



THE DAYTON SECTION

Fostering scientific education and research, and promoting public understanding of science.

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BULLETIN**Cruel Summer Edition 2009****Meetings and Events**

September 19: Celebrate the End of Summer at the Fifth Annual Section Picnic of the New Era!

Section News and Other Stuff

- Past Meeting — p 3
- Call for Nominations — p 4
- The Board Undertakes Team Building — p 4
- Attention: Section Members Employed in Industry — p 6
- Attention: Chemists with Ties to Bosnia-Herzegovina — p6
- The 42nd Central Regional Meeting of the ACS — p7
- High School Teaching Scholarships, Stamps and Ambassadors — p 6
- Quotable Quotes — p 8
- Alzheimer's Avoidance Therapy — p 8
- AAT-2: Su Doku for Chemists — p 8

DATE MATERIAL - MEETING ANNOUNCEMENT - DO NOT DELAY

ADDRESS SERVICE REQUESTED

American Chemical Society
Dayton Section
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UPCOMING MEETING

SEPTEMBER 19

FIFTH ANNUAL SECTION PICNIC OF THE NEW ERA

Where: Indian Ripple Park, 2801 E. Stroop Road, Kettering — Look for the banner!
www.ci.kettering.oh.us/newweb/departments/parks/parks_shelters.php

When: 11:30 AM – 4:00 PM, Rain (unless an incessant downpour) or Shine!

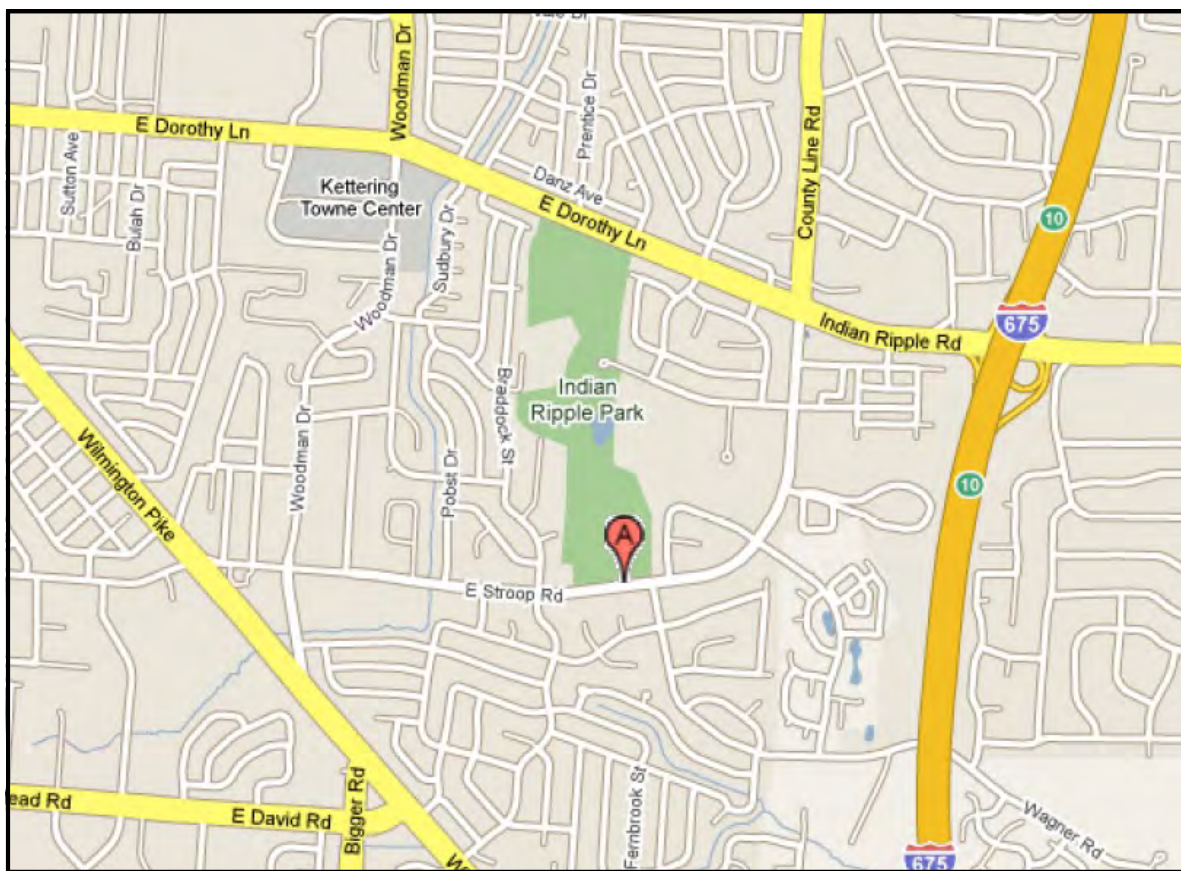
Keynote: None!

