The

Chemical

Accelerator

INDIANA SECTION OF THE AMERICAN CHEMICAL SOCIETY



AMERICAN CHEMICAL SOCIETY

June 2017

2017 Chair's Corner by Tom Xiao

Dear Indiana Local Section,

As our second quarter is winding down, we are heading into the summer with a full list of exciting events and accomplishments that we can be very proud of. Our Science Day at Ball State on April 8th kicked off the quarter with a huge success, with over 70 volunteers hosting approximately 300 visitors with 48 activity booths. The "Think Like a Molecule" poster session on April 20th brought our second quarter to a new level of success with 43 posters, 17 judges and more than 100 attendees from college students all over Indiana and selected high school students from our SEED project.

Earth Day and March for Science on April 22nd gave our local section nice exposure to the public, representing ACS and the science sector at this huge event. Our 2023 National ACS Meeting strategic planning session at University of Indianapolis on April 24th reached the next level of enthusiasm among committee members, as many bold and exciting ideas were collected and are now being evaluated for feasibility of implementation.

The annual Award Night on May 9th at University of Indianapolis was truly the highlight of our local section this quarter, hailing over 100 awardees, distinguished ACS members and speakers. One of the distinguishable achievements was the qualification of 5 USNCO students from our local section to enter the high honors national camp with 20 qualifiers in total from USA. This is the highest number of reps who have ever reached this level from our local section. Congratulations to the many awardees, volunteers and outstanding members who have contributed to this dynamic and vibrant local section.

Huge congratulations to our past chair, Linda Osborn, and many of our event chairs for their outstanding leadership and contributions to our local section last year, which resulted in 10 National ACS ChemLuminary Award finalists from our local section. This has set the record for the most number of nominations in our local section history.

Looking forward, there will be our annual signature SEED project poster presentation on July 20th, and our annual baseball night on July 24th. With the 252nd National ACS Meeting & Expo in DC in August and upcoming CSI and NCW prep work and volunteering recruitment in the months ahead, we are looking forward to a busy and eventful local section next quarter.

I hope everyone has an enjoyable and relaxing summer!

The Executive Committee meets the second Tuesday of each month at 6:00 pm in the Kurek building at the Heritage facility located at 7901 West Morris Street. All Local Section members are encouraged to come and join. Meetings last~2 hours. Dinner is provided before the meeting. Please let us know if you plan to attend. You can contact our 2017 Chair, Tom Xiao, at xiao_tom@lilly.com. This is a great networking opportunity for those of you who are looking to get more involved!

2017 Executive Committee	
Chair	Tom Xiao
Chair-Elect	Lisa Bucholtz
Secretary	Tamiko Porter
Councilors	Robert Pribush, Brian Mathes, Robert Sammelson, Beth
	Lorsbach
Alternate Councilors	Amy DeBaillie, Sibel Selcuk, Tony Trullinger, Erin Dotlich
Past Chair	Linda Osborn
Treasurer	Paul Morgan
Member-at-Large	Maria Alvin-Gaston, Mark Pobanz, Anne Wilson
2023 NMLT Strategic Planning	Frederique Deiss
Art and Chemistry	Gregory Dale Smith
Awards	Katherine Stickney
Celebrate Science	Julie Holland
Chemists Celebrate Earth Day	Paul Ridenour
Education and Olympiad	Bob Pribush
Election	Mathew Gardlik
Grants	Ann Cutler
K12 Outreach	Erica Posthuma Adams
Kids in Chemistry	Brian Mathes
Membership Affairs Committee	Rebekah Dickenson, Jordan Knotts
National Chemistry Week	Belgin Canturk, Gregory Smith
Newsletter Design	Julie Holland, Andrea Moberly
Newsletter Editor	Julie Holland
Project Seed	Elmer Sanders
Project Seed Co-Chair	Josh Taylor
Public Relations	Kerrm Yau
Science Day	Ryan Jeske
Social Media	Erica Posthuma Adams
Trustees	David Mitchell, Dawn Brooks, Ann Hunt
Webmaster	Matt Gardlik
Women Chemists	Amy DeBaillie
Youth Committee Chair	Tejas Shah
XA7	ng for a Wahmagtor for the Everytive Committee

We are currently still looking for a Webmaster for the Executive Committee. Please contact Tom Xaio at xaio-tom@lilly.com if you are interested!

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Happy Fourth of July!

Please make sure to keep your pets safely away from all fireworks. You do not want your Fido or Fifi to do any of these! https://www.youtube.com/watch?v=sMQh4hjmIFQ.



