



The

Indiana Section of the American Chemical Society

Accelerator

Visit our website: <http://indiana.sites.acs.org/>

Chair's Corner

First things first – I'd like to extend a hearty congratulations to Elmer Sanders and the 2009 Project SEED team for winning the ChemLuminary Award for Outstanding Project SEED Program. The ChemLuminary Awards are National ACS awards that are given to local sections that demonstrate excellence in carrying out their mission to serve local communities. The awards for 2009 programs were announced at the fall National ACS meeting in Boston a few weeks ago, and it was my honor to accept the award on behalf of the leaders, volunteers and students who do such an outstanding job making the Indiana section's SEED program one of the best in the country. Thanks so much for your efforts!

Fall is upon us, and the ACS Indiana Local Section has many events in store for our members in the coming months. At the end of this month, we will see the return of Career Night, which will be held at Butler University. This is a great opportunity for students to learn more about careers in chemistry from experienced industrial and academic chemists. The ACS Poster Session in mid-October, also at Butler, provides an opportunity for students and industrial chemists to share their research in an open environment which encourages networking. This year's poster session will feature ACS President Joe Francisco as the speaker, so don't miss it! Also in mid-October, the section will host ACS tour speakers Mickey Sarquis and Lynn Hogue, former director and associate director of the Center for Chemistry Education at Miami University of Ohio, respectively, and internationally recognized as leaders in chemistry and science education. They are now leading Terrific Science, an organization that promotes professional development and outreach programs, and they have wowed audiences around the world with workshops that help teachers and others make chemistry relevant and thoroughly enjoyable for students and children of all ages. This should be a fun and educational experience for a broad audience, so we hope you can attend!

In early November, we will once again sponsor a day at The Children's Museum of Indianapolis to celebrate National Chemistry Week with chemistry demonstrations and hands-on science experiments for budding chemists of all ages. Later in November, our WCC committee is planning a development session for the women of the Indiana Section. This event will be targeted toward improving your networking skills and your strengths for success in your life.

Watch the mail for postcards detailing these events or check out our website!

Fall is also a time to pay our dues to the society. In addition to what (**Chair's Corner** continued next page)

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

(Chair's Corner *continued from previous page*)

we pay to enjoy the benefits of membership at the national level, there is also the option to support our local section when we pay our national membership dues. Over the past couple of years, we have noticed a decrease in local section dues paid. While there are likely to be many good reasons why this has happened, the reality is that local section dues are an important part of our section's budget that allows us to put on programs for you, our local section members. It's a relatively small membership fee for what we hope you believe are programs and activities that are beneficial to you, so please, when you send in your payment this year, don't forget to pay your local section dues.

Elections are also coming up this fall, both at the national and the local level, so don't forget to vote!

Jeannie Phillips

2010 Chair, ACS Indiana Local Section

Project SEED

Thank you... for another wonderful summer at Project SEED.

In our rapidly changing world, it is nice to rest upon long enduring legacies. One of these is the 42-year and going legacy the ACS gave the world in establishing the summer science research internship program, Project SEED.

With an overwhelming sense of gratitude and appreciation I thank all of the Indiana Section members for their contributions to this wonderful program. You will personally get to meet the summer students at the upcoming Indiana Local Section Poster Session on October 14, so please register! The research scientists who hosted the 28 students and volunteered over 10,000 hours of public service are the heart of our program. You can see all names at our program's website, www.indyprojectseed.org This type of collaboration is common to ACS; corporations, universities, and research professionals, and private donors all coming together for a worthy cause: investing in today's youth, tomorrow's leaders.

Like trailers at the end of movies, I could place a long list here of all the numerous people, companies and organizations who contributed to the students in our summer program, but like you, they all did it with a sense of civic duty and love of humanity. We do not turn anyone down, so those of you readers who would like to lend a hand to these talented, hard-working students but wonder what you can possibly do to help – contact me and we will find a place for you in our public service.

