



THE DAYTON SECTION

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

WEB ADDRESS: <http://DaytonACS.org>
<https://www.facebook.com/daytonacs>

DAYTON SECTION OFFICERS

CHAIR

Dr. Anastasie Weaver
chair@daytonacs.org

CHAIR-ELECT

Dr. Erick Vasquez (937) 229-2688
vasquez@udayton.edu

IMMEDIATE PAST CHAIR

Dr. Eugeniya (Jenny) K. Iskrenova-Ekiert
past-chair@daytonacs.org

SECRETARY

Vacant

TREASURER

Dr. Prakriti B. Pollack
treasurer@daytonacs.org

COUNCILOR

Dr. Steven Trohalaki
878-0677, strohalaki@gmail.com

ALTERNATE COUNCILOR

Dr. Yu Kay Law, (765) 973-8323
lawy@iue.edu

COMMITTEE CHAIRS

MEMBERSHIP

Dr. Aaron Burke
890-2312, aburke1333@aol.com

PUBLIC RELATIONS

Dr. Ibrahim Katampe
376-6513, ikatampe@centralstate.edu

PATTERSON COLLEGE CHEMISTRY AWARDS

Dr. Erick Vasquez (937) 229-2688
vasquez@udayton.edu

PATTERSON HIGH SCHOOL CHEMISTRY AWARDS

Dr. Eugeniya (Jenny) K. Iskrenova-Ekiert
hs-awards@daytonacs.org

PATTERSON-CRANE AWARD

Dr. Steven Trohalaki
878-0677, strohalaki@gmail.com

BULLETIN EDITOR

Dr. Steven Trohalaki
878-0677, strohalaki@gmail.com

INDUSTRIAL RELATIONS

Sidney Osborn
industrial.relations@daytonacs.org

EDUCATION

Dr. Weijie Lu
education@daytonacs.org

INVESTMENT

Dr. Prakriti B. Pollack
treasurer@daytonacs.org

CAREER PLANNING

Vacant

WOMEN CHEMISTS

Dr. Suzanne Seleem
376-6689, sseleem@centralstate.edu

YOUNGER CHEMISTS

Vacant

WEBMASTER

Dr. Yu Kay Law, (765) 973-8323, lawy@iue.edu

NATIONAL CHEMISTRY WEEK COORDINATOR

Dr. Melinda Greer
(513) 936-7165, greermd@ucmail.uc.edu

COPYRIGHT COMMITTEE

Pat N. Pending
PatNPPending@gmail.com

BULLETIN

Stifling Summer Edition 2018

Meeting

August 4: Thirteenth Annual Picnic of the New Era!

Section News and Other Stuff

- Call for Nominations — page 2
- Call for NCW Volunteers — page 2
- Patterson-Crane Award — page 3
- Past Meetings — page 4
- Chemistry Olympians — page 5
- Welcome New Committee Chairs — page 5
- Alzheimer's Avoidance Therapy — page 6
- AAT-2: Su Doku for Chemists — page 6
- Quotable Quotes — page 6

DATE MATERIAL - MEETING ANNOUNCEMENT - DO NOT DELAY

ADDRESS SERVICE REQUESTED

American Chemical Society
Dayton Section
5100 Springfield St., Ste. 108
Dayton, OH 45431

NON-PROFIT ORG.
U.S. POSTAGE PAID
DAYTON, OHIO
PERMIT NO. 517

CALL FOR NOMINATIONS FOR THE 2018 SECTION ELECTIONS!

The vacancies we need to fill this year are Chair-Elect, Secretary, and Treasurer. Starting in 2019, the Treasurer will serve a two-year term. The Secretary will serve the remaining year in the current two-year term. The Chair-Elect will serve in that office in 2019, as Chair in 2020, and as Immediate Past Chair in 2021, although, Immediate Past Chairs are usually too busy with substance abuse rehabilitation to perform any duties. All officers serve on the Section's Board of Directors.

To determine which office is the best fit for you, consider your current security password. If it contains mostly numbers, Treasurer is best. If it contains mostly letters, run for Secretary. If you can't remember your password, Chair-Elect is your destiny!

Electronic elections will be held this November, with the results announced at the Membership Meeting.

Please contact the Chair of our Nominations Committee, Wayne Cook (wlcook47@gmail.com) if you are interested in running for either of these positions. Trust us; it'll be fun!

***** CALL FOR VOLUNTEERS *****

NATIONAL CHEMISTRY WEEK

With this year's theme,

Chemistry Is Out of This World!

NCW 2018 focuses on chemistry of and in outer space!

We'll celebrate NCW with two events this year:

- ◆ The Boonshoft Museum of Discovery on Saturday and Sunday, October 20th and 21st, from 11 AM–4 PM. We'll need quite a few volunteers for this event!
- ◆ On Saturday, October 27th, from 1–4 PM, we'll be at the Centerville Library, where 5–8 volunteers are needed.

Contact NCW Coordinator, Melinda Greer at (513) 936-7165 or at greermd@ucmail.uc.edu to volunteer for either of these events.