We continue our revival of an old tradition with a picnic at a *new location* for all Section Members, their families, and *prospective* Section Members, e.g., undergrads. The Section will provide hamburgers, hot dogs, brats, veggie burgers, and soft drinks. Please bring a side dish or a dessert (especially if you bake) to share with everyone.

Those of us with kids will bring the typical stuff — soccer balls, Frisbees, badminton, and softball stuff — while singles with peculiar Ohio personalities will bring their corn hole sets but feel free to bring your favorite sports paraphernalia (except firearms).

For planning purposes, let us know if you'll attend and the number in your party; contact Todd Yeates at alan.yeates@wpafb.af.mil or (937) 255-9138.

Let us know, too, if you're a better grill cook than Steve, who intentionally drops meat on the ground so that he can bring it home to his dog.



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 10th for 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 was a veritable Hat Trick; all three winners were students of Mrs. Bonnie Buddendeck at Centerville High School:

First Prize: Neel Patel, for “Onion Tears: Sulfoxide Production by Enzymatic Catalysis in *A. Cepa*”

Second Prize: Ziyang Xu, for “Tofu: A Delicious Gel of Coagulation”

Third Prize: Aaron Zhao, for “Ancient Concoctions of Chinese Herbs”

Unfortunately, Ziyang Xu missed the ceremony because he was off visiting prospective colleges, so we used part of his prize money to pay for the pizza. All three winners are being sought to film stints on *Top Chef – Las Vegas* (Season Premiere: Wednesday, August 19, 9/8c on Bravo). The Section offers its heartfelt congratulations to this year’s winners.

A keynote address was given by forensic scientist Suzanne Noffsinger from the Miami Valley Regional Crime Laboratory, who detailed the differences between TV’s *CSI* and reality. The audience was shocked to learn that leather lab jackets are not standard issue at MVRCL; that the mass spectrometer does not automatically identify sample components at the push of a button; that a DNA analysis “rush job” still takes a several weeks; and that no one at MVRCL even *knew* that Gil Grissom left *CSI*!

This was the first time in recent memory that the High School Awards were held at a High School (what a radical concept!), so there were a few glitches having to do with pizza delivery and projector/laptop/screen issues but a good time was had by all – except those of us who squirmed at our desks, suffering High School flashbacks about getting detention or worse – having bad marks put on our permanent records after being caught smoking in the bathroom, and poor Aaron Sellinger, who was mistaken for a Freshman and stuffed into a locker by members of the football team’s offensive line.



Mrs. Bonnie Buddendeck is surrounded by her students, from left to right: Neel Patel, Emily Briskin, Aaron Zhao, Michael Jacobs, Sean Behm and Christina Falugi.



Mrs. Bonnie Buddendeck flanked by Neel Patel (left), Aaron Zhao (right), and Ziyang Xu (in spirit).

CALL FOR NOMINATIONS

Has any of the following kept you from seeking elective office?

- The need to ask people you don't like (or even know) for money to fund your campaign.
- Learning annoying facts so that you don't look like a blithering idiot in the inevitable debates.
- Getting smeared by your sleazy opponent who thinks he's just so freakin' smart.
- The embarrassing questions posed by pesky reporters just trying to make themselves look superior.
- The fear that your numerous, adulterous affairs — as well as all those creepy, amorous emails you wrote when you were drunk — will become common knowledge to the public and/or your spouse.
- The masses will never understand that you're a maverick, dammit!
- Saturday Night Live players mocking you with their so-called "satire."
- The hoards protesting your victory, then the ensuing bloody riots and U.N. sanctions, when it becomes evident that the election was fixed.

