



THE DAYTON SECTION

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

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BULLETIN**Dog Days of Summer 2010 Edition****Meetings and Events**

September 18: Celebrate the End of Summer at the Sixth Annual Section Picnic of the New Era!

Section News and Other Stuff

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DATE MATERIAL - MEETING ANNOUNCEMENT - DO NOT DELAY

ADDRESS SERVICE REQUESTED

American Chemical Society
Dayton Section
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Dayton, OH 45431

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UPCOMING MEETING

SEPTEMBER 18

SIXTH ANNUAL SECTION PICNIC OF THE NEW ERA

Where: Germantown Metropark, Cottonwood Shelter (the closest address is 6910 Boomershine Road, Germantown, OH. See directions and map below.)

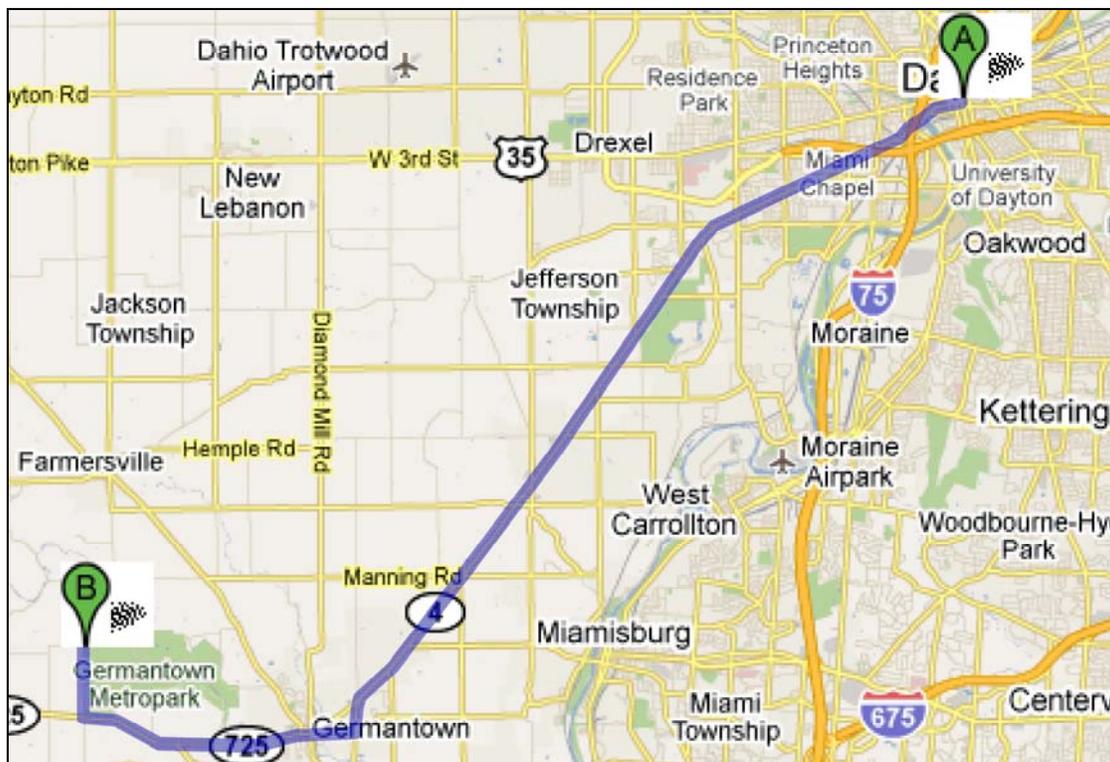
When: 11:00 AM – 3:00 PM, Rain (unless an incessant downpour) or Shine!

We'll continue our revival of an old tradition with a picnic at a *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; Oatmeal Chocolate Chip Cookies would be great) to share with everyone.

Those of us with kids will bring the typical stuff — soccer balls, footballs, Frisbees, badminton, and softball equipment — while those with peculiar Ohio personalities will haul out home-made corn hole sets but feel free to bring your favorite sports paraphernalia (except firearms). As in years past, singles, wearing Friday's work clothes, will bring hangovers.

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 or Hilmar Koerner at hilmar.koerner@wpafb.af.mil or 904-5091. Let us know, too, if you're a better grill cook than Steve, who intentionally drops meat on the ground so that he can feed the feral felines of Fairborn.