Now that the summer program is over, our team is helping all seniors with their college and scholarship applications. There are still many ways for volunteers to be involved, so please feel free to email or call me. I teach at Southport High School during the school year, but I prefer to use my personal email and phone for SEED related correspondence: elmer.sanders@yahoo.com and (317) 514-3212

Elmer Sanders

Program Coordinator

Indianapolis Project SEED

www.indyprojectseed.org

Project SEED: One student's experience

Kwame Newton participated in the 2010 Project SEED research internship program and delivered the following speech at our annual appreciation banquet. He is a senior at University High School and was recommended to SEED by his chemistry teacher and Indiana local section member Laura Slocum.

Kwame was hosted by professors Bruce Ray and Horia Petrache from the Department of Physics at the IUPUI School of Science and mentored on his research project 'Measurements of Interaction Between Glycoproteins and Lipid Bilayers.'

When I first heard about Project SEED, I wasn't sure what to expect. That university scientists would allow *high school* students to fully participate in their laboratories conducting useful, scientific research simply baffled me, but as I learned more and more about the program, my skepticism was laid to rest. *What if someone catches the lab on fire, or doesn't remember how to convert moles to grams, or just has absolutely no idea what he or she is doing?* That's what preceptors are for. *What if someone can't find a lab, or doesn't know how to make a poster?* That's what the SEED coordinators are for. *What if I can't figure out how to upload all of my Project SEED photos to Facebook?* That's what the other students are for. According to Albert Einstein, "If we knew what it was we were doing, it would not be called research, would it?"

My first visit to the laboratory in which I have been working was an amazing experience. I had never seen so much machinery, chemicals, and scientists in one place! Although this was only a rudimentary introduction, it was nonetheless wholly fascinating. In addition to seeing all of the equipment that I would be using, I also was able to meet all of the other people working in the area, including

several university students and professors.

After the first week or so, I started getting the hang of things, and was more comfortable working on my own. I am working on a project in which the interactions between cell membranes and certain proteins were being investigated, so a lot of my time was spent mixing different combinations of solutions and scanning them with spectroscopy. Without Project SEED, I may not have had the amazing opportunity to learn how to use such high-level techniques, along with such expensive equipment. I also had to work with graphs and calculations in spreadsheets, which was a totally eye-opening experience for me. I can remember just a few months earlier, when I absolutely *loathed* spreadsheets so much that I was willing to bypass the more advanced technology and use a calculator, even if it meant doing more work. After just *one* use in the lab, I began to realize the infinite possibilities of spreadsheet processing, and immediately became comfortable with my tasks.

Another part of my Project SEED experience that I really enjoyed was the interaction with all of the other Project SEED students—whether it be chatting at a barbecue, going for a walk along the canal, or playing frisbee in the pouring rain. It came as a shock to me that so many people my age actually had a genuine interest in science—now I finally knew some people my age that would understand my chemistry jokes! (Speaking of which, Q: Why did the bear dissolve in water? A: Because it was a polar bear!) It was also interesting to hear the details of other projects and other people's difficulties and successes.

But now that my experience is coming to a close, I can surely think of three core values that encompass the spirit of the Project SEED experience: commitment, discovery, and growth.

Commitment: commitment of my preceptors and others in my lab to their research projects, to helping me understand my responsibilities and objectives, and to advancing science for the greater good of humanity; commitment of the Project SEED staff to organizing all 28 of our labs, keeping in touch with our preceptors, making sure we stay on track, and giving us a chance to relax at picnics; commitment of the students to their projects, and to learning all they can about their project, and commitment to playing frisbee—even if it's raining.

Discovery: the discovery that things don't always go as planned, and that these same things can also be corrected; the discovery of new and exciting information which may or may not have been expected; the discovery that some things which used to be difficult may not be as complicated as previ-

ously thought; the discovery of how rewarding scientific research is; discovery of the lab environment; and the discovery that *some* jokes are better off left in the lab.

