



THE DAYTON SECTION

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

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BULLETIN

Sizzlin' Summer Edition 2012

Meetings and Events

Sept. 22: Say goodbye (and good riddance) to this horrendously hot Summer at the *Eighth Annual Section Picnic of the New Era!*

Section News and Other Stuff

- Past Meetings — pages 3-4
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DATE MATERIAL - MEETING ANNOUNCEMENT - DO NOT DELAY

ADDRESS SERVICE REQUESTED

American Chemical Society
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UPCOMING MEETING

SEPTEMBER 22

EIGHTH ANNUAL SECTION PICNIC OF THE NEW ERA

Where: Magee Park, 1820 Little Sugarcreek Road, located in the City of Bellbrook on Little Sugarcreek Road between State Route 725 and Possum Run Road (See http://www.bellbrooksugarcreekparks.org/parks/magee_park/ as well as directions and map below.)

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

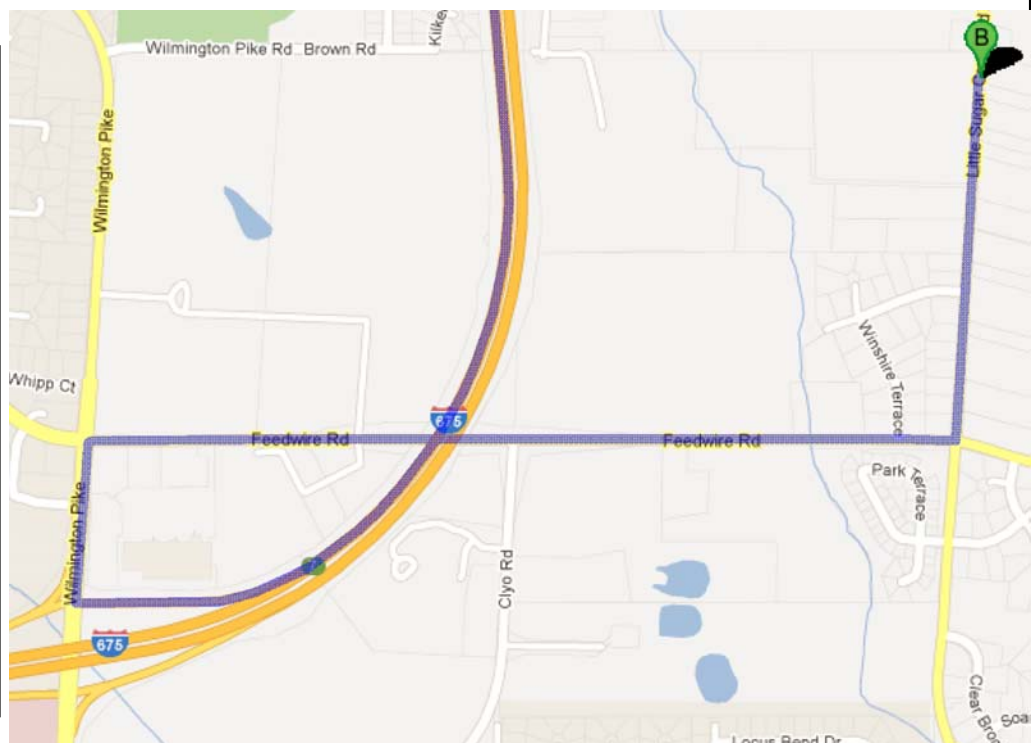
We'll continue our revival* of an old tradition with a picnic at a *wonderful, new venue!* All Section Members, their families, and prospective Section Members, e.g., students, are invited. The Section will provide hamburgers, hot dogs, brats, veggie burgers, and soft drinks, although everything will be the result of our Chair's first grocery-shopping expedition, so be ready for a few surprises. Please bring a side dish or a dessert (especially if you bake; chocolate-chip oatmeal cookies with nuts would be great) to share.

Those of us with kids are encouraged to bring the typical sports paraphernalia — soccer balls, footballs, Frisbees, and badminton and softball equipment — while those with peculiar Ohio personalities will automatically haul out home-made corn hole sets, but feel free to bring your favorite sports gear (except firearms). Singles who bring dates they met on eHarmony.com will get special door prizes! Singles who can't even get internet dates will get our pity.