Directions: From Dayton, take OH-4 South, which turns into Dayton Germantown Pike. Turn right at OH-725/Market St. Continue to follow OH-725 West about 4 miles. Turn right at Boomershine Rd. Alternately, take US 35 West, turn left at S. Johnsville Rd./S Johnsville Farmersville Rd. and go south for about 6.5 miles. The road changes names a few times — S Johnsville Farmersville Rd, Farmersville Johnsville Rd., N Elm St., Farmersville Rd. — turn right at Manning Rd., go half a mile and take the 1st left onto Boomershine Rd. Try Google Maps or, better yet, break out some cash and get a GPS. And look for the Dayton Section ACS Banner!



CALL FOR NOMINATIONS AND VOLUNTEERS

The vacancies we need to fill this year are: Chair-Elect, Councilor, Alternate Councilor, and Treasurer. So far, the Section's Nominating Committee has identified one candidate for each office except Chair-Elect.

Upon election, the Chair-Elect will serve as an understudy to the Chair in 2011, as Chair in 2012, and as Immediate Past Chair — mostly an advisory role — in 2013. The four-five Section meetings per year are organized by Committee Chairs, so all the Chair really does is sit back and delegate authority. If you like telling others what to do and then getting all the credit, you are the perfect person to assume this role. If, on the other hand, you're the type of person who enjoys creating chaos where there is order, feel free to contact the Section's Secretary, Jim Carey (at 513-241-2324 or jcarey@whepatent.com) about running for the three offices for which we *already have* candidates. And don't worry; we won't call you names (at least not to your face).

Don't fret if you're one of those section members out there who *need* to be told what to do. We've got volunteer positions for you, too! If you take a gander at the *Bulletin* masthead, you'll see a couple of vacant Committee Chairs, e.g., Public Relations Chair. The PR Chair writes press releases about Section Meetings and emails them to Miami Valley newspapers, and radio and TV stations. It's a snap, although you *do* have to attend Section Meetings. But what else are you going to do; watch reality TV?

If you like to write but you're a loner who prefers minimal contact with the general public (and who could blame you?), you can chair the Bylaws Committee — our Bylaws are badly in need of revision — electronic balloting and the new ACS membership criteria are just two of several updates that are required. You can do this at home, all alone, while you drink.

Totally opposite to the personality of the Bylaws Committee Chair would be the Chair of the Government Relations Committee (Jon Slagle, the current Chair, will be gone in a flash if anyone shows even the slightest interest in this position). You'd get to hobnob with state and federal congresspersons and try to influence their positions on issues like education and research funding. True, you'll likely come into contact with more lawyers than you'd ever want so you'll probably need to shower a tad more often. This position comes with a loofah allowance.

National Chemistry Week 2010 — *Behind the Scenes with Chemistry*

Chemistry is everywhere — prominently as a science fair project or inconspicuously as a special effect or book. Current TV shows like *Mythbusters* and books such as *The Science of Harry Potter* bring behind-the-scenes science into full view, allowing the public to understand that it is not magic, but rather chemistry that explains the mystery behind what appears to be “magic” that is shown. We want to diminish the term “magic” associated with the “unexplainable” and direct attention to the chemistry that makes it all work. Come out and participate in our activities!

As in years past, we'll have two events:

The first is a free event on Saturday, October 23, 10:00 AM – 2:00 PM at the Centerville Library, 111 W. Spring Valley Road.

The second event will be Saturday, November 6 and Sunday, November 7, noon — 4:00 PM both days, at the Boonshoft Museum of Discovery, 2600 DeWeese Parkway, Dayton (See www.boonshoftmuseum.org for directions). Museum admission is required.

We need volunteers to help the Section with either event. If you are interested in helping out please call Joy Haley at (937) 255-9718 or e-mail Joy.Haley@wpafb.af.mil to let her know which day you are available and a time frame. Volunteers will be rewarded with the best free pizza in the Miami Valley.

PAST MEETING

The 41st Central Regional Meeting of the ACS

Held at the Dayton Convention Center, 16-19 June 2010, CeRMACS was an astonishing success. We had more than 500 oral and poster presentations, well over 600 registrants, 60 guests, and 21 exhibitors representing 10 companies. Morning and afternoon technical sessions were kicked off each day with a plenary session, including topics varying from Enhancing Human Performance with Nanomaterials to Climate Change in the Arctic. ACS Workshops on Leadership and Career Services were also given. Social events included the incredibly innovative Chemipalooza at the Boonshof Museum of Discovery on Thursday evening (the laser show accompanied with *Dark Side of the Moon* is indelibly etched on many of our minds, not to mention chemists rocking out to *White Wedding* – given a choice, the Editor chooses the former) and a Dayton Dragons game on Friday night. CeRMACS culminated on Saturday with a wonderful workshop for High School Chemistry Teachers, featuring Chem Demos from Dayton's own John Fortman in addition to Bassam Shakhshiri from the Univ. of Wisconsin-Madison.

