

# The Accelerator

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Indiana Section  
of the American  
Chemical Society

## Chair's Corner

WOW!!! Where did the summer go???

It seems like I was just grading final exams and writing final reports about two weeks ago. Another summer has flown by.

The Central Regional Meeting was a huge success. Thank you so very much to all who helped David Malik and Bob Pribush to plan this meeting and to all of you that attended. Our July and August meetings brought in many new faces and it was great getting to meet new people. These events are recapped elsewhere in this newsletter. However, I want to thank Jeff Ward in particular for his presentation on the Chemistry of Ice Cream. I still think that ice cream should be a food group!!!

I want to update you on two of our primary goals for this year – increased educational outreach and increased attendance at monthly meetings.

The July meeting brought in 30 attendees, including four children, and there were 31 attendees, including two children, at the Indians' game. We continue to see increased attendance each month and I especially want to thank Brian Mathes for his additional public relations efforts. The postcard updates and newspaper advertisements help to remind each of us about our local section monthly meetings.

We will continue our educational outreach efforts this fall with each of our monthly meetings. The Career Night in September and the Poster Session in October are excellent opportunities for us to incorporate high school, undergraduate, and graduate students into our activities and provide them with valuable information.

At the Central Regional Meeting, two of our local section Chemagination teams won first place—Lisa Koerner and India Johnson, in the Biotechnology category, and Jake Lockhart, Kate Pedersen, and

Elisabeth Mang, in the Medicine/Health category. These students all attend University High School of Indiana, and will be competing in the National contest this fall. You will have a chance to see their entries at the Poster Session on October 11<sup>th</sup>.

Take note of all of our upcoming events in the Upcoming Events Calendar. We will once again celebrate National Chemistry Week (NCW) at the Children's Museum this year on November 6<sup>th</sup>. I know that Julie O'Brien could use some help with this event. Please contact her if you are interested.

You will be receiving your ballot for the 2005 Indiana Section Officers by October 1<sup>st</sup> in a separate mailing. I encourage you to VOTE!!!

Finally, I would like to extend a special invitation to those of you who have not attended a monthly event. We would like to meet you. Also, if you are interested in serving on any of the committees, an extra hand is always appreciated.

Laura Slocum

## Career Night

The Second Annual Indiana Local Section American Chemical Society Career Night will be held on Thursday, September 23, starting at 5:30 PM. This function will be held in the Riley Room at Butler University in Indianapolis, IN. The Career Night will allow students of all levels to interact with chemists from various academic and industrial settings. The format of this year's event will include six, short presentations from local chemists, followed by a roundtable discussion where students can inquire about chemistry careers. After the conclusion of the discussion, there will be a networking period, where the students will have a chance to talk to speakers and representatives from local industries and schools about opportunities in chemistry. Currently, we have a number of colleges and industrial companies signed up to either

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The Indiana Local Section of the American Chemical Society publishes the Accelerator four times a year. The Section is not responsible for statements or opinions printed in this publication. The Editors are responsible for all unsigned and staff articles.

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**Career Night** (continued from page 1) participate as a speaker or to have materials available for the networking session.

This event allows students to learn not only what opportunities are available to chemists in the Indiana area, but also allows them to interact with colleges, graduate programs, and industrial firms to better plan their future in the chemical sciences. We encourage you to attend and to bring as many students as possible. The cost is completely covered by the Indiana Local Section of the American Chemical Society. Dinner will be served, and all attendees will be given a t-shirt to mark their attendance. We do ask that you RSVP to either Angela Bridges (1-800-998-3411; x3664) or Lindell Ward (317-738-8309) by **September 14** if you plan to attend.

-Lindell Ward

## Indians Chemistry

### Could Have Been Better

On Tuesday, August 17<sup>th</sup> a group of chemists, (28 ACS fans total including my dad), went to an Indianapolis Indians game. It was a blast! We played hall of fame trivia with the periodic table, ate nachos and hotdogs, tried to catch foul balls, and best of all got to see a live baseball game!

There was a homerun early in the second inning for the Richmond Braves that scored them two runs and got the game going. A little while later, the adults started talking about how the lines were different in Las Vegas. What was that about? I always thought that it was 90 ft to first no matter where you live. I guess you learn something new every day.

In the middle of a few random innings, we played baseball chemistry trivia. You had to match the first and last name of a hall of famer with the symbol of an element of the periodic table. For example: Bromine's symbol is Br or Babe Ruth, (that's the one that I got).

