



THE DAYTON SECTION

Fostering scientific education and research and promoting public understanding of science

WEB ADDRESS:

<http://www.udayton.edu/~acs/>

2004 DAYTON SECTION OFFICERS**CHAIR**

Dr. Hilmar Koerner
904-5091, hilmar.koerner@wpafb.af.mil

CHAIR-ELECT

Dr. Peter Mirau
255-9153, peter.mirau@wpafb.af.mil

IMMEDIATE PAST CHAIR

Dr. Joy Rogers
255-3808-x3179, joy.rogers@wpafb.af.mil

SECRETARY

Ms. Kristi Singh
255-3808-x3258, kristi.singh@wpafb.af.mil

TREASURER

Dr. Rachel Jakubiak
255-8979, rachel.jakubiak@wpafb.af.mil

COUNCILOR

Dr. Steven Trohalaki
255-6671-x3118, steven.trohalaki@wpafb.af.mil

ALTERNATE COUNCILOR

Dr. Rajiv Berry
255-2467, rajiv.berry@wpafb.af.mil

COMMITTEE CHAIRS**PROFESSIONAL PRACTICES**

Dr. Narayanan Venkat
255-9177, narayanan.venkat@wpafb.af.mil

PUBLIC RELATIONS

Vacant

COLLEGE AWARDS

Prof. Al Fratini
229-2849, Albert.Fratini@notes.udayton.edu

HIGH SCHOOL AWARDS

Mr. Berch Carpenter
767-7068, berchc@msn.com

PATTERSON-CRANE AWARD

Dr. Melinda Greer
(513) 936-7165, melinda.greer@uc.edu

BULLETIN EDITOR

Dr. Steven Trohalaki
255-6671-x3118 steven.trohalaki@wpafb.af.mil

INDUSTRIAL RELATIONS

Vacant

EDUCATION

Dr. Paul A. Fleitz
255-6671-x3105, paul.fleitz@wpafb.af.mil

INVESTMENT

Dr. Tom Cooper
255-6671-x3157, thomas.cooper@wpafb.af.mil

SECTION CAREER PROGRAM

Dr. Aaron Burke
255-6671-3154 aaron.burke@wpafb.af.mil

GOVERNMENT RELATIONS

Ms. Lisa Denny
255-9151, lisa.denny@wpafb.af.mil

WOMEN CHEMISTS

Dr. Ruth Pachter
255-6671-x 3177, ruth.pachter@wpafb.af.mil

YOUNGER CHEMISTS

Mr. Jon Slagle
255-3803-x3152, jonathon.slagle@wpafb.af.mil

WEBMASTER

Mr. Jon Slagle
255-3808, jonathan.slagle@wpafb.af.mil

NATIONAL CHEMISTRY WEEK COORDINATOR

Vacant

BULLETIN**New Year's Issue 2006****Meetings**

Feb. 14: *The Chemistry of Coffee Roasting*, by Dr. Thomas Parliment

Feb. 18-19: TechFest 2006

March 7: Annual Poster Session and Patterson College Chemistry Awards

March 15: *An Illustrated Tour of the Oesper Collections in the History of Chemistry*, by Prof. W.B. Jensen

Section News

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DATE MATERIAL - MEETING ANNOUNCEMENTS - DO NOT DELAY

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American Chemical Society
Dayton Section
Eugene M. Kettering Center
140 East Monument Avenue
Dayton, OH 45402-1267

UPCOMING MEETINGS

FEBRUARY 14

THE CHEMISTRY OF COFFEE ROASTING

Speaker: Dr. Thomas Parliment (Parliment Consulting, New York)

Venue: Dorothy Lane Market Loft, Springboro

Directions: See <http://www.dorothylane.com/locations.html>

Social: 6:30 – 7:00 PM (free coffee and desserts; see below)

Talk: 7:00 – 8:00 PM



Abstract: During the roasting of a green coffee bean a myriad of reactions occur. Water is lost, carbon dioxide evolved, brown pigments are generated and delightful flavors and aromas are produced. This presentation will discuss the process of coffee roasting with particular emphasis on the chemical reactions and interactions which occur.