For planning purposes, let us know if you'll attend and the number in your party; contact Suzanne Seleem at 376-6689, sselem1@aol.com, or Lori Balster at 656-9695, lori.balster.ctr@wpafb.af.mil. Let us know, too, if you're a better grill cook than Steve, who flips without warning sizzling hot burgers and brats at unsuspecting picnickers and expects them to make the catch in an open bun.

*After last year's picnic, resuscitation is more like it.

Directions: On I-675 south, take exit 7 for Wilmington Pike toward Bellbrook. Turn right onto Wilmington Pike, then make another right onto Feedwire Rd. Go about 1 mile on Feedwire Rd. to Little Sugar Creek Road and make a left. Magee Park will be about half a mile up the road on the right. Look for the Dayton Section ACS Banner!



PAST MEETING

PATTERSON HIGH SCHOOL CHEMISTRY AWARDS

Continuing a tradition that began in 1943, Dayton Section members convened at Centerville High School on the evening of June 14th for the culmination of the Patterson High School Chemistry Awards. The ten students who scored highest on a standard chemistry exam were invited to write essays on what chemistry means to them. The essays were ranked by a committee formed by the Dayton Section, with the top three awarded prizes of \$1000, \$500 and \$250 for 1st, 2nd and 3rd place, respectively.

This year's winners, their essays, their High Schools (and their teachers) are:

First Place: Joseph Lin, *Fluoride: The Chemistry behind Cavity Prevention*
Centerville High School (Bonnie Buddendeck)

Second Place: Benjamin Africk, *The Science of Sweet: A Chemical Analysis of Caramel Production*
Centerville High School (Bonnie Buddendeck and Julie Summers)

Third Place: Michael Want, *Chemistry and Its Relevance to PVC-Me*
Beavercreek High School (Tejinder Rattan)

The Section thanks Bonnie Buddendeck and Cindy Hasler, Co-Chairs of the Patterson High School Chemistry Awards Committee; Paul Fleitz, Chair of the Education Committee; the volunteers who read and ranked the essays; other volunteers who baked cookies and brownies; and, of course, the Patterson Family for their generosity.

In his keynote address, Dr. Jim Gord, Principal Research Chemist and Director of the Combustion & Laser Diagnostics Research Complex at the Air Force Research Lab, illustrated how his passion for science led to success in many disciplines, and turned him into the prominent research chemist he is today. He encouraged students to explore their own passions for science, and advised them to be open to new ideas and new opportunities. Although their journey in science may not be simple or straightforward, if they stay open to new possibilities and work hard they will ultimately end up in the right place.

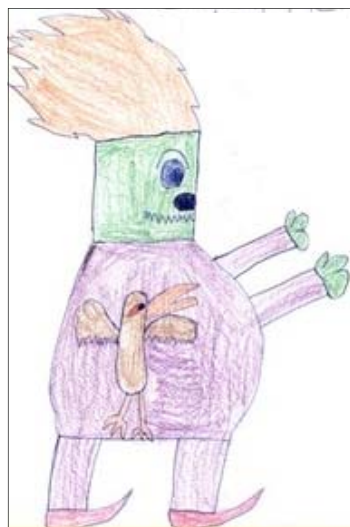
Unfortunately, our Public Relations Chair failed to show up, so there are no photos. We therefore present artist renderings of the meeting.



Chair-Elect Lori Balster, substituting on short notice for Chair Suzanne Seleem, took charge of the meeting and did a splendid job.



Dr. Paul Fleitz, Chair of the Education Committee, introduced students and presented the awards.



First-place winner Joseph Lin graciously accepted his first prize—a check for \$1000.



