



The

Indiana Section of the American Chemical Society

Accelerator

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

Chair's Corner

Congratulations to everyone in the section...Why? Because the Indiana Section was nominated for 5 national ChemLuminary awards. The National ACS uses these ChemLuminary awards to recognize local sections for innovative programs and excellence in reaching out to the public. Our proudest achievement is nomination for outstanding section. This is the third year in a row we have been nominated for this award (We won it last year!) This nomination shows that our section has put together a great programming package. Furthermore, our 3 National Chemistry Week category nominations show how well we are achieving our number one goal, outreach to the public and making them aware of how chemistry impacts their daily lives. Last, but not least, our Young Chemist Committee nomination shows our emphasis on building up the young chemists who will be our future. Congrats again to all that were directly involved in these nominations. Look for the next issue of the Accelerator, where I hopefully show off all the hardware the section brought back!!

Brian Mathes, Chair

Section Notes

Baseball Recap – July Meeting

On July 20th, the Indiana Section descended on Victory Field to take in a 5 to 4 Indian's Victory over the Norfolk Tides. Twenty-seven Indiana Section members were in attendance and participated in this year's Baseball/Chemistry Trivia event. This year, members had to match initials of Hall of Famers with their corresponding elements...like Babe Ruth and Bromine. Thanks to all who came out and visited with your fellow chemists. Hope to see you all out there at next year's event.

ChemLuminary Awards

The Indiana Section was nominated for an astounding 5 ChemLuminaries. The first of which is a gauge of our entire program. The middle three are nominations based on National Chemistry Week (NCW) activities.

The final entry rewards our commitment to our Younger Chemists. Congratulations to all!

The categories are

- Committee on Local Section Activities — Outstanding Performance by Local Section, Medium / Large Size Category Award
- Committee on Community Activities — Most Original Hands-on Activity or Chemical Demonstration
- Committee on Community Activities — Outstanding Community Involvement in NCW
- Committee on Community Activities — Outstanding Event for the Public Using the Yearly Theme
- Younger Chemists Committee — Most Creative Local Section Younger Chemists Committee Event Award

The Section is currently preparing a poster for presentation at the ChemLuminary awards night on Tuesday September 12th at 8PM at the San Francisco ACS meeting. The location is the San Francisco Marriott Salon 9. If you are out in San Francisco, please come out and support the Section.

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

2006 Indy Project SEED Summer Students

The Indy Project SEED Committee, chaired by Dr. Charsetta Grant, has just completed another successful summer program for some local economically-disadvantaged high school students who are interested in the sciences. We hosted ten young scientists who spent eight weeks working on research projects in the labs of volunteer scientists at the I. U. Medical School and Eli Lilly & Co. Our summer coordinator, Mr. Elmer Sanders, a chemistry teacher now at Southport H. S., supervised the students and arranged a number of enrichment activities which included a talk with Dr. Bob Bowen, CEO of Bowen Engineering Corp. In addition, participants presented a summary of their research efforts at a Poster Session held on Thursday, August 3rd, at the Van Nuys Medical Science Building on the I. U. Medical School campus. During the Awards Ceremony, we heard encouraging words from Prof. Carl Cowen of the Math Department in the School of Science at IUPUI. The SEED Committee wishes to thank all our supporters including, most importantly, you, our local ACS section membership. For more information, please visit our website at www.indyprojectseed.com.



Project SEED students, from left to right: M. Flood, M. Adair, A. Skandarajah, A. Su, C. Audu, L. Salinas, T. Weaver, A. Osborn, A. Wilson, Elmer Saners, Bob Bowen. Missing is K. Bum-Erdene.

