that there is a compelling need for ongoing expertise on the committee.

The Council also approved the *Petition to Amend the Duties of the Committee on Local Section Activities*. This petition provides the Committee on Local Section Activities (LSAC) with the authority to support Local Sections by taking action on their behalf, including appointing an interim executive committee and/or facilitating a Local Section's election when there is a lapse in the local section's leadership. Let's hope that the LSAC never needs to take these actions in support of the Dayton Section.

Perhaps the most consequential action of Council was approval of the 2022 Schedule of Membership, which was recommended by the Committee on Membership Affairs (MAC). The Schedule reduces the base dues rate to \$160 per year, but more importantly it establishes various dues categories and benefits packages based on career stages, role in the chemical enterprise, and desired level of interaction by the Member with the Society. MAC estimates that these changes will eventually increase ACS membership five-fold!

After much discussion about the pros and cons, the Council approved the Distribution Formula for Division Allocations recommended by the Committee on Divisional Activities. This formula is considered transitional and will be reviewed by the Committee on Divisional Activities yearly.

The ACS Board of Directors reported to Council the approval of extensive changes to the ACS Strategic Plan. Equity was added to our Core Values, which now include on Diversity, Equity, Inclusion and Respect. Our Vision and Mission statements were also modified to make clear that these statements include all people. A fifth Strategic Goal – *To Embrace and to Advance Inclusion in Chemistry* – was added to make clear that Diversity, Equity, Inclusion and Respect is our commitment at the same level as our long-standing four strategic goals.

While the Fall ACS Meeting in Atlanta will be held as a hybrid, the Council Policy Committee decided that Council will convene virtually due to "limitations on travel affecting many of our Councilors."

*Your faithful Councilor, Steve Trohalaki*

## Upcoming Meetings

### Joint Meeting/Picnic with the Cincinnati Section

**When:** Sunday, September 19<sup>th</sup>

**Where:** Germania Park, 3529 W Kemper Rd, Cincinnati (about 45 minutes from Dayton)

**Cost:** \$15 for adults and \$5 for children under 10, but ***the first 25 registrants are free!***

**Agenda:** 1–2 PM Resume Review by ACS Career Consultants

2–3 PM Employer and university displays; networking/socializing

3–4 PM Food\*

4–4:30 PM Chem Demos

4:30–6 PM Games and other recreational diversion: Attendees should bring corn-hole sets, soccer balls, and any other sports equipment except firearms and lawn darts. The park has a nice children's playground and there will also be a bouncy house!

6–7 PM Clean-up

\* Food will include hamburgers, sausage, mac & cheese, baked beans, and potato salad. Veggie burgers will be available and should be requested in advance on the registration form. Water and pop (i.e., soda) are provided by Germania Park, along with two half-kegs of beer. Mixed drinks and wine will be available at a cash bar. (Contact the organizers if you want to have this event double as your wedding reception.)

Attendees are asked to bring fruit or dessert to share, but individual portions must be wrapped.

#### COVID Precautions

Mask-wearing (except when eating/drinking) and social distancing are required. Attendees must fill out and sign the [ACS Waiver](https://daytonacs.org/Waiver.pdf), which can be found at <https://daytonacs.org/Waiver.pdf>.

#### Register by September 9th

An online registration form is available at <https://DaytonACS.org/JointPicnic>. Send the completed form and waiver as PDFs or JPGs to Davide Simone at [dlsimone43@gmail.com](mailto:dlsimone43@gmail.com).

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### Annual Poster Session (Date to be Determined)

Plans are currently underway for the 2021 Poster Session as a live event. If things fall through, we'll hold the poster session as a virtual event. We will contact members *via* email when we have a firm date and venue. Watch our Facebook page, too!

Four outstanding poster awards of \$100 will be given to students who are enrolled in a school, college, or university within the Dayton Section's territory or whose research was performed within the Section's territory. Students who want to be considered for an award should indicate whether they are an undergraduate or graduate student

**Call for Abstracts:** Send abstracts of 250 words or fewer by Friday, September 17th using the e-form: <https://DaytonACS.org/AbstractSubmission>. If you experience a problem with the e-form, contact Davide Simone at [dlsimone43@gmail.com](mailto:dlsimone43@gmail.com).