UPCOMING MEETINGS

AUGUST 4TH

THIRTEENTH ANNUAL SECTION PICNIC OF THE NEW ERA!

Where: Magee Park, 1820 Little Sugarcreek Road, Bellbrook

Map: <http://www.bellbrooksugarcreekparks.org/parks-and-facilities/parks/magee-park>

When: 11:00 AM – 3:00 PM, Rain (unless an incessant downpour) or Shine!

We'll continue our revival of an old tradition with a picnic at a picturesque location. All Section Members, their families, significant others, acquaintances you might have married in Vegas while on a bender but you prefer to think it was all a bad dream, and prospective Section Members, e.g., students, are all invited. The Section will provide burgers, hot dogs, brats, veggie burgers (on request!), and soft drinks. Please bring a side dish or a dessert to share, but all items from Yellow Springs bakeries will need to be taste tested by the Executive Committee.

Those of us with kids are encouraged to bring the typical sports paraphernalia — soccer balls, footballs, Frisbees, badminton sets, and softball equipment — *anything* that will keep them occupied and away from those of us who *don't* have kids! Those with peculiar Ohio personalities will automatically haul out home-made corn hole sets. Feel free to bring your favorite sports gear, but leave your firearms, slingshots, nunchakus, bows & arrows, and lethal lawn darts from the 1970s at home. There will be door prizes if you give EliteSingles.com a whirl and bring a date.

For planning purposes, let us know if you'll attend and the number in your party using the Google form <https://goo.gl/forms/DS9cA5LVC0VAgrzW2>.

AUGUST 21ST

PATTERSON-CRANE AWARD

The 2018 winner of the Patterson-Crane Award is Professor Paul S. Weiss, Editor of *ACS Nano*!

The Patterson-Crane Award is given biennially for outstanding achievement in the documentation of chemistry. International in scope, the award is given in honor of two outstanding members of the Dayton and Columbus Sections: Austin M. Patterson (1876–1956) and E.J. Crane (1889–1966), who were both Editors at Chemical Abstracts Service. The monetary award of \$3000 comes from bequests from the Patterson and Crane families. Historically, awardees are invited to either Dayton or Columbus to present an address. In two instances, when Dayton and Columbus hosted Central Regional Meetings, the awardees' presentations were plenary speakers.

Last year, the Dayton and Columbus Sections and the Central Region of the ACS agreed to always present the Patterson-Crane Award at the Central Regional Meeting starting in 2018. However, this year's CRM in Toledo was canceled. Professor Weiss, who happened to be the Program Chair for the Fall National Meeting in Boston, offered to include his PCA address as part of a half-day symposium on nanomaterials. Other speakers include Fraser Stoddart (Northwestern University), Lloyd Whitman (of the White House OSTP), Jillian Buriak (University of Alberta), and Rick Loverd (NAS/DGA Science Entertainment Exchange).

The symposium, which will be designated a *President Recommends* event, will take place Tuesday afternoon. Please make an effort to attend if you'll be at the Fall Meeting.

PAST MEETINGS

Patterson High School Chemistry Awards

Continuing a tradition that began in 1943, Dayton Section Members, high school students, and their parents and teachers gathered at the University of Dayton on May 15 for presentation of the Patterson High School Chemistry Awards. Dr. Wayne Cook gave an interesting talk about *The Chemistry of Ink* to at least 50 attendees.

The ten students scoring highest on a standard chemistry exam, along with the highest scoring students at each high school, were invited to write essays on *Chemistry in Movies and Television*. The essays were ranked by a committee formed by the Dayton Section. Prizes of \$1000, \$500 and \$250 for 1st, 2nd, and 3rd place, respectively, were awarded. This year's winners (and their teachers) are:

- 1st place: Kevin Yin, *Dynamite in Film and Television*, Centerville High School (Ms. Summers)
- 2nd place: Ellen Cheng, *The Bridge Between Movies and Real Life*, Centerville High School (Mr. Hess)
- 3rd place: William Chan, *I Can't Breathe: Asphyxiation and Carbon Dioxide Intoxication in Film*, Beavercreek High School (Mrs. Rattan)

We offer our heartfelt congratulations to all of our Patterson Scholars!

Chemists Celebrate Earth Week

For the first time in the Section's history, a CCEW event was held in honor of Earth Day. On April 22nd, about 200 people stopped by the Section's booth at the Boonshoft Museum of Discovery to participate in several activities, including a poetry contest. Thank you to our volunteers and the Boonshoft team for making this day a successful one. The winners of the poetry contest were presented with a monetary prize. This year's winners and runners up (and their teachers) are listed below. The Section congratulates this year's winners and runners up!

Grades K-2:

- Winner: Angaeika (Ru) Pollack, Stephen Bell Elementary School, Bellbrook. (Mrs. Crider)
- Runner-Up: Camden Burdick, Creative World of Montessori, Dayton. (Mr. Proctor)

Grades 3-5:

- Winner: Lizzy Van Auken, Fairborn Intermediate, Fairborn (Mrs. Shanks)
- Runner-Up: Abigail Arnett, Fairborn Intermediate, Fairborn (Mrs. Shanks)

Grades 6-8:

- Winner: Meredith Mooney, Creative World of Montessori, Dayton (Ms. Sturgis)

We owe a special debt of thanks to Dr. Prakriti Pollack for organizing this event and supervising our volunteers. We hope this event continues in the years to come.