What if you had a virtual guaranteed that *none* of the above would happen; that you could waltz right in to an elected position unopposed, with no inconvenient inquiries to your flawed morals or character failings, with the only requirement being your membership in good standing in the ACS and the Dayton Section? Why, you'd jump at the chance, wouldn't you? Well, this is your lucky day! Just say the word and you can be the nominee for either Chair-Elect or Secretary. Trust us; it'll be fun!

The next Secretary will serve during the 2010 and 2011 calendar years. The Chair-Elect will serve in that position in 2010, as Chair in 2011, and as Immediate Past Chair in 2012. Contact Todd Yeates at alan.yeates@wpafb.af.mil or (937) 255-9138 if you are even *remotely* interested in either position.

The Dayton Section Board Hits the Mall

The Dayton Section Board, along with select Committee Chairs, recently undertook a team-building exercise at the Mall at Fairfield Commons. The idea was to promote cooperation and compromise by shopping as a group but it didn't quite turn out that way. Individuals quickly got bored with compromise and peeled off from the group to visit their favorite haunts. Ironically, however, they all wind up at the same place – Mall Security. See if you can match the Board Member or Committee Chair to their reason why. Answers below!

- | | |
|---|---|
| 1. He forgot where he parked his car. | a) Aaron Sellinger, Treasurer |
| 2. For loitering near the fitting rooms in the Plus-Sized Ladies' Department at <i>Dillard's</i> . | b) Gary Kedziora, Public Relations Chair |
| 3. Started a shoving match after being taunted by teenaged Goths at <i>Hot Topic</i> . | c) Hilmar Koerner, Chair-Elect |
| 4. For hoarding cat toys at the pet store. | d) Jon Slagle, Secretary |
| 5. There's just something about a women in uniform. | e) Joy Haley, NCW Coordinator |
| 6. At <i>Dick's Sporting Goods</i> , a heated argument about the lack of Corn Hole accessories escalated to fisticuffs. | f) Paul Fleitz, Education Committee Chair |
| 7. Absconded with trays of free samples at the <i>Food Court</i> . | g) Rachel Jakubiak, Alternate Councilor |
| 8. He was just inquiring about job openings. | h) Rajiv Berry, Immediate Past Chair |
| 9. For using a stolen Golden Buckeye Card to obtain discounts on edible thongs at <i>Victoria's Secret</i> . | i) Ray Dudek, Patterson-Crane Award Chair |
| 10. He became agitated when all the bears at <i>Build-a-Bear Workshop</i> wouldn't stop sneering at him. | j) Steve T, Councilor |
| 11. Threw an extended hissy fit when turned away for service at <i>Miracle Eyebrows</i> . | k) Todd Yeates, Chair |
| 12. Patrons at <i>Fox & Hounds</i> were revolted by drunken admissions of "truth" during a shocking round of "Truth or Dare." | l) Venkat, Professional Practices Chair |

/ 1-k / 2-f / 3-a / 4-g / 5-c / 6-d / 7-b / 8-h / 9-i / 10-f / 11-l / 12-e /

ATTENTION: INDUSTRIAL CHEMISTS & CHEMICAL ENGINEERS

Did you know that:

- About 25% of Dayton ACS Section Members are affiliated with government or academic organizations?
- About 25% of Dayton ACS Section Members list their affiliation as industrial?
- About 50% of Dayton ACS Section Members list no affiliation?
- Of the 22 Officers and Committee Chairs in the Dayton Section, only *one* is employed by industry?

The Dayton Section of the American Chemical Society has recently revitalized the Industrial Relations Committee to help improve communication with and participation from the industrial chemists and chemical engineers in the Miami Valley. Along with improved communication and participation from Industrial Section Members, we want to better understand the needs and interests of this underrepresented faction.

Nationally, ACS has initiated a new website aimed specifically at industrial members: <http://boilthisdown.org/>

In addition, several industry-focused websites are linked through the ACS homepage (<http://www.acs.org>) as well as career assistance (<http://www.acs.org/careers>). You might also be interested in joining the Division of Industrial & Engineering Chemistry (<http://membership.acs.org/1/IEC/>).

What we want to know is:

- Have you visited these websites?
- Do you find them interesting or helpful?
- What kinds of activities, programs, recognition, etc., would you like to see from the Dayton Section?
- Have you taken advantage of venues for professional and technical networking, e.g., the ACS Member Network?

Email your comments, feedback, and suggestions to: industrial.relations@daytonacs.org.