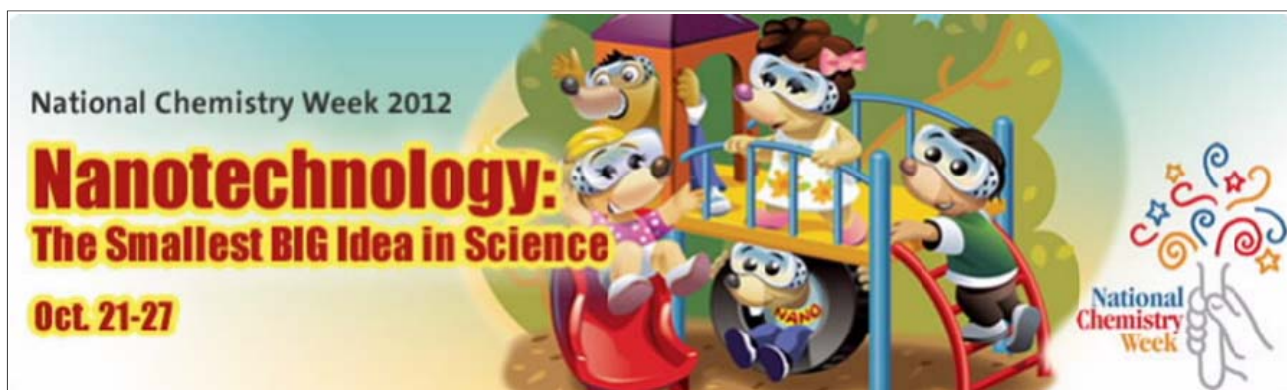
Dr. Jim Gord delivered a riveting keynote address.

NATIONAL CHEMISTRY WEEK — CALL FOR VOLUNTEERS

Nanotechnology: The Smallest BIG Idea in Science

We'll celebrate NCW (Oct. 21st-27th) with an event at Centerville Library (Oct. 27th; 10 AM– 2 PM). We might also participate in a second event at the Boonshoft Museum of Discovery, as in past years. We need volunteers to help the Section with NCW programming. If you are interested, please contact Joy Haley at (937) 255-9896 or Joy.Haley@wpafb.af.mil.

See <http://www.chemistry.org/ncw> for more on this year's theme.



PAST MEETING

SPECIAL AMENDED-BYLAWS MEETING

On June 27th, five section members convened at South Park Tavern at 5 PM for the dual purposes of voting on the Section's newly amended bylaws and drinking a few beers. According to our current bylaws, a two-thirds vote was necessary to approve the amendments at the second Section Meeting after the amended bylaws were mailed to all Section Members.

The Chair of the Section's Bylaws Committee showed up but instead of the other five members showing their gratitude for all his hard work by buying him a round or two, the reverse was true; the five threatened to vote nay unless their bar tab was paid. In the end, after considerable discussion and compromise (and a few rounds of beers) the amended bylaws passed unanimously: 6 yeas to 0 nays.

Now, the amended bylaws must be ratified by ACS's Constitution and Bylaws Committee, where some bureaucrat hemmed and hawed that the Section didn't supply an MS-Word document just the way they like it, so it will take more time than it would usually, yada, yada, yada. Perhaps it's just their way of saying that they want *their* bar bill paid, too.

The new amendments will allow the Section to hold electronic elections, thereby saving us money on printing and postage. In addition, the amendments allow Student Members to serve as Committee Chairs. Finally, the new bylaws will allow for the entire amendment process to take place electronically, so that this past meeting may well be the last time the Dayton Section holds a Special Amended Bylaws Meeting. *Oh, the times they are a changin'.*

SEEKING NOMINATIONS FOR CHAIR-ELECT AND TREASURER

The two positions we need to fill for terms starting in 2013 are Chair-Elect and Treasurer. The Chair-Elect will succeed to Chair in 2014, and to Immediate Past Chair in 2015. The Treasurer serves a term of two years, expiring at the end of 2014. Using a #2 pencil to completely fill in the squares, take the two quizzes below to see if your personality and skill set are consistent with either position.

Chair-Elect

1. I am a big believer in delegating authority. True False
2. I typically blame others for everything that goes wrong. True False
3. I usually keep the peace with colleagues with a round or three of beers. True False
4. I make up for my annoying habits with a round or three of beers. True False
5. I know the difference between India Pale Ales, Porters, and Stouts. True False
6. I don't mind serving as a designated driver. True False

Treasurer

1. I know how to use a calculator. True False
2. I am proficient in Microsoft Excel. True False
3. I am familiar with the term "budget." True False
4. It is time to reorder checks *before* you run out of checks. True False
5. My mother didn't raise no embezzler. True False
6. Although I usually fall asleep during meetings, I don't snore. True False

OK, so each quiz was just a ruse. If you managed to make it to question 6 (or even to question 4), you have the minimum attention span necessary to be a Dayton Section ACS Officer! Congratulations!! Contact either Suzanne Seleem at 376-6689, sseleem1@aol.com, or Lori Balster at 656-9695, lori.balster.ctr@wpafb.af.mil to nominate yourself. Trust us; it'll be fun!