Participants

Mentor

Research Project

Marcus Adair , <i>Arsenal Technical H.S.</i>	Dr. Vincent H. Gattone, <i>IUIU School of Medicine</i>	Development of Rod Outer Segment of the Eye in Rodent Meckel Gruber Syndrome
Cornelius Audu , <i>Warren Central H.S.</i>	Mr. Leonard Winneroski, <i>Eli Lilly & Company</i>	Medicinal Chemistry: Tools of the Trade
Khuchtumur Bum-Erdene , <i>Southport H.S.</i>	Dr. Hiremagalur Jayaram, <i>IU School of Medicine & V.A. Medical Center</i>	Can we target therapy specifically to cancer cells?
Maire Flood , <i>Arsenal Tech H.S.</i>	Dr. Chinghai Kao, <i>IU School of Medicine</i>	Light and prostate cancer
Alyssa Osborn , <i>Emmerich Manual H.S.</i>	Dr. Stephen A. Kempson, <i>IU School of Medicine</i>	Immunodetection of nitric oxide synthase in mammalian kidney
Leonardo Salinas , <i>George Washington C.H.S</i>	Dr. James Mcateer & Dr. James Williams <i>IU School of Medicine</i>	Lithotripsy: Using Shock Waves to Break Kidney Stones
Ahalya Skandarajah , <i>Pike H.S.</i>	Dr. Lynn Willis & Dr. Rajash K. Handa <i>IU School of Medicine</i>	Kidneys, Kidney Stones and Shock Wave Lithotripsy
Angela Su , <i>Pike H.S.</i>	Dr. Alex Robling, <i>IU School of Medicine</i>	Regulation of Bone Mass by Leptin
Tiffany Weaver , <i>George Washington C.H.S.</i>	Dr. Sherry Queener, <i>IU School of Medicine</i>	Discovering Drug Targets in Pneumocystis
Ashia Wilson , <i>Arsenal Tech H.S.</i>	Dr. Subah Packer, <i>IU School of Medicine</i>	Detrusor Muscle Contractility and Compliance in Diabetic Bladder Dysfunction

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

Upcoming Events

Career Night

The Indiana Section of the American Chemical Society announces its fourth Annual Chemistry Career Night. This event will be held from 5:45 to 8:30 PM on **Tuesday September 26, 2006** at University of Indianapolis Schwitzer Center (directions and map of campus are available at www.uindy.edu).

The keynote speaker will be Dr. Jay Siegel, Professor and Director of Forensic Investigative Science at IUPUI. The title of his talk is "A Career as a Forensic Chemist: CSI-Not".

Students, teachers, parents, and anyone interested in a career in forensic science are welcome to attend. Dinner will be served, and admission is free. A question and answer discussion session with forensic experts will follow Dr. Siegel's presentation.

RSVP to Kathy Stickney (kstickney@uindy.edu or 317-788-3552) by September 21.

October Poster Session

The 7th annual Poster Session of the Indiana Local Section of the American Chemical Society will be hosted by Earlham College in Richmond on **Tuesday, October 10th** (see event announcement). **Registration and abstract submission deadline is September 20th.**

The keynote address this year will be given by Dr. Vahid Majidi, assistant director of the FBI. Prior to his current assignment, Majidi served as the Chemistry Division Leader at the Los Alamos National Laboratory. He has also served as Chief Science Advisor to the Department of Justice where he was responsible for coordinating science and technology policy among the Department's component agencies and with state and local law enforcement entities. Majidi served as the lead Department representative for biosecurity, pathogen forensics, select agents, DNA technologies and biometrics. In this capacity, he interacted with the policy coordinating committees for the Homeland Security Council,



7th Annual Indiana Local Section of the American Chemical Society Poster Session

Poster Presentations from Area Colleges, Universities and Industries

Special After Dinner Presentation

Vahid Majidi

Assistant Director of the FBI and former Leader of the Los Alamos National Laboratory's Chemistry Division

Forensic Evaluation of Radiological Materials

October 10, 2006

Earlham College

Richmond, IN

4:30 PM – 8:30 PM

Dinner is free for presenters and for all students registered for the poster session, \$10 for all others

For free registration, abstract submission, and/or dinner reservations, visit

<http://www.earlham.edu/~chem/YCC06.htm>

Abstract Deadline: 9/20

Registration Deadline: 9/20

**For Registration Questions,
call Terry Shipley at 765 983-1309**

National Security Council and White House Office of Science and Technology. He also served as a Department liaison to the scientific community. In addition to a long history of service to the society of Applied Spectroscopy, he has served on a number of editorial boards and is currently on the Board of Directors of the International Forensic Research Institute.