Thanks!

Wayne L. Cook, Ph.D.
Industrial Relations Committee Chair

A Unique Symposium at CeRMACS-2010: Chemistry for Peace

In many parts of southeastern Europe, Dayton has been synonymous with peace ever since the Dayton Peace Agreement, which was initialed at Wright-Patterson Air Force Base on November 21, 1995, put an end to the three and a half-year war in Bosnia. This symposium will explore several themes, including:

- the environmental aftermath of war
- Environmental chemistry remediation research and applications
- chemistry as an implement for peace, e.g., green energy science and technology
- solidifying the sister-city relationship between Dayton and Sarajevo

The late Nobel Laureate in Chemistry, Richard Smalley, described cheap, clean energy as the number one problem facing humanity in the 21st century. Cheap, clean energy sources would remove the motivations for many of the world's conflicts as well as solving important problems around the world, such as the scarcity of potable water.

We encourage participation from section members with ties to Bosnia and Herzegovina.

This symposium is co-sponsored by Sister Cities International, the Dayton International Peace Museum and its environmental branch, The Future Energy and Conservation Center.

For more information, contact Steve Trohalaki at steven.trohalaki@wpafb.af.mil or Paul Fleitz at paul.fleitz@wpafb.af.mil.

Support the U.S. Commemorative Stamp Campaign for IYC 2011!

The ACS is working to urge the United States Postal Service to adopt chemistry as a theme for a commemorative stamp in 2011 in view of the contributions of chemistry to the well-being of humankind in the U.S. and worldwide and on the occasion of the 2011 International Year of Chemistry.

The USPS gets 50,000 subject requests per year and awards only 25 commemorative stamps per year. Your efforts to contribute to this cause this year are very important and very much appreciated!

How to get involved:

- Visit www.acs.org/iyc2011 to download the petition
- Distribute the petition for signature among your colleagues, students, and friends (all chemists and friends of chemistry are encouraged to sign!)
- Mail or FAX completed petitions to the ACS Office of International Activities no later than November 1. (see petition for fax number and address)

Learn more about IYC 2011 and contribute ideas to the ACS celebration of this historic event at www.acs.org/iyc2011.

Improve the Public's Appreciation for Chemistry! Become a Chemistry Ambassador!!

Chemistry Ambassadors is a new ACS program that invites members to help improve public awareness and appreciation for chemistry in the communities where they live.

Some of you are already doing this through NCW and other activities, we applaud you. But we also know that many of our members are not able to be active in their local sections, yet they are concerned about the public's appreciation for chemistry. If you feel you don't have time to become personally involved in making a difference, we ask you to think again. Chemistry Ambassadors is custom made to fit *your* schedule and *your* interests, no matter how little time, or how much you can afford to spend.

If someone asks what you do for living, do you have a response that's comfortable for you and relevant for the other person? Are you willing to provide ACS scholarship information to a high school guidance counselor? How about science podcasts for younger students? Willing to send a letter to your elected official to influence science policy? Sample scripts and letters will be provided, along with audience-appropriate messages about chemistry. And if you have more time, we have more suggestions and more tools.

Going to the national meeting? Stop by one of our workshops on Monday or Tuesday afternoon to learn more about the program. To register, e-mail Keith Lindblom at k_lindblom@acs.org.

ACS Receives \$33 Million Gift for High School Teaching Scholarships

Building Renamed for Donors

The American Chemical Society renamed its Washington headquarters building on June 3rd in honor of Clifford and Kathryn Hach, whose Colorado-based scientific foundation donated \$33 million in support of high school chemistry teaching. Society officials said the donation was the largest ever for ACS. Kathryn Hach-Darrow, who co-founded the Hach Scientific Foundation with her late husband, Clifford, said ACS was chosen for the gift because "it represents permanence and stability, and it truly embraces chemistry on a national level."

The ACS is renowned for its many education programs serving a wide spectrum of learners, from grade school to graduate school and beyond. The new funding will supplement existing ACS programs by further enhancing the teaching of high school chemistry, including a scholarship program for undergraduate chemistry majors interested in a career teaching chemistry, a grant program for chemists who have a degree in chemistry but wish to pursue careers teaching chemistry, and outreach grants to chemistry teachers. More information about the ceremony and the scholarships is at www.acs.org/funding. "The combined programs of the Hach Scientific Foundation and the ACS offer a complete suite of opportunities for high school teachers, from pre-service education through ongoing professional development," said Judith L. Benham, Chair of the ACS Board of Directors, at the dedication ceremony.