And finally, growth: the growth of personal experience derived from operating in a laboratory, the growth a laboratory must make in order to accommodate high school students, the growth of general scientific knowledge, and the growth of young minds—nurturing the “seed” of science so that it may grow into a strong, healthy tree, capable of bearing fruit, of which the seeds can be sewn into the minds of the future.

Project SEED has been an amazing experience, and has allowed me an opportunity paralleled by no other—I sincerely thank each and every one of you in this room for helping and encouraging me, and your young family member, and your intern, and your student, and your friend, to explore the wonderful gift of science, and the personal, humanitarian, and universal rewards it has to offer.

Kwame Newton

2010 Leadership Development System Course

The Indiana Local Section of the ACS held the leadership development course entitled “Engaging and Motivating Volunteers” on June 19 from 8 AM - 12 PM at Jordon Hall on the campus of Butler University. The local section invited volunteers who had served on the National Chemistry Week Planning Committee, the 2011 Central Regional Planning Committee, the Executive Committee, and other programming committees to attend the workshop as a thank you for their service to the local section. Invitations were also sent to the presidents and vice-presidents of the local student affiliates. Carol Duane served as the facilitator and fourteen volunteers attended the interactive workshop. The participants found the course to be very informative and left with new ideas on how to engage and motivate volunteers to help organize and serve on the committees for the local sections' activity program. The Indiana Local Section plans to host another leadership course next year.

Amy DeBaillie

Voting on Revisions to the Section's Bylaws

The recent national vote of ACS members to change categories and requirements for ACS membership, as contained in the national Constitution and Bylaws, has put our Indiana Section Bylaws out-of-date with respect to those categories, and thus we need to approve a number of amendments to our bylaws to bring them into conformity with the national documents. We are taking this opportunity to make a few clarifying amendments in other areas, as well. You will be given an opportunity to vote on these amendments at the same time that you elect new Section officers next month. (Amendments to bylaws are adopted if approved by $\frac{3}{4}$ of the members voting.)

Those members of the Section who receive e-mail announcements of Section news regularly will receive directions on how to see a marked-up copy of the full bylaws of the Indiana Section, with comments (if you wish!). Meanwhile, here is a briefer summary.

- (1) Amendments due to changes in the membership categories. The categories "ASSOCIATE MEMBER" and "Student Affiliate" no longer exist, and a new category, "STUDENT MEMBER", has been created. This has led to deletion of reference to "Student Affiliates" in Bylaw IV, section 2, deletion of "ASSOCIATE" and insertion of "STUDENT" in Bylaws IV, VII, and VIII, suggestion that the new STUDENT MEMBERS be allowed to hold the elective position of Executive Committee Member-at-Large, but not other elective positions in the Indiana Section.
- (2) Clarifications. Ballots are to be "distributed", not "sent" (gets away from the idea of mailed ballots) in Bylaw VII, Section 6, procedures to describe fair balloting methods are inserted, Bylaw VII, Section 6, a person appointed as an interim Councilor or Alternate Councilor must be a regular MEMBER, not a STUDENT MEMBER; Bylaw VII, Section 8, statement about the use of *Robert's Rules of Order* is reworded; Bylaw X, Section 5, use of electronic balloting on bylaws changes is specifically mentioned: Bylaw XIII, Section 2.
- (3) Wording change to match national documents. The description of how to handle the dissolution of the Section is changed to match the language found in the national Bylaw VII, Section 15 – this is our Bylaw XIV.

If you do not receive e-mail from the Indiana Section and would like to see fuller description of the amendments to be voted on, please send a request to Ann Hunt, 1775 Glencary Crest, Indianapolis, IN 46228.