AVOID THE MISTAKES OF VALENTINE'S DAYS PAST WITH FREE COFFEE AND DESSERT FROM THE DAYTON SECTION!

This sequence of events is all too familiar. The card, the flowers, and the candy are all given and received with love. An intimate dinner follows. Then it's home for a long-anticipated evening of cuddling and snuggling. But, moments after you put on your favorite Barry White CD, you find your Valentine out like a light and snoring away on the couch. Even worse, there's evidence of drooling! You might as well see who's on Letterman. The fault, dear Dayton-Section Member, lies not in your stars but in yourself! Obviously, there was too little intellectual stimulation *during* dinner and insufficient sugar and caffeine *after* dinner. Do yourself a favor; on Valentine's day, bring your honey to the DLML and enjoy a stimulating lecture and then pump yourselves up with a cappuccino, espresso, or latte, and dessert. Chances are you'll need a *second* Barry White CD.

FEBRUARY 18-19

MIAMI VALLEY TECHFEST 2006

Time: Saturday, Feb 18, 10 AM–6 PM; Sunday, Feb 19, 11 AM–5 PM

Venue: Sinclair Community College Ponitz Center (Bldg. 12) and AIM Center (Bldg. 13)

This is a free event about sharing and learning about math, science, engineering, and technology - past present and future - for the entire family. Explore over sixty interactive science and technology demonstrations, exhibits, and games hosted by dedicated volunteers and practicing professionals and prepared by Dayton/Miami Valley professional societies, universities, industry, Air Force, and NASA. The Dayton Section of the American Chemical Society will be there again this year with hands on demonstrations exploring chemistry. In addition, Prof. John Fortman will perform a chemistry demonstrations show for kids of all ages.

UPCOMING MEETINGS

MARCH 7

ANNUAL POSTER SESSION AND PATTERSON COLLEGE CHEMISTRY AWARDS

Venue: University of Dayton, John F. Kennedy Memorial Union Ballroom

Agenda: Poster Set-Up: 5:30 – 6:00 pm

Poster Judging: 6:00 – 7:00 pm

Poster Viewing: 6:30 – 7:30 pm

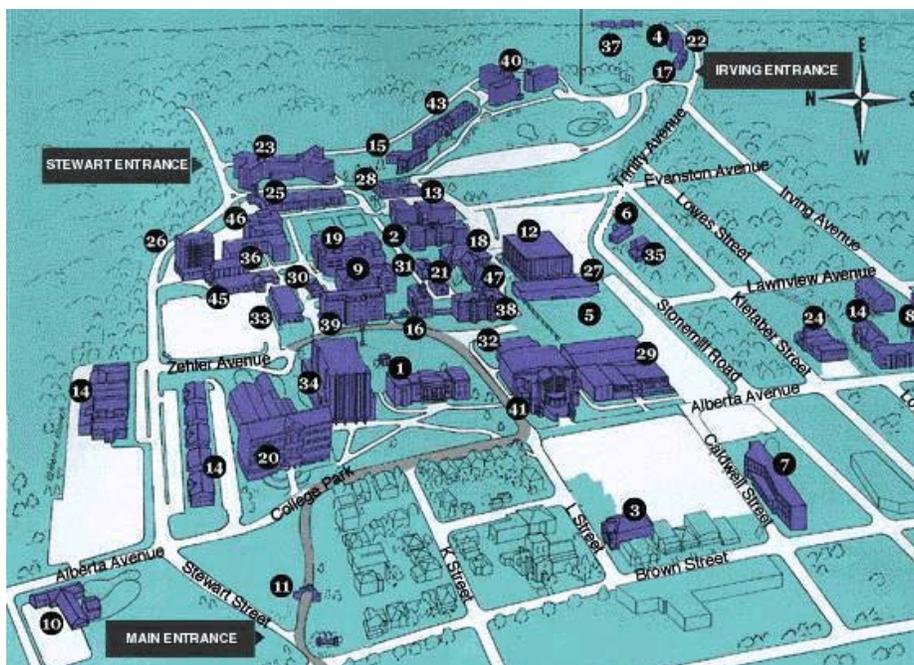
Awards Presentation: 7:30 – 8:00 pm

The Annual Poster Session is a tradition of long standing in the Dayton Section. As last year, we will present four \$100 cash awards for the best undergraduate and graduate poster presentations. The Dayton Section Officers invite you, your colleagues, and students to present a poster relating to any area of chemical research. Complimentary food and drink will be provided by the Section.