U.S. NATIONAL CHEMISTRY OLYMPIAD

From all the students in the Miami Valley who took a written USNCO exam (which the Dayton Section also uses for the Patterson High School Chemistry Competition), ten qualified to continue the Olympiad selection process by taking three *additional* USNCO Exams. From 9 AM until about 3 PM (with a short break for lunch) on a nice Saturday this past Spring, eight high school students from the Miami Valley took two written exams and a lab exam — all rigorously comprehensive. From identical examinations across the United States, 20 finalists were selected to attend the Chemistry Olympiad Study Camp, June 10-25, 2018, at the US Air Force Academy, CO. The students then competed for a spot on the team representing the United States at the 50th International Chemistry Olympiad in Bratislava, Slovakia and Prague, Czech Republic, July 19-29, 2018.

The Section expresses its gratitude to the following students (and their teachers) for participating in this year's Olympiad Competition:

Kevin Yin	Centerville High School	(Ms. Summers)
Shriya Rangaswamy	Centerville High School	(Mrs. Buddendeck)
William Chan	Beavercreek High School	(Mrs. Rattan)
Jordan Finch	Kettering Fairmont High School	(Ms. Lewis)
Tiffany Huang	Beavercreek High School	(Mrs. Rattan)
Stella Joly	Oakwood High School	(Mr. Rainsberger)
Grace Bradley	Archbishop Alter High School	(Ms. Cuticchia)
Charlie Almoney	Oakwood High School	(Mr. Rainsberger)
Jake Kovacs	Anna High School	(Ms. Quinter)

The Section owes a debt of thanks to Todd Yeates for proctoring the Olympiad Exams, Lonnie Dorgan for providing classroom and laboratory space at Sinclair Community College, and Mark Wannamaker for his help with the exams.

The Dayton Section Welcomes It's Newest Committee Chairs!

Two longtime Section Members — Weijie Lu and Sidney Osborn — have volunteered to chair two important committees: the Education Committee and the Industrial Relations Committee, respectively.

We still have two committees without chairs — the Younger Chemists Committee and the Career Planning Committee. Please consider volunteering to Chair either of these committees. You also might consider volunteering for any other committee listed in the *Bulletin* masthead. Most are committees of one, so additional members are very much needed.

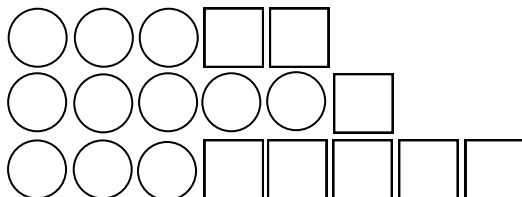
If you want to find out more about how you can volunteer, come to our Summer Picnic and talk to other Section Volunteers.

Alzheimer's Avoidance Therapy* Unscramble the letters to reveal a chemical name. Then, use the circled letters to solve the riddle. Answers next edition!

B N O O R

E I L N S Y

D E G H O R Y



A *p* orbital pulls into a parking lot, but the attendant tells him, "We've got no spots for you," and makes the *p* orbital turn around and exit the lot. Just then, an *sp*³ orbital pulls up, and the attendant lets him in. Outraged, the *p* orbital pulls back in and says, "What gives? You said the lot was full, but you let *that* guy in! The attendant points to the sign and says, "I guess you can't read. It says,



Answers for Last Edition

BENZENE GRAPHITE DILITHIUM

At the Element Bar, Chlorine Difluoride Anion decides to chat up the comely barmaid. With the sincerest look he can master, he says to her, "You are beautiful. You pop, sparkle and buzz electric! I'm going to pick you up when you get off work and show you a night you will never forget!!" The barmaid is nonplussed, and replies, "Yeah, do me a favor will-ya? Just lose two electrons ... **AND GET BENT!**"

Quotable Quotes for \$1000, Alex!

"Pluto's orbit is so elongated that it crosses the orbit of another planet. Now that's... you've got no business doing that if you want to call yourself a planet. Come on, now! There's something especially transgressive about that."

- Neil deGrasse Tyson

"The moon gravitates towards the earth and by the force of gravity is continually drawn off from a rectilinear motion and retained in its orbit."

- Isaac Newton

"Funding for the original manned Voyager Mars Program was scratched in 1968, before humans had gotten out of Low Earth Orbit. Mid-'60s plans for a Venus fly-by with astronauts actually flying by it met the same fate."

- P. J. O'Rourke

"We've fallen into a trap of ever-widening orbits of contact, and there is a total disregard for the present moment."

- Jerry Seinfeld

AAT-2 – Su Doku for Chemists!

Using the following nine chemical elements:

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

fill in the grid below so that each row, column, and 9-element subcell has only one occurrence of each element.

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

Solution for Last Edition

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

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