Ann Hunt
Councilor, Indiana Local Section

Baseball Night

It was a wonderful night for Baseball on July 26th when the Indianapolis Indians took on the Charlotte Knights with 32 members of the Indiana Section of the American Chemical Society in the stands. The temperature was perfect for a nice evening of baseball and meeting other members of the section. Faith Musko remarked how this was the best night of baseball and conversation we have ever had. Unfortunately for the Charlotte Knights, the Indians came out on top with an 8-5 victory. Our members had a good chance to network and pick up some free stuff during the annual trivia contest. This year during the trivia contest we had a non-chemist answer the chemistry trivia question before our own members did!!! Our mission to bring chemistry to the public...fulfilled. See you all next year.

Brian Mathes

12th Annual Indiana Local Section American Chemical Society Poster Session Poster Presentations from Area Colleges, Universities and Industries

Special After Dinner Presentation
Dr. Joe Francisco
Purdue University
President of the American Chemical Society

October 14, 2010
Butler University
Indianapolis, IN
4:30 PM – 9:00 PM

Dinner is free for poster presenters and all students,
\$10 for everyone else
To download registration forms, which include dinner
reservations, visit

<http://membership.acs.org/i/indiana/>
Abstract Deadline: 10/03/10
Registration Deadline: 10/7/10

For Poster Session and Abstract Submission Questions,
email LuAnne McNulty at lmcnulty@butler.edu

Indiana Medicinal Chemistry Symposium

The Indiana Medicinal Chemistry Symposium sponsored by Lilly and the Chemistry and Chemical Biology Dept at IUPUI that will take place October 2, 2010 at IUPUI. Please see the web site (www.medchem.chem.iupui.edu) for registration and more information.

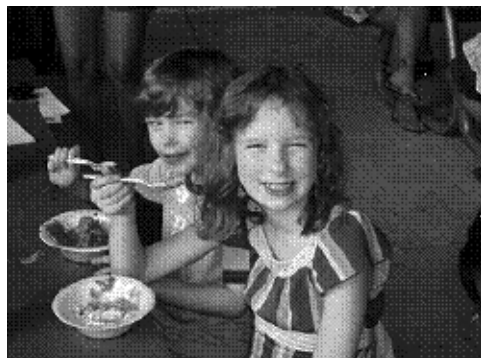
The Chemistry of Ice Cream Presented by Jeff Ward

On the evening of August 11, 2010, Indianapolis, Indiana's temperature registered 97°F in a few places. This was the perfect time to indulge in one's favorite ice cream. Such was the venue at Eagle Creek Park on Indianapolis' west side where Jeff Ward, a process chemist, presented "*The Chemistry of Ice Cream*" to an audience of approximately 70 participants.

The group, consisting of chemists, engineers, parents and children, was treated to several ice cream brands and flavors. Perhaps everyone's favorite was Jeff's homemade ice cream. With ice cream being eaten on such a warm evening, the science behind the treat was then presented.

Jeff presented concepts such as crystallization, particle size, freezing point, solubility, agglomeration in such a simple manner, that the entire audience understood. The "phase diagrams" seem to draw particular interest by all in attendance.

The various methods of preparing ice cream were presented as well. A demonstration of preparing peach ice cream was among the various exhibits. After preparing the peach ice cream which took about 20 minutes, the resulting product (peach ice cream), was served to the audience. Children in attendance also participated by preparing their own individual "James Bond" ("shaken not stirred") ice cream. The directions for this activity may be found below.



Permission granted for photo use (Kevin Smith)

Ingredients and Ice Cream Maker

1 gallon size Plastic Zip Lock Bag
1 quart size Plastic Zip Lock Bag
Ice cubes or small enough to fill $\frac{3}{4}$ of the gallon bag
 $\frac{3}{4}$ cup of table salt
1 cup whole milk
 $\frac{1}{4}$ cup heavy cream
 $\frac{1}{4}$ cup sugar / or $\frac{1}{8}$ cup of sugar and 1 Tbs of maple syrup
 $\frac{1}{2}$ teaspoon vanilla extract

Process

Charge milk, sugar, cream and vanilla to the smaller bag, seal the bag and gently shake to dissolve sugar. Place smaller bag into the larger bag. Charge salt, followed by ice, into larger bag and seal the larger bag (check for leaks). Shake and turn end over end until ice cream congeals. This should take 5 – 10 minutes. Allow to stand for a few minutes to harden ice cream to desired consistency.