The annual Patterson College Chemistry Awards, sponsored by the Dayton Section, will be presented to an outstanding junior chemistry major at each college and university within the Section's boundaries.

Call for Abstracts

Abstracts of 250 words or fewer should be sent by close of business Friday, February 24, 2005 to Jon Slagle at jonathan.slagle@wpafb.af.mil. For students, please indicate on the abstract if you would like to be considered for an award and if you are an undergraduate or graduate student. For abstract format, please follow ACS Guidelines.



The John F. Kennedy Memorial Union is Building 19.
See <http://www.udayton.edu/campusmap/map.html> for more detail.

UPCOMING MEETINGS

MARCH 15

AN ILLUSTRATED TOUR OF THE OESPER COLLECTIONS IN THE HISTORY OF CHEMISTRY

A Joint Meeting with the Cincinnati Section

Speaker: Prof. William B. Jensen, Department of Chemistry, University of Cincinnati

Date: Wednesday, March 15, 2006

Venue: The Golden Lamb, Lebanon

Social: 6:00 – 6:30 PM

Dinner: 6:30– 7:30 PM

Speaker: 7:30– 8:30 PM

The meeting will include dinner, which is free for students (buy your own beverages). The venue befits a talk on the history of chemistry; established in 1803, the Golden Lamb was the stage-coach stop between Dayton and Cincinnati. Seating is limited. Please contact Hilmar Koerner at (937) 904-5091 or Hilmar.Koerner@wpafb.af.mil for reservations and carpooling options.

Abstract: This heavily illustrated talk will provide an overview of the newly housed Oesper Collections in the History of Chemistry at the University of Cincinnati, including the rare book and journal collection, the photo and print collection, and the apparatus museum. Also included are a restored circa-1900 chemical laboratory and lecture hall.

About the Speaker: Dr. Jensen's interests center on the development of late 19th and early 20th century physical chemistry and inorganic chemistry, with special emphasis on the origins of chemical thermodynamics and solid-state inorganic chemistry. He also has made a detailed study of the origins and development of the 19th century scientific community in Cincinnati.



Directions:

From I-75 Dayton: Take I-75 south to Exit 29 (Monroe-Lebanon), Rt. 63. Make a left on Rt. 63. The Golden Lamb is 6 miles down the road on the left-hand side.



Results of the 2005 Dayton Section Elections

We received 35 ballots in all, which is about 10% of the membership and typical for a local section. Dr. Peter Mirau defeated Dr. Rajiv Berry to become our new Chair-Elect. Although “mandate” and “political capital” have been bandied about, it must be pointed out that the margin of victory was little more than 1% of the membership. Kristi Singh, was unanimously elected Secretary. In addition, we are pleased to announce that Dr. Rajiv Berry has been appointed Alternate Councilor, filling the vacancy created by Dr. Rajesh Naik’s resignation. Congratulations to Paul, Kristi, and Rajiv and a heartfelt thanks to our outgoing officers, Dr. Ruth Pachter and Ms. Lisa Denny.

Newly Elected Officers



Peter Mirau
Chair-Elect



Kristi Singh
Secretary



Rajiv Berry
Alternate Councilor



Lisa Denny
Secretary



Ruth Pachter
Immediate Past Chair

Special Appointment

Outgoing Officers

Returning Officers



Hilmar Koerner
Chair



Joy Rogers
Immediate Past Chair



Rachel Jakubiak
Treasurer



Steve Trohalaki
Councilor
(current photo unavailable)