By the ninth inning, the Indians were still down, and we had not caught any fly balls. Then, one flew over our heads and into the seats behind me; I tried to get it, but it was just too high. Then the Indians made a come back! They scored one run to pull within three. After two outs and runners on second, and third, we hit a potential game tying, fly ball into the

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# Fifth Annual Indiana Section ACS Poster Session

The Fifth Annual Indiana Section ACS Poster Session will be held on Monday, October 11, starting at 4:30 PM. The poster session will be held in the atrium of the Julian Science and Mathematics Building at DePauw University. DePauw is located about one hour west of Indianapolis. This annual event is generously supported by local industries Eli Lilly and Company and Dow AgroSciences, as well as the Indiana Local Section of the ACS. The keynote speaker for this year's event is Dr. Tom Sparks, an Advisor at Dow AgroSciences, who will be speaking about "Discovery Research: From Questions to Molecules." This event provides an excellent opportunity for students interested in internships and job-seeking seniors and graduate students to meet potential local employers and for companies to make contacts with students with research experience. *Registration for the poster session will be free for everyone and will include assorted light refreshments. The dinner following the poster session will be free for all students (others who would like to attend the dinner will pay \$10 at the door).* Dinner will be held at the Walden Inn adjacent to campus and the menu will feature a buffet with chicken, fish, and vegetarian entrées, salad, roast potatoes, tuscan vegetables, as well as chocolate mousse and homemade fruit cobbler for dessert.

### The schedule for the evening will feature:

4:30 – 5:30 PM	Tours of the Julian Science and Mathematics Center
4 – 5:30 PM	Registration and light snacks
5:30 – 7 PM	Poster Session
7 – 8 PM	Dinner in the Union Building Ballroom
8 – 9 PM	Keynote Speaker: Dr. Tom Sparks, Dow AgroSciences, "Discovery Research: From Questions to Molecules"

Electronic copies of the abstract instructions and the registration form can be found at <http://membership.acs.org/i/indiana/YCC.html>. Abstracts for the poster session should be submitted no later than **Friday, September 24**. Copies of the registration information and abstracts should be emailed to Robin DiRocco at [rdirocco@depauw.edu](mailto:rdirocco@depauw.edu) (Microsoft Word or text format required for the abstracts). Early registration is encouraged! Everyone needs to register (it is free!) by **Friday, October 1**, even if they plan to only attend the poster session.

Directions to DePauw and further information on the poster session will be emailed to all conference participants upon registration, but will also be posted at the website at a later date. Feel free to call (765) 658-4603 or email Hilary Eppley at [heppley@depauw.edu](mailto:heppley@depauw.edu) if you have general questions about the poster session. Questions about your registration status should be directed to Robin DiRocco ([rdirocco@depauw.edu](mailto:rdirocco@depauw.edu)).

Some added bonuses for this year's poster session:

- Participating students (perhaps some other lucky participants) will receive free National Chemistry Week T-shirts
- See DePauw's unique Periodic Museum of the Elements
- Visit the National Chemical Historic Landmark for Percy Julian's work at DePauw (a famous African American natural products chemist)
- See Ferid Murad's Nobel Prize for the discovery of the biological role of nitric oxide

-Hilary Eppley

To find up to date information about  
Local Section activities,  
visit our website: <http://membership.acs.org/i/indiana/>

# National Chemistry Week

Mark your calendar now! Celebrate the Chemistry of Health and Wellness!

National Chemistry Week activities will be held at the Children's Museum of Indianapolis on Saturday, November 6 from 10 AM to 3 PM. This year's theme is "Health and Wellness." We're planning some new activities this year that should be lots of fun. Check out the October Accelerator for details about this year's program. Scheduled activities include the High School Chemistry Competition, Kids and Chemistry hands-on workshops, the Eli Lilly and Company Chemistry is a Blast program, and activities by local industries and universities. We'll also have some special events for science teachers who will be in town for the National Science Teachers Association regional meeting.

Share your passion of chemistry with the public! Volunteer for National Chemistry Week!

Our National Chemistry Week activities would not be possible without dedicated volunteers like YOU. Please consider helping with pre-event activities or volunteering for one of the many events at the Children's Museum. Some volunteer activities will only take a couple hours of time, and many come with free admission to the Children's Museum during NCW. Special thanks go to our corporate sponsors, Dow AgroSciences and Eli Lilly and Company, for supporting this event.

For more information about volunteer opportunities or NCW events, contact me [obrien\\_julie@lilly.com](mailto:obrien_julie@lilly.com) or [jtbrien@iquest.net](mailto:jtbrien@iquest.net), or by phone at 317-276-4356. -Julie O'Brien

## Fall 2004 Election News

If you are interested in running for one of the following positions:

- **Chair-Elect**
- **Councilor**
- **Alternate Councilor**
- **Member-At-Large**

please contact Stan Kolis at [KOLIS\\_STANLEY@LILLY.COM](mailto:KOLIS_STANLEY@LILLY.COM).