David Mitchell

Election News

National Elections: Indiana Section members are reminded to vote for the 2011 ACS President-elect when the ballots are sent the week of September 24. The deadline for voting, either online or by mail, is November 12th. The candidates are Dr. Luis Echegoyan, University of Texas at El Paso, El Paso, TX and Dr. Bassam Z. Shakhasshiri, University of Wisconsin, Madison, WI. The candidate statements were printed in the September 9th issue of Chemical and Engineering News and can be found online at acs.org.

Dawn Brooks, councilor Indiana Section

Indiana Local Section Elections: The upcoming Indiana Section elections will be held electronically this year. We will email members with a link to the ballot in October. To vote, you simply click on the link and make your selections. If you prefer to receive a paper ballot, please contact Lindell Ward at (317) 467-3607 or Lindell.Ward@covance.com by Friday, October 8th. Ballots must be received by November 1st to be counted. If you have any questions or concerns, please contact Jason Ribblett at jwribblett@bsu.edu.

Mark Your Calendars
Behind the Scenes with Chemistry!!
National Chemistry Week Celebration
The Children's Museum of Indianapolis
Saturday, November 6, 2010

The 2010 Indiana Local Section will celebrate National Chemistry Week on Saturday, November 6, from 10 AM to 3 PM at The Children's Museum of Indianapolis! Current shows like MYTHBUSTERS and books like The Science of Harry Potter bring "behind the scenes" science to a prominent view. This allows the public to understand that it's not magic, but rather common chemistry topics which explain the mystery behind the "magic" that is shown. With this year's theme, we want to diminish the term "magic" associated with the "unexplainable" and direct attention to the chemistry which makes these things work. Watch the Local Section website (<http://indiana.sites.acs.org/>) for updated information about our plans and activities!

Your help is needed to make this event one of the best science education events in the state! Start planning now for how you would like to be involved! We are still working out the details of our events and plans, but the information below will give you an idea of what we are considering. If you have other ideas for fun, educational events, please contact us! This year we look forward to hosting the following activities in the spirit of National Chemistry week!

Community Charity Event – Toy Drive

This will be a wonderful opportunity to get our chemistry community involved in an effort to come together to provide toys for the children in need in the local Indianapolis area as Christmas is right around the corner. We also plan to have a blast as we paint a chemistry related mural for one of the local libraries, parks or grade schools!! Please let Rebecca Lamkin (rlamkin@hotmail.com) and Kent Griffith (kejgriff@imail.iu.edu) know if you would like to get involved.

19th Annual High School Chemistry Competition

In light of last year's success, we are asking high school teams to submit videos for this year's competition. The video submissions (minimum 5 minutes-maximum 15 minutes) will be judged according to the following criteria: display of the theme "Behind the Scenes with Chemistry," innovation, hands-on activities, and teamwork efforts. The winning team will be

honored at a short awards ceremony at The Children's Museum of Indianapolis during the National Chemistry event on Saturday, November 6, 2010. The video will be played continuously during the NCW event. If you would like to serve as a judge for the competition or have questions please contact Paul Ridenour (PRidenour@aitlabs.com) and Edward Chikwana (Chikwana@franklincollege.edu).

Chemistry Activities at the Children's Museum

Local companies, universities, and professional organizations are invited to set up booths which provide interactive, fun experiments and demonstrations related to Behind the Scenes with Chemistry! To inquire about sponsoring a booth, please contact Faith Musko (FMusko@aitlabs.com).