The Electronic Section-Meeting Reminder

Are you unpopular? Telltale signs include: 1) All your incoming e-mails are either offers to sell you Viagra knockoffs or endeavor to bilk you out of your lifesavings; 2) Your science-related after-hours social interactions are limited to chat-room lamentations on how none of your coworkers look nearly as good in a tight sweater as *CSI*'s Marg Helgenberger. Face it; you need e-mail you can use *and* face-to-face social contact with fellow chemists (who else would want anything to do with you?). That's why we took the liberty of signing you up for our *Electronic Section-Meeting Reminder*. Now, if you misplaced the *Bulletin* (or, used it to protect the new carpet from a vomiting pet), before marking your calendar, you'll be reminded of upcoming section meetings in a timely fashion. Of course, at the risk of becoming even *more* unpopular, you can opt-out at any time.

Past Meetings

National Chemistry Week

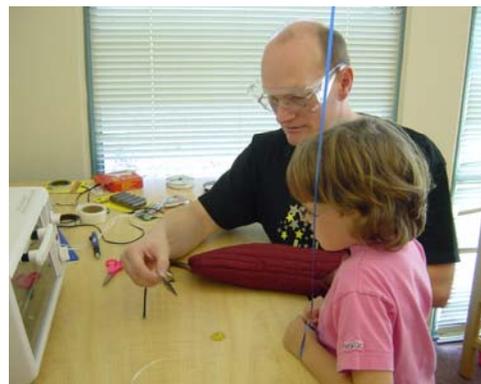
Saturday, October 22nd, we held a very special event at the Washington-Centerville Public Library celebrating the theme *The Joy of Toys*. We had a turnout of about 70 children along with their parents. The kids had an overwhelming response to our hands-on demos, frequently saying that they were “awesome.” We had several experiments including the super shrinker, Crayola’s model magic, and fused polymers showing the importance of materials chemistry in today’s toys. We also had several toys for the children to interact with. We give special thanks to all of the volunteers that day. They include: Jonathan Slagle, Eric Beckel, Doug Krein, Hilmar Koerner, Rachel Jakubiak, Narayanan Venkat, Kristi Singh, and Joy Rogers. Also thanks to Paul Fleitz for providing the super stretch man — we’re sorry that he was broken. Also special thanks to Meredith Koerner who designed our ACS logo out of Model Magic.



Venkat mistakes toy parts for Peanut M&Ms.



Meredith’s Model Magic.



“Will this super-shrinker technology work on my little brother?”



Don’t you hate it when one of the *parents* has an attention span of like 5 seconds?



“We don’t need no stinking volunteers!”

Professional Practices

Our annual professional practices meeting was held on November 16th at the Wellington Grille in Beavercreek to honor our two new 50-year members of the ACS. This year we honored Dr. Glenn Buell and Dr. Gilbert Nelson. Dr. Glenn Buell was able to attend the meeting and gave us a synopsis of his education and career in chemistry. Several past honorees also joined us, along with board members present and past. Congratulations to both 50-year members! We also honored our outgoing board members Dr. Ruth Pachter (Immediate Past-Chair) and Ms. Lisa Denny (Secretary). Thanks to both of them for their hard work for our local section.

Announcement: The Patterson High-School Chemistry Competition

Attention: High School Chemistry Teachers

The 2005 Patterson High School Chemistry Competition will be held on March 4th from 8:00 am – 12:00 noon in 101 Fawcett Hall at Wright State University. The competition is open to students in Montgomery, Miami, Greene, Darke, Clark, Preble, and Champaign Counties. The most outstanding student from each school, identified by their scores on a multiple choice chemistry exam, will receive a plaque from the Dayton Section. In addition, each top scorer from the exam may submit an essay on “Chemistry and Its Relevance to Me” for cash awards: \$1000 (1st Place), \$500 (2nd Place), and \$250 (3rd Place). The top 8 students (only 2 from the same school) will also qualify to take the regional Chemistry Olympiad exam for the National Team. During the examination students will be allowed to use calculators. All other reference charts will be provided. Parking will be available in surrounding student and public parking facilities. There will be no registration fees. All students taking the test must be currently enrolled in and/or have completed a high school chemistry course. If you wish to learn more about the competition, please contact Mr. Berch Carpenter (High School Awards Committee Chairman) at (937) 848-3737 or e-mail him at berchrc@msn.com.