Call for Volunteers for Celebrate Science Indiana and National Chemistry Week by Julie Holland

Are you interested in sparking the curiosity of kids in chemistry or other sciences? If so, we have two upcoming opportunities to talk to kids about STEM while assisting with hands-on activities and demonstrations.

The Local Section ACS will be hosting two booths at Celebrate Science Indiana (CSI) on Saturday, October 7th at the Indiana State Fairgrounds from 9 a.m. to 5 p.m. Volunteers are asked to work either 2 or 4 hours shifts during the 8-hour day. If you are interested, please contact Julie Holland at Julie.Holland@hrglab.com.

The Local Section ACS is also sponsoring a booth at Indianapolis Children's Museum for the annual National Chemistry Day (NCD) which is part of National Chemistry Week. This event is held on Saturday, November 4th from 10 a.m. to 3 p.m. If you would like to volunteer, please contact Linda Osborn at Linda.Osborn@hrglab.com.

We hope to see you there as either a volunteer or a participant. CSI is free with the purchase of parking at the fairgrounds. NCD is free with the cost of museum admission. Both events are opportunities for some family fun!

The Indiana Section of the ACS presents...

Indians Baseball Night Part XVI



Indians play Rochester RedWings

July 24nd 7 PM Game Time!!!! Victory Field \$10

Chemistry/Baseball Trivia Giveaways!!!

Please RSVP to Brian Mathes at mathes@lilly.com Or 277-7720 by July 17th

Chemistry Rocks! (Illustrated Poem - National Chemistry Week 2017)

By Linda V. Osborn

National Chemistry Week 2017 will cover topics related to the chemistry of rocks! The Indiana Section of the ACS is once again sponsoring an illustrated poem contest for students in Kindergarten - 12th grade. If you know of any students that would like to participate, the details follow.

The contest entry deadline is **September 20, 2017**. Our prizes include 1st Place = \$100, 2nd Place = \$50, and 3rd Place = \$25 for each age group category ($K-2^{nd}$, $3^{rd} - 5^{th}$, $6^{th} - 8^{th}$, $9^{th} - 12^{th}$). All contestants get to display their Illustrated Poems at Celebrate Science Indiana on October 7th and November 4th at the Children's Museum of Indianapolis with the winners announced at these events. One of the winning illustrations may also be used for the NCW t-shirt design.

Have your child or student write and illustrate a poem using the NCW theme, "Chemistry Rocks". The poem must be no longer than 40 words, and in the following styles to be considered - Haiku, Limerick, Ode, ABC poem, Free Verse, End Rhyme, Blank Verse. Entries are judged based on relevance to and incorporation of the theme, word choice and imagery, colorful artwork, adherence to poem style, originality and creativity, and overall presentation. Members of our executive committee that do not have a relative in the contest serve as judges.

Contest Rules:

- Poems must conform to a particular style. No poem may be longer than 40 words.
- The topic of the poem and the illustration must be related to the NCW 2017 theme, "Chemistry Rocks".
- All entries must be original works without aid from others.
- Each poem must be submitted and illustrated on an unlined sheet of paper (of any type) not larger than 11" x 14" (8.5 x 11 preferred). The illustration must be created by hand using crayons, watercolors, other types of paint colored pencils or markers. The text of the poem should be easy to read and may be printed with a computer, before the hand-drawn illustration is added, or the poem may be written on lined paper which is cut out and pasted onto the unlined paper with the illustration.
- Only one entry per student will be accepted.
- All entries must include an entry form.
- All illustrated poems and/or digital representations of the poems become the property of the American Chemical Society.
- Acceptance of prizes constitutes consent to use winners' names, likenesses and entries for editorial, advertising and publicity purposes.



Winners of the Indiana illustrated poem contest will advance to the ACS National Illustrated Poem Contest! Click here to see the National winners from 2016!

https://www.acs.org/content/acs/en/education/outreach/ncw/ncw-illustrated-poem-contest/2016-winners.html? ga=1.206325459.1322509793.1459802862

Please contact: Linda Osborn <u>linda.osborn@hrglab.com</u> (317-390-3188) with questions. Send official entries to Linda Osborn at 7901 W. Morris St. Indianapolis, IN 46231 so that it is received on or before September 20th.