Please Volunteer for Our Award-Winning NCW Event!

We have many opportunities for our Indiana Section members to get involved with National Chemistry Week! Most involve as little as 1-2 hours of your time. Some volunteer opportunities involve working with museum guests, while others are for behind-the-scene activities, including event planning and volunteer coordination activities. All volunteers who help with NCW on Nov. 6 will receive free museum admission the day of the event as well as a free NCW t-shirt! To volunteer, please contact Katie Schindler (katie.schindler@biomet.com) and Kevin Weber (kevintweber@gmail.com).

Need more information?

Contact Erin Dotlich (Dotlichem@lilly.com) and Viola Kimbowa (Kimbowavs@lilly.com)

Special Thanks to Dow AgroSciences, Eli Lilly and Company, and The Children's Museum of Indianapolis for continuing support and sponsorship of the Indiana Section's National Chemistry Week event.

Viola Kimbowa and Erin Dotlich

National Chemistry Week is coming and the ACS needs you!

The National Chemistry Week (NCW) event will be held at The Children's Museum of Indianapolis on Saturday, November 6, 2010. We need volunteers who are interested in educating our future generations about the incredible contributions of chemistry.

This year's theme is "Behind the Scenes with Chemistry!!" Chemistry is everywhere, whether prominent as a science fair project or tucked behind the scenes of a special effect or book. We want to diminish the term "magic" associated with the "unexplainable" and direct attention to the chemistry which makes these items work.

We hope to make this year a big success, and we need your help. A variety of volunteer positions are available to run hands-on activity booths and greet visitors. Please discuss this with colleagues, friends, and family who might be interested in participating. Please contact us as soon as possible if you would like to participate:

Kevin Weber

Katie Schindler

kevintweber@gmail.com

katie.schindler@biomet.com

317-569-9301

574-371-1124

Check It Out! Upcoming Events in 2010!

September 27 th	Career Night Butler University 5 – 8 PM
October 14 th :	ACS Poster Session Butler University 4:30 - 9 PM
October 24 th :	Wizard's Academy Indiana Medical History Museum 12 Noon
November 6 th :	National Chemistry Week Celebration The Children's Museum of Indianapolis 10 AM – 3 PM

ACS Webinars™

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Learn more and register at

www.acswebinars.org

October 7, 2010

Careers in Intellectual Property

Learn what you need to know to build a career in the field of intellectual property!

Robert Koch, Attorney at Law with Milbank Tweed Hadley McCloy LLP.

October 14, 2010

US Immigration Updates for Foreign Born Scientists

What foreign-born scientists should know to legally work and gain permanent residence in the US!

Kelly McCown, Attorney at Law with McCown and Evans LLP.

October 21, 2010

Sparking Discovery – Chemists in the Community

Learn how chemists are giving back to their communities and how you can too!

Al Hazari, Ph.D., University of Tennessee, Knoxville.

October 28, 2010

Programs and Funding Opportunities for Manufacturers and Small Chemical Businesses – Part II

Learn about U.S. government resources that help small chemical businesses be more competitive in the marketplace!

Ben Vickery, Senior Industrial Specialist, National Institute of Standards and Technology.

Connect with subject matter experts and global thought leaders in chemical sciences, management, and business on relevant professional issues every Thursday from 2-3pm ET. After a short presentation, the remainder of the hour belongs to you for live Q&A!



Cultivating Chemistry at the Crossroads of America



Central Regional Meeting of the ACS June 8th-10th 2011

University Place Conference Center and Hotel Indianapolis, Indiana

Celebrating the International Year of Chemistry with a comprehensive technical program, workshops and special events in a downtown area that offers big-city amenities in a convenient, easy-to-navigate packaged wrapped in a friendly, inviting atmosphere.



Contact: Dr. Jeannie Phillips, General Chair
jrphillips@dow.com
www.acs.org/crm2011

Save the Date and Spread the Word!

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



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