Dr. Joy Haley Named Women Chemists Committee's Newest *Rising Star!*

The WCC Rising Star Award recognizes outstanding women scientists approaching mid-level careers who have demonstrated outstanding promise for contributions to their respective fields. Dr. Haley will receive as part of her award:

- ◆ The opportunity to present her contributions at a WCC-sponsored symposium at the spring ACS national meeting in New Orleans.
- ◆ A \$1,000 stipend to cover spring national meeting travel expenses.
- ◆ Recognition at the WCC "Just Cocktails" reception (this is the part Joy likes best) and at the WCC Luncheon where awardees are seated at the head tables along with ACS governance.



The Dayton Section Board of Directors offers its sincere congratulations to Dr. Joy Haley (a Past Chair and current National Chemistry Week Coordinator) on her well-deserved award. The Section owes a debt of thanks to Joy's nominator, Dr. Rachel Jakubiak (Alternate Councilor) and to Drs. Paul Fleitz (Chair, Education Committee) and Tom Cooper (former Investments Committee Chair) for writing seconding letters.



Alzheimer's Avoidance Therapy* Unscramble the letters to reveal chemical names, concepts, or modeling tools. Then, use the circled letters to solve the riddle. Answers next edition!

ACCILRY ○ ○ ○ □ ○ □ ○
 ELMO ○ ○ ○ ○
 EMOSU ○ ○ ○ ○ ○

Having just graduated from a very prestigious university, Dustin feels uneasy about both his future and a party his parents have thrown for him. For one thing, they invited all of *their* friends. What's with that? One old fart saunters up to Dustin and says, "I just want to say one word to you. Just one word. Are you listening? Dustin assures him that he is, then hears the old geezer whisper:



Answers for Last Edition

BORON ESTER ANILINE
 The Cray T3E, wondering why the UNIVAC was taking so long to compute the electronic structure of a simple sydnone using density functional theory, says, "Surely, you can't **BE SERIAL**. The UNIVAC, it's voice-recognition software suffering from a lack of memory, replies, "Well, I am. And stop calling me Shirley."

AAT-2 – Su Doku for Chemists!

Using the following nine chemical elements:

Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu
----	----	---	----	----	----	----	----	----

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

		Co	Ni		Cr			
Ti	Cu		Mn					
	Sc				Fe			
Sc	Ti							
	Cr	Cu				Ti	Sc	
								Fe
Cu		Cr			Ni			
						Sc		Mn
	Ni		Fe		Mn	Co		

Quotable Quotes for \$2000, Alex

"Some rise by sin, and some by virtue fall."

–William Shakespeare

"Kites rise highest against the wind - not with it."

–Winston Churchill

"A man may die, nations may rise and fall, but an idea lives on."

– John F. Kennedy

"The way for a young man to rise is to improve himself in every way he can, never suspecting that anybody wishes to hinder him."

–Abraham Lincoln

"I'm like the Phoenix, rising from Arizona!"

–Frank Costanza

Solution for Last Edition

Fe	Co	Ni	Cr	Ti	Cu	Mn	Sc	V
Ti	Sc	Cu	Fe	V	Mn	Cr	Ni	Co
Mn	Cr	V	Co	Sc	Ni	Fe	Cu	Ti
Cr	Ni	Ti	Cu	Co	Fe	V	Mn	Sc
Co	C	Sc	Ni	Mn	Ti	Cu	Cr	Fe
Cu	Mn	Fe	V	Cr	Sc	Co	Ti	Ni
Sc	Ti	Cr	Mn	Fe	V	Ni	Co	Cu
V	Cu	Mn	Ti	Ni	Co	Sc	Fe	Cr
Ni	Fe	Co	Sc	Cu	Cr	Ti	V	Mn

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