ACS High School Chemistry Scholarship Examination

Mark your calendars for **April 14, 2007**, the tentative date for the 2007 examination! A new year is starting for students, but it is not too early to schedule and make preparations. A link to previous exams is at the IUPUI Chemistry website: www.chem.iupui.edu.



Build It! Dig It!

The Chemistry of the Inside and Outside of Your Home



National Chemistry Week, October 29 – November 4

The 2006 Indiana Section National Chemistry Week celebration will take place on Saturday, November 4, from 10 am – 3 pm. This year's theme celebrates the chemistry that makes up your home and garden. Once again, the event will be held throughout the Children's Museum of Indianapolis (www.childrensmuseum.org). Last year's event is a finalist in three categories (the most that an NCW event can be a finalist for) at the Chemiluminary Awards at the Fall ACS National Meeting. We hope that you can join us so we can continue building on such a successful event!

Over 3500 museum visitors are expected on Saturday, which provides the Local Section, as well as the participating universities, companies, professional organizations, high schools, and Student Affiliate chapters, with excellent exposure to the general public. Last year, over 220 volunteers helped make NCW successful.

Plan to bring your family and friends to the fun-filled event, which will include chemical demonstration shows and hands-on activities provided by our exhibitors. (Last year we had over 40 different hands-on activities to try.) Please let others know about this exciting event. All of the activities for National Chemistry Week on Saturday are FREE with museum admission.

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.

Our event is still in the planning stages, so watch the Local Section website (<http://membership.acs.org/i/indiana/>), as well as a blog specific to National Chemistry Week (www.IndyNCW.blogspot.com), for updated information about our plans and activities!

Here are some of the activities planned for the Saturday Event:

- **Lots and Lots of Activities about your Home with their Connections to Chemistry**

- **14th Annual High School Chemistry Competition**

Area high schools, including defending champion Zionsville High School, will vie for the winning trophy. Student teams develop a series of simple activities around a common chemical principle and perform the activities for museum visitors. The teams are judged on scientific accuracy, safety procedures, and creativity. Located on the mezzanine above the museum entrance.

An awards ceremony for the competition will be held in the Lilly Theatre immediately after the conclusion of the contest at about 4 pm. Help cheer on the high schools and show your support of their hard work by attending!

- **Chemistry is a Blast! Shows in the Lilly Theatre**

A rotating mix of demonstrations by chemists from Eli Lilly and Company intrigue the audience while emphasizing chemical principles and safety. Shows on the hour.

- **Chemistry Activities throughout the Museum**

Local companies, universities, and professional organizations provide interactive experiments and demonstrations related to Build It and Dig It! on tables located around the ramp system throughout the museum.

- **Kids and Chemistry Hands-on Experiments in the Dow Biotechnology Lab**

Chemists conduct hands-on experiments with elementary-age children and their parents.

- **Largest Outdoor Periodic Table in Indiana**

You will be welcomed to the museum by a huge rendition of the Periodic Table of the Elements in chalk on the sidewalk of the museum entrance. Brought to you by the Butler Student Affiliates Chapter of the American Chemical Society.

Need more information? Contact Julie O'Brien at jtobrien@iquest.net (preferred) or 317-276-4356.

Please Volunteer for Our Award-Winning NCW Event!

We have many opportunities for our 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 November 4 will receive free museum admission the day of the event as well as a NCW t-shirt.** Here are some ways you can help:

Before National Chemistry Week:

- Donate or let us borrow safety supplies and house building materials for NCW activities and demonstrations.
- Get your company involved with NCW!!! Opportunities are still available for booth space and sponsorships. We need more of our area chemistry-related companies as participants.
- Are you a member of a professional construction organization or hobbyist craftsman? Or, do you teach others about safety as part of your profession? Are you, or do you know, any master gardeners? We're looking for people with skills in home building, construction, woodworking, and gardening to talk to museum guests during our NCW event.
- Pick up NCW shirts from printer on Indy's eastside (near 465 & 70 East) on November 2 or 3, and deliver them to the Children's Museum early (8 am) on November 4.
- Volunteer to be a media contact for television spot requests.
- Volunteer needed to coordinate schedule of volunteers for November 4.
- Make posters about house construction, home safety, or gardening to put up around the museum.
- Put up NCW posters at your workplace.