## ***Patterson High School Chemistry Competition/Chemistry Olympiad***

Originally established by Charles A. Thomas and Carroll A. Hochwalt, former Dayton chemists and Monsanto researchers, the top chemistry students in the area have been recognized under the auspices of the Dayton Section since 1943. In 1990, the family of the late Austin M. Patterson, also a prominent Dayton chemist, assumed sponsorship.

In a typical year, all area high school students are invited to take the local Chemistry Olympiad examination at centralized locations. The ten highest scoring students and the highest scorers at each High School are then invited to write essays, which form the basis of the final judging of the Patterson High School Chemistry Awards. The top ten finalists, although only two from each school, are then invited to take the Laboratory Olympiad exams; students are nominated for the U.S. National Chemistry Olympiad competition based on their cumulative performance.

Also, in a typical year, the student from each high school scoring highest on the local exam is awarded a plaque. Grading is performed separately for those students who have only taken one year of chemistry. Students from this group who were the highest scorers in their High School will also receive a plaque. The top three essayists are awarded first, second, and third prizes of \$1000, \$750, and \$500. In addition, teachers of the prizewinners receive \$50 awards. Essays are due at the end of May.

Like last year, however, this year is hardly typical. By and large, students took the initial Olympiad exam at their own high schools. We accepted a student from Columbus because that section did not offer the exam. The traditional Laboratory Exams that are part of the Olympiad were not offered.

This year's Patterson Scholars (and their teachers) are:

### Chemistry-2

Ben Loudenslager	Northmont High School	(William Patrizio)
Samantha Street	Northmont High School	(William Patrizio)
Austin Choi	Oakwood High School	(Tony Rainsberger)
Becker Kash	Oakwood High School	(Tony Rainsberger)
Matthew Rohan	Oakwood High School	(Tony Rainsberger)
Alexis Shannon	Anna High School	(Vicki Quinter)
Alan Xie	Beavercreek High School	(Kristine McDaniel)
Anna Yang	Beavercreek High School	(Kristine McDaniel)
Ayham Huq	Centerville High School	(Julie Summers)
Eric Li	Centerville High School	(Julie Summers)
Liam Juhas	Centerville High School	(Carly Monfort)
Leo Ruthmeyer	Centerville High School	(Carly Monfort)
Elizabeth Davis	Columbus, Home School	(Susan Davis)

### Chemistry-I

Alice Sandberg	Beavercreek High School	(Kristine McDaniel)
Catherine Sayeedi	Beavercreek High School	(Kristine McDaniel)
Merritt Alspaugh	Anna High School	(Vicki Quinter)
Lenna Rowland	Anna High School	(Vicki Quinter)

The Section owes a debt of thanks to Dr. Weijie Lu, Chair of the Patterson High School Chemistry Awards, and to the high school teachers who proctored the Olympiad exam.

## ***Patterson College Chemistry Awards***

The Patterson College Chemistry Awards are presented annually to outstanding junior chemistry majors at each university within the Section's boundaries. These awards are usually presented at the Annual Poster Session, but because all our programming is still up in the air, certificates and checks for \$400 will be mailed to the winners. If we *do* hold a poster session this Fall, the winners will be acknowledged there and receive certificates. Central State University did not submit a candidate for the award this year. The Section owes a debt of thanks to Mark McClain for overseeing these awards. This year's winners are:

Cedarville University:	Nikolas Otto
University of Dayton:	Ryan McGuire
Wittenberg University:	Rachel Kaiser
Wright State University:	Austin Reed

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## ***In Fond Remembrance of Don Sullenger***

We were saddened to hear that long-time Dayton-Section member Don Sullenger passed away from complications of chronic kidney disease on Monday, December 28, 2020.

Don was born February 8, 1929, in Richmond, Missouri. He graduated from Richmond High School as valedictorian and started college at Westminster College in Fulton, Missouri, where, in 1946, he heard Winston Churchill give his famous "Iron Curtain" speech. Don completed his undergraduate degree at the University of Colorado, Boulder, graduating Phi Beta Kappa, majoring in Chemistry.