Bill Carroll* discovered that he has more hair than the Wright Brothers *combined!* (That's why they're wearing hats.)



Make your own discoveries in Dayton, Ohio, at CeRMACS-2010:
CHEMISTRY: REACTING TO PROVIDE NEW TECHNOLOGIES
June 16-19, Dayton Convention Center and Crown Plaza Hotel

Featured Symposia

- Computational Materials Science: Theory, Modeling, & Simulation
- Nanomaterials: Synthesis, Structures, Functionalization & Applications
- New Vistas in Biotechnology: Chemistry, Materials & Applications
- Combinatorial Characterization in Nano-Bio Systems
- Chemistry & Materials for Alternative Energy
- Metamaterials
- Chemistry for Peace
- Small Chemical Business Programming
- Materials for Aerospace and Space Applications
- Chemical Education Symposium and HS Teacher Award
- Minority Leaders in Nanomaterials Research Workshop

Nano and
Bio and
Meta!
OH MY!!



Pre- and Post-Meeting Attractions:

- Dayton Dragons Baseball at Fifth-Third Field, Downtown Dayton (<http://daytondragons.com>)
- US Air Force Museum (<http://www.nationalmuseum.af.mil>)
- The Dayton Art Institute (<http://www.daytonartinstitute.org>)
- Boonshoft Museum of Discovery (<http://www.boonshoftmuseum.org>)
- Schuster Performing Arts Center (<http://www.schustercenter.org>)
- Historical Oregon District (<http://www.oregondistrict.org>)
- Carillon Historical Park (<http://www.carillonpark.org>)
- The Dayton International Peace Museum (<http://www.daytonpeacemuseum.org>)
- Paramount's Kings Island (35 miles south)
- And a Plethora of Wright-Brothers Activities (<http://www.nps.gov/daav>)

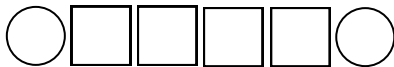
<http://CeRMACS2010.org>

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

A E R U



C E I M S U



D E E E I K N T



Dustin, a young, inexperienced chlorine molecule, is flustered by all the attention paid him by Anne, a sultry, alluring ferrocyanide who has been around the block a few times, if you get my drift. Anne exhales a plume of smoke and laughs at Dustin as he finally arrives at a startling revelation: "You're trying to



Arent you?"

Answers from Last Edition

COBALT OSMIUM DIPHENYL

A morose Marlon sits in the back seat of a cab just weeks after having failed his dissertation defense and complains to his thesis advisor, "You was my mentor; you shoulda looked out for me a little bit. I coulda been a POSTDOC; I coulda been ... *nobody*."

Quotable Quotes for \$2000, Alex

"The more laws and order are made prominent, the more thieves and robbers there will be."

—Lao Tzu

"He who holds the ladder is as bad as the thief."

—German Prover

"A man who has nothing can whistle in a robber's face."

—Juvenal

"The big thieves hang the little ones."

—Czech Proverb

"Don't worry about people stealing your ideas. If your ideas are any good, you'll have to ram them down people's throats."

—Howard Aiken

"How do you just walk into a house and take a TV Guide? How does she expect you to watch TV? Am I just supposed to turn it on and wander aimlessly around the dial?"

—Frank Costanza

AAT-2 — Su Doku for Chemists!

Using the following nine chemical elements:

H	He	Li	Be	B	C	N	O	F
---	----	----	----	---	---	---	---	---

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

	O							C
		H	B					
He					Li		Be	
		O						N
Li	Be	N						
			F		H			
F			He	C	N			
						Li		
	N		Be			He		

Answer from Last Edition:

F	O	He	Be	C	H	Li	N	B
Be	Li	N	O	B	F	C	He	H
C	H	B	He	N	Li	Be	F	O
H	Be	C	F	Li	N	O	B	He
B	He	F	C	H	O	N	Li	Be
O	N	Li	B	He	Be	H	C	F
Li	B	Be	H	F	C	He	O	N
N	F	O	Li	Be	He	B	H	C
He	C	H	N	O	B	F	Be	Li

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