Awards were given at the conclusion of the technical sessions on Wednesday evening, starting with the Patterson High School Chemistry Awards, which have been administered since 1943. Students from across the Miami Valley take a standardized test, then the top ten are invited to write essays, which form the basis of the final judging. This year's winners, (their teachers), and their essays are:

- 1st Place, \$1000: Doug Davenport, Northmont High School (Mr. Patrizio) – *The Chemistry that saved my Father's Life*
- 2nd Place, \$500: Farees Saqlain, Oakwood High School (Mr. James Slagel) – *From Ketchup to Bleach: The Photochemistry of Chromophores*
- 3rd Place, \$250: Daniel Yanes, The Miami Valley School (Mr. Bryan Czarnota) – *A Salute to Solute*

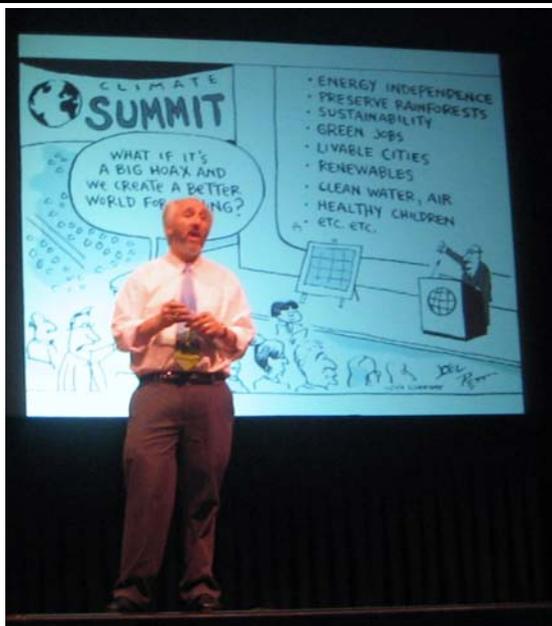
The ACS Division of Chemical Education Central Region Award for Excellence in High School Teaching was presented to Bridgette Sparks from Saline High School, Saline, Michigan. Quoting from her nominations, Ms. Sparks, who also coaches Saline High's rowing team, believes that, "The experiences in the classroom, coaching on the field, and participating in the education system as a student, have shaped who I am as an educator today. Reflection, goal setting, consistent and clear feedback, clear communication, and a firm grasp of content are the essentials of good learning and teaching practice. Helping students determine their learning styles and how to teach themselves to be better learners is the foundation of my teaching philosophy. Goal setting, developing action plans, clear feedback, and communication are the hallmarks of good coaching and good teaching."

The E. Ann Nalley Central Regional Award for Volunteer Service to the American Chemical Society was presented to none other than our own Councilor, Steve Trohalaki (there was only one other nominee). Those in the audience who stood, applauded, and called for a speech were soon mortified as Steve recited Herman Munster's Academy Award fantasy acceptance speech: "I want to thank all the little people. But I can't. Because I did it all myself." Privately, Steve was very appreciative of being selected to receive this award. As tears welled up in his eyes, Steve said, "Now, whenever I fill out a job application, I won't have to leave blank the section that instructs the applicant to list his awards."

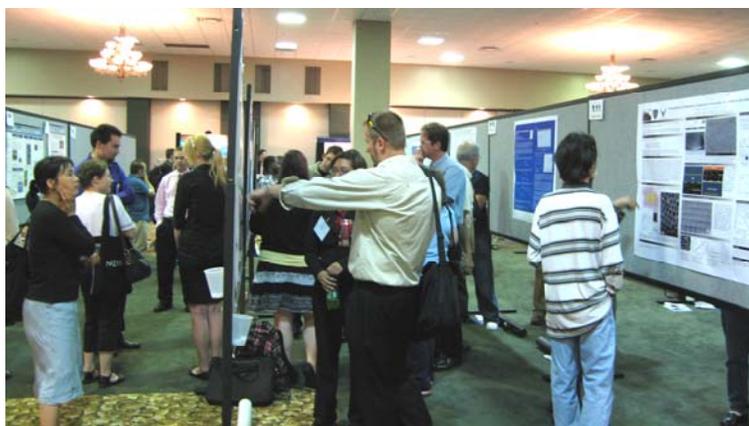
The Patterson-Crane Award, which is given biennially by the Dayton and Columbus Sections for meritorious contributions to chemical information, was presented to Professor Peter Willett of Sheffield University, UK. Prof. Willet delivered a fascinating talk entitled, "Fifty Years of Cheminformatics." In addition to the \$2000 honorarium, Prof. Willet was presented with an engraved Wright-Flyer replica.