After working for General Electric and serving his country in the U.S. Army, Don, matriculated at Cornell University Graduate School earning a PhD in Physical Chemistry, performing structural research on elemental boron and boron-rich borides. He was a long-time employee of Mound Laboratory and the U.S. Department of Energy (1962-1992), performing x-ray diffraction analyses supporting research and development for nuclear weapons and alternative energy programs.

Don was a long-time member of the American Chemical Society, serving as the Dayton Section Chair-Elect, Chair, and Immediate Past, Chair from 1975-1977 and for several years as *Bulletin* Editor. He was also a member of the American Crystallographic Association and Sigma Xi. Don was named a Dayton-area "Outstanding Scientist" by the Dayton Affiliate Societies Council in 1978.

Upon retirement, Don became Adjunct Professor in the Chemistry Department at Miami University, Oxford, Ohio, and was instrumental in establishing The Mound Science and Energy Museum Association, serving in various leadership positions. He enjoyed teaching about his love of chemistry and particularly boron, his entire life.

Don loved traveling, eating seafood, reading, ballroom dancing with his wife, Judy, learning about the natural world, gardening, listening to opera and classical music, and talking about the accomplishments of his children and grandchildren.

Those of us who had the privilege to know Don will miss him.

## Call for Nominations!

The vacancies we need to fill this year are Chair-Elect and Secretary. Starting in 2022, the Secretary will serve a two-year term. The Chair-Elect will serve in that office in 2022, as Chair in 2023, and as Immediate Past Chair in 2024, although Immediate Past Chairs either hike the Appalachian Trail or say they need more time to be with their families and are unavailable. All officers serve on the Section's Board of Directors.

If you're the kind of person that likes to play the odds, and you think that the Delta variant is just the tip of the iceberg, well, *now's* the time to volunteer. It will fill that glaring void in your résumé and you'll hardly have to do anything at all!

To determine which office is the better fit for you, ask yourself this question: Have you ever explained to someone that "meeting minutes" originated from the Latin phrase, *minuta scriptura*, meaning "small notes?" If you answered yes, then you are far too annoying to be Secretary, but just annoying *enough* to be Chair-Elect! If you answered no, wait until next year and run for Treasurer.

If you are interested in running for either of these positions, please contact a member of the Nominations Committee, Dr. David Wang at wanghuabin0903@yahoo.com or Prof. Eric Fossum at eric.fossum@wright.edu. Trust us; it'll be fun!

### AAT-2: Sudoku for Chemists!

Use the following nine chemical elements:

La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb
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fill in the grid below so that each row, column, and 9-element sub-cell has only one occurrence of each element.

				Eu	Tb			Nd
La			Gd				Pm	
		Eu		Pr			Sm	
	La	Ce	Eu				Nd	
		Pr				Gd		
	Tb				La	Sm	Eu	
	Sm			Ce		La		
	Eu				Sm			Pm
Ce			Tb	Pm				

### Quotable Quotes for \$1000, Alex!

"Oh, you hate your job? Why didn't you say so? There's a support group for that. It's called everybody, and they meet at the bar."

– Drew Carey

"I haven't understood a bar of music in my life, but I have felt it."

– Igor Stravinsky

"People like to set the bar high. I like to put the bar on the ground and barely step over it. I like to keep the expectations really low."

– Kevin Smith

"I had eel at a sushi bar once; it's disgusting. I thought it was chicken. It looked like chicken. It was brown and looked delicious, and I was like, 'That looks safe.' It wasn't."

– Chris Evans

### AAT-2 Solution for Last Edition

Pm	Sm	La	Ce	Nd	Gd	Eu	Pr	Tb
Gd	Ce	Tb	Pm	Eu	Pr	Sm	La	Nd
Pr	Nd	Eu	Tb	La	Sm	Pm	La	Nd
Sm	Tb	Ce	La	Gd	Eu	Pr	Nd	Pm
Eu	La	Gd	Pr	Pm	Nd	Ce	Tb	Sm
Nd	Pr	Pm	Sm	Ce	Tb	Gd	Eu	La
Tb	Gd	Pr	Nd	Sm	Pm	La	Ce	Eu
La	Pm	Nd	Eu	Pr	Ce	Tb	Sm	Gd
Ce	Eu	Sm	Gd	Tb	La	Nd	Pm	Pr

\*Surveys suggest that mental exercises, including word puzzles, may delay the progression of Alzheimer's Disease.