# High School Chemistry Competition Grand Prize \$250!

The 13<sup>th</sup> Annual High School Chemistry Hands-on Activities and Demonstration Competition, sponsored by the Indiana Section of the American Chemical Society, will be held at The Children's Museum of Indianapolis on **Saturday, November 6, 2004**. The aim of this competition is to foster an increased awareness of chemistry among young children under the age of 12 through hands-on activities and demonstrations. High school teams of a maximum of **eight students** will develop simple hands-on activities and demonstrations with a common chemical theme and perform the activities for youngsters attending the Children's Museum. This year, judging criteria will be weighted to prefer those schools that have child-friendly activities related to the theme "**Health and Wellness**." Please submit your ideas as soon as possible. Space is limited to **10 schools**, and priority will be given to the earliest submissions. If you are interested in participating or if you have questions, please email me at [jtbrien@iquest.net](mailto:jtbrien@iquest.net).

**PRIZES:** All participants will receive a National Chemistry Week t-shirt and a certificate of participation. First place teams will receive **\$250** and a trophy, second place will receive **\$150** and a trophy, and third place will receive **\$75** and a trophy.

A special thanks to our Corporate Sponsors, Dow AgroSciences and Eli Lilly and Company, for supporting this event. -Julie O'Brien

## Chemistry of Ice Cream

Did you know that in the hot summer of 1790, while in New York, George Washington spent \$200 on ice cream? Well you would, had you been among the thirty people who attended the July 29<sup>th</sup> presentation on "The Chemistry of Ice Cream" that I presented. I am an organic chemist in Chemical Process Research and Development at Eli Lilly. I explained the chemical processes in making the emulsion/foam comprised of water crystals, air bubbles, milk fat globules, unfrozen serum of sugar and flavoring that we know as ICE CREAM. Much of the talk focused on the thermodynamics of making ice cream and how the ice cream maker, a scraped surface heat exchanger, is ideally suited for preparing the delicious product. Freezing point depressions and phase diagrams were examined in the salt-ice mix and inside the ice cream itself. The talk

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## Indians Chemistry

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outfield. Unfortunately, the Braves outfielder made a miraculous catch and we lost the game. It seemed all we needed was a little more chemistry to get the win.

So, both our hopes of getting a baseball and an Indians victory were doomed for the day, or were they? As we were leaving the stadium and were walking down the street, a man who had watched the Indians warm up, noticed my little brother and his empty leather glove. Out of the blue, he gave my brother a baseball that had cleared the wall during practice. This made my brother's day. I guess the moral of this story is to never give up and you just might find (or be) a man or woman with a big enough heart to reach out and make someone's day!

By Jackson Parker, age 13

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then turned to crystal size and how additives help maintain the integrity of the crystals against such taste defects caused from the growing of larger ice crystals as a result of heat shock. I proceeded to talk about the various ingredients that go into making ice cream and what such additives and emulsifiers do to preserve flavor and texture. Unfortunately no secret recipes were divulged.

After the presentation, everyone got their chance to make their own ice cream in a re-sealable bag — known as James Bond ice cream — because the mixture is shaken and not stirred. A demonstration was carried out in an old fashioned ice cream maker and many enjoyed scoops of the freshly made soft ice cream from the dasher blades. A taste test was performed and evaluated by Lilly statistician Andreas Sashegyi to determine if a new process of low fat ice cream could honestly boast being as creamy as the non fat variety. Results of the test were as follows: “not yet, but keep trying.” Finally the beautiful evening ended with a demonstration of ice cream being made using liquid nitrogen as the sun set.

-Jeff Ward

## ChemLuminary Success!

**CONGRATULATIONS** to the Indiana Local Section!!! We won three, out of the five, ChemLuminary Awards for which we were nominated. ChemLuminary Awards are the way in which the national ACS honors its volunteers. Recipients were announced and the presentation of awards was made at the 227<sup>th</sup> ACS National Meeting in Philadelphia, PA on Tuesday, August 24 at Loew's Philadelphia Hotel at Millennium Hall.

### We received the following ChemLuminary Awards:

- Local Section Public Relations (Medium Large to Very Large) Award
- Local Section Career Program (Small to Medium Large) Award
- Most Creative Local Section Younger Chemists Committee Event Award

### We were nominated for the following ChemLuminary Awards:

- Outstanding Local Section Younger Chemists Committee Event Award
- Outstanding Kids and Chemistry Program Award

These ChemLuminary Awards were based on our activities in 2003 under Stan Kolis' leadership. The committee chairs over each of area or event deserve many thanks for all of their efforts. **CONGRATULATIONS AGAIN!**

-Laura Slocum

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## Upcoming Events

**Thursday, September 23**

### **Second Annual Career Night**

Riley Room at Butler University 5:30-8:30 PM  
RSVP to either Angela Bridges (1-800-998-3411 x3664)  
Or to Lindell Ward (317-738-8309) by **September 14<sup>th</sup>**

**Monday, October 11**

### **YCC/Industry Poster Session** DePauw 4:30 PM

For more information contact Hilary Eppley (765-658-4603) or heppley@depauw.edu

**Saturday, November 6**

### **National Chemistry Week**-Children's Museum

For more information contact Julie O'Brien (317-276-4356 or obrien\_julie@lilly.com)

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American Chemical Society

Indiana Section

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