The special symposium, *Chemistry for Peace: Building on the Dayton Accords*, organized with an Innovative Project Grant from ACS Local Sections, featured unique talks on green energy and environmental remediation of war-torn regions. It was very well attended, drawing a very diverse audience.

CERMACS-2010 IN PHOTOS



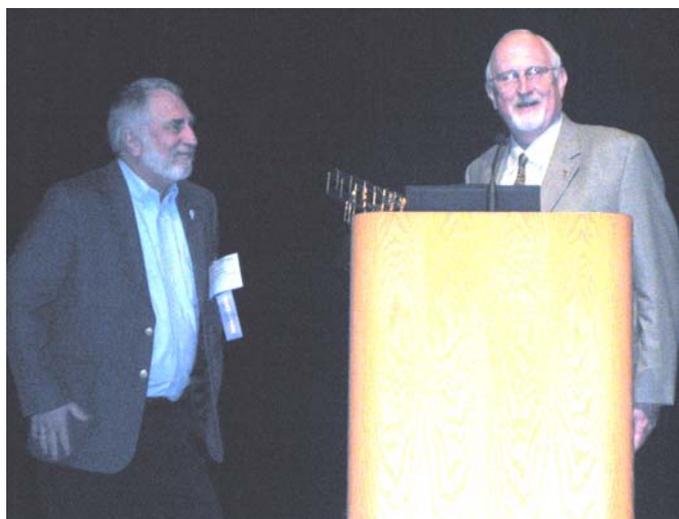
Prof. Paul Shepson during his plenary address said that, of the hundreds of climate scientists with whom he collaborates, there is not one who disagrees with the hypothesis of man-made global warming.



Apparently, the free popcorn, muffins, coffee, sodas, and ice cream were not necessary to promote attendance at the three Poster Sessions.



Prof. Willett wonders how he'll manage to get his Wright Flyer back to the UK in one piece.



Barry Farmer, CeRMACS-2010 General Chair, cuts off Plenary Lecturer Wade Adams as he goes way past his time slot.



Exposition attendees were easily snared in the exhibitors' traps.



Flanking Central Regional Award Winners Bridgette Sparks and Steve Trohalaki are members of the ACS Board of Directors, Peter Dorhout and Diane Grob Schmidt, who explained that the size of the plaques are proportional to the winners' Body Mass Indices.

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

BEIMRTU ○ ○ ○ □ □ ○ □
 A A E G O S T T ○ □ ○ □ □ □ ○ ○
 E N N O ○ ○ □ □

After barely surviving a financial crisis, the Chemistry Dept. gathers for their annual Christmas party. Chiming is heard as the drunken P-Chem professor staggers into the ornamented tree, prompting Zuzu, the comely coed/Office Assistant, sitting rather inappropriately in the Dept. Chair's lap, to exclaim, "Daddy, Provost says, 'Every time a bell rings, an Assistant Professor



"Oh, if that were only true, Zuzu," laments the Department Chair. "If that were only true. Now be a good girl and get us another drink."

Answers for Last Edition

BUFFER BEESWAX GERANIOL

As Judy throws water on Ray, who has caught fire, some accidentally splashes on Margaret, who shrieks, "The change in my "GIBBS FREE energy is zero, although my enthalpy and entropy are increasing!! Oh, what a world! What a world."

Quotable Quotes for \$2000, Alex

"If one cannot catch a bird of paradise, better take a wet hen."

—Nikita Khrushchev

"The birds are moulting. If only man could moult also - his mind once a year its errors, his heart once a year its useless passions."

—James Allen

"A bird does not sing because it has an answer. It sings because it has a song."

—Chinese Proverb

"You can know the name of a bird in all the languages of the world, but when you're finished, you'll know absolutely nothing whatever about the bird . . . So let's look at the bird and see what it's doing - that's what counts. I learned very early the difference between knowing the name of something and knowing something."

—Richard P. Feynman

"You have the chicken, the hen, and the rooster. The chicken goes with the hen... So who is having sex with the rooster?"

—Frank Costanza

AAT-2 — Su Doku for Chemists!

Using the following nine chemical elements:

H	He	Li	Be	B	C	N	O	F
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fill in the grid below so that each row, column, and 9-element subcell has only one occurrence of each element.

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

Solution for Last Edition

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

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