Volunteers needed on November 4 for the following:

- Do you have fun activities about gardening, safety, or construction that you'd like to provide or teach others about? Or, do you have special skills that you could contribute? Two volunteers needed for check-in area from 8 am – 10:30 am.
- Volunteers needed to help unload boxes at the Children's Museum 8 am – 9:30 am.
- Volunteers needed to staff NCW table. You can pick a time between 10 am and 3:30 pm.
- Volunteers needed to set up and take down hands-on displays, and general NCW activities. 8:30 am - 10 am and 3 - 4 pm.
- Volunteers needed to staff experiment tables related to this year's theme. You pick a time between 10 am and 3 pm.
- Volunteers needed to staff other hands-on activities throughout the museum. You pick a time between 10 am and 3 pm.
- Volunteer needed to check safety of NCW exhibitors to ensure that they are following the museum safety rules from 9:30 am – 10:30 am.
- Volunteers needed to help exhibitors with issues that come up during set-up from 8:30 am – 10 am.
- Judges needed for high school contest between 10am - noon.

After National Chemistry Week:

- Be involved with the NCW subcommittee in 2007!

Want to help? Contact Julie O'Brien at jtobrien@iquest.net or by phone at 317-276-4356.

Traveling Kits from Kids and Chemistry Now Available!

Kids and Chemistry is an outreach program designed to build chemistry awareness. One such initiative is the traveling kit. These kits provide a hands-on way to make science fun for children. Each kit is equipped with instructions and all materials necessary for students to complete the experiment.

There are two kits available, *Jiggle Jelly* (appropriate for grades 2-4) and *Chemical Changes* (appropriate for grades 4-6). Each kit allows for the students to actively conduct the experiment, observe changes, and record their findings. These experiments are then related to daily life, demonstrating how chemistry affects all of us.

Kits are available to any ACS member who would like to organize a class with a school or youth program (Scout Troops, Big Brothers/Big Sisters, etc). If you would like more information or would like to make arrangements to get a traveling kit, please contact Jaclyn Barrett at barrettja@lilly.com.

DON'T MISS THESE EVENTS!

Career Night – Tuesday, September 26th at 5:45 pm at the University of Indianapolis Schwitzer Center. Dr. Jay Siegel, Professor and Director of Forensic Investigative Science at IUPUI, will speak on “A Career as a Forensic Chemist: CSI-Not”. RSVP to Kathy Stickney (kstickney@uindy.edu or 317-788-3552) by September 21.

October Poster Session- Tuesday, October 10th at Earlham College. Poster presentations from local colleges, universities and industry. Keynote address by Dr. Vahid Majidi, assistant director of the FBI. Registration and abstract submission deadline is September 20th.

National Chemistry Week Event- Saturday, November 4th at the Children’s Museum of Indianapolis. Bring the family to celebrate the chemistry that makes up your home and garden. Numerous activities are planned including the 14th annual high school chemistry competition.

• TEN EASY WAYS TO CELEBRATE NATIONAL CHEMISTRY WEEK •

1. During the week of October 29-November 4, answer your telephone announcing, “It’s National Chemistry Week.”
2. Telephone your favorite radio station and ask them to air a request to listeners to celebrate National Chemistry Week.
3. Wear your favorite National Chemistry Week T-shirt and ask others to wear theirs.
4. Display NCW brochures or other chemistry-related materials at your local libraries, museums, and other organizations.
5. Visit a local elementary school classroom and provide them with “Great Chemistry is Everywhere” stickers.
6. Take your family to a local science museum and point out the chemistry that is involved in creating the displays.
7. Do a hands-on activity or chemical demonstration with your family. Check the website <http://chemistry.org/ncw> for some simple examples.
8. Give a presentation to a local club, school, or other organization and explain how chemistry relates to your career.
9. Sponsor a chemistry-related contest for your students and/or community.
10. Have a “National Chemistry Week” party.

OPEN THE NEWSLETTER FOR MORE DETAILS!

The *Accelerator* Newsletter

American Chemical Society

Indiana Section

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