Farewell Letter from Outgoing Secretary, Lisa Denny

Dear Section Members,

Please allow me to take this opportunity to relate to you my experiences as a Board Member and volunteer over the past 2 years, which, I hope, will encourage you to serve the Dayton Section in some capacity, whether it be as an officer, committee chair or member, or hands-on chemistry demonstrator for National Chemistry Week or TechFest.

The Dayton Section’s activities surely meet the goals laid out in the ACS Charter, i.e., to foster scientific education and research and to promote the public understanding of science. Since 1946, we’ve held High School Chemistry Competitions that make students think in detail how chemistry has affected their lives. We reward outstanding college chemistry majors in each of the universities in greater Dayton with our College Awards. Our annual poster session allows area undergraduates and graduate students to present their research alongside research of professionals that constitute our membership. We get kids interested in science with our activities at TechFest and during National Chemistry Week. Without the efforts of the Board of Directors and our committees, none of this would take place.

While a few venerable volunteers have been Committee Chairs and Board Members for many years, most are like me; they do their part by serving in one capacity or another for a year or two before relinquishing their role to new volunteers. This system would work fine if we had, say, half a dozen new volunteers each year but the most we’ve been able to manage lately is 2 or, in a ‘good’ year, 3. Take it from me; the time commitment is much less than I’d anticipated but the fulfillment I’ve felt is magnitudes more. Please consider running for office or volunteering for TechFest or National Chemistry Week. You won’t regret it!

With best wishes for the New Year,

Lisa Denny

MESSAGE FROM THE CHAIR

Greetings and a Happy New Year to all the “Science Makers” (as my 6-year old son calls me) of the Dayton Local Section.

When I first started as Chair-Elect in 2005, I was full of ideas on how to better serve and inform the local community on Chemistry, especially after I came back from an ACS Leadership Conference. But I quickly realized that none of this is possible without the involvement of the 450+ members of this Section, only 50 of whom I may have met. So, my goal at this point is simple: to do my best to get members involved in local section activities; to help in serving the local community to get better informed about chemistry; and to try to turn young people onto science. We are always looking for volunteers for Local Section Activities. If you are interested or have your own activity ideas, please give me a call at 904-5091 or e-mail me at Hilmar.Koerner@wpafb.af.mil.

Also, if you feel that something needs to be changed or you would like to know why the heck you are paying extra for the Local Section, we need to hear from you. It is all about dialogue between You - the Members - and Section Officers to get things moving.

Hilmar Koerner

QUOTABLE QUOTES FOR \$2000, ALEX

“Ambition is the last refuge of failure.” — Oscar Wilde

“Evans boldly put 50 atm. of ethylene in a cell with 25 atm. of oxygen. The apparatus subsequently blew up, but luckily not before he obtained the spectra shown in Figure 8.

— A.J. Merer and R.S .Mulliken, *Chem. Rev.* **69**, 645 (1969)

“A scientist is someone whose curiosity survives education's assaults on it.”

— Sir Hermann Bondi

“To understand the very large, we must understand the very small.”

— Democritus, 470-380 BC

“Think big! Think nano! — R. E. Smalley

THE ‘SPOT THE HUMOR’ CONTEST: WE HAVE A WINNER!

Several issues ago, the Editor, in a blatant attempt to determine if anyone at all was reading the *Bulletin*, offered a prize of free lunch or dinner to any member who could correctly enumerate the attempts at humor made in the *Bulletin* since the new Editor took over. Well, the Editor was astonished to receive an entry with the correct answer — 368! Yes, the humor was sometimes quite subtle. By the way, those of you whose entries said, “The only joke is you,” (or, words to that effect) were off by at least 367. In any case, the winner is ... Professor Ken Turnbull! (Apparently, Ken is trying to live up to the stereotype that a Scot will do anything for a free meal.) Ken is hereby invited to attend a lunchtime Board Meeting or to have dinner with the speaker before one of our upcoming Section Meetings. Congratulations Ken!