Paying It Forward

By: *Marcia L. Gillette*, Retired Senior Lecturer in Chemistry, now adjunct lecturer in chemistry, Indiana University Kokomo

I doubt that there are many of us whose curiosity about science, and particularly about chemistry, wasn't sparked through interactions with a parent, teacher, or other adult when we were young. Were it not for those individuals, along



with the activities they provided, our interests and career paths might have taken a very different turn. While the act of thanking them is certainly important, it often falls short of acknowledging the enormous impact those role models had on our professional lives.

While I did have the opportunity to thank the high school teacher who started me on the path I've followed for more than forty years, there are others who most certainly also deserved my recognition but never received it. One of them was Anna Harrison, the first female ACS President and my college freshman chemistry teacher. Fortunately, some years ago the very organization over which she once presided instituted the Science Coach program:

https://www.acs.org/content/acs/en/education/outreach/science-coaches.html?cid=home_4up

With the cooperation of the AACT (https://teachchemistry.org/), the Science Coach program provides all of us with the opportunity to give back, whether as a personal goal or as a way of paying forward a debt we owe to someone(s) in our past.

For almost five years, I have been working as a science coach with Jan Koloszar, a sixth-grade master teacher at Northwestern Elementary School in Howard County, to help her enrich her science curriculum. Public school teachers have their plates filled to overflowing with standards, testing requirements, and expectations they must meet, so having the support of a science coach can be invaluable. Some examples of activities I've done with Jan:

- The sixth graders at Northwestern all know that they will be required to complete a science project for presentation at the school science fair and, possibly, at the county, regional, and state science fairs as well. Helping with those projects is always a rewarding experience for me, particularly because it was the science fair experiences I had while in high school (yes, there were science fairs back in the '50s) that helped me begin my journey in science.
- Jan's students do a great many hands-on activities and experiments. I've been able to help with some, add to the explanations of others, and facilitate some new ones for her.
- Jan's students work in groups to develop short demonstrations which they narrate and are filmed on their iPads for a feature that is broadcast weekly throughout the school called "Science in Sixty" (as in 60 seconds), and I often help with that.
- I've helped Jan's students develop hands-on experiments that they carry out with a class of second graders whose regular curriculum does not include those sorts of activities. These experiments address some of the second-grade science standards, and the sixth graders must understand the foundations of them well enough to explain the principles, just as mentors would

explain principles to their mentees. It's always interesting to hear the sixth graders' comments after these mentoring sessions, comments which often reflect surprise that the second graders 'knew more than we thought they would' or that it was 'hard to answer all of their questions and/or to keep their attention'. What a great learning experience for both groups of students.

• I've worked with small groups of sixth graders as they prepare to participate in various competitions, including the You Be the Chemist Challenge sponsored by the Chemical Education Foundation.

And to top it all, Jan receives \$500 for her classroom each year we partner in the Science Coach program which she can use at her discretion. Besides purchasing supplies, she has spent some of the money to take the class on field trips, and those are wonderful experiences for the students as well.

Many science coaches work with high school chemistry teachers by supporting their teaching, mentoring students doing research projects, and facilitating field trips and/or interviews with chemists who work in various settings. It would be rare for a middle school or high school student to recognize the almost limitless range of applications chemistry can have. Neither do they realize that laboratory work can be done not just in corporate or university laboratories but also in places as diverse as archeological digs, in museums, in mines, in mobile units traveling to environmentally challenged sites, in outfitted planes collecting air sample, or in research vessels on the lakes and oceans to name only a few. Young people love computers. Consider, too, that much of the development of chemistry is computational, where the 'laboratory' setting involves primarily computers. And now more than ever, it is imperative that chemists be able to communicate the importance of their results and conclusions to the general population, a skill that combines chemistry background with written, oral, and other communication skills. We all know that science should be apolitical. "It is what it is", as the saying goes, which is something we all need to do a better job helping the public to understand and appreciate. With all of these opportunities it's hard to imagine any student who couldn't fit his/her interests into an application of chemistry. Convincing students of this would be a perfect challenge for a science coach. It doesn't matter who you partner with because you can be enormously helpful in just about any K-12 setting. The important thing is that you serve as a role model for younger students and share your enthusiasm, experiences, and knowledge with them, just as someone did for you in the days and years past. The students are likely to have all sorts of questions about jobs, opportunities, and yes, even salaries. Help them to realize the critical role chemists (you!) play, the rewards you reap for your efforts, and your love for the field in general. PLEASE consider participating in the ACS Science Coach program. I have no doubt that the experience will be as rewarding for you as it has been for me. And yes, Jan and I have applied to continue our partnership thorough the 2017-2018 school year! Please keep your fingers crossed for us.

YBTC/Silver Circle Program Wrap-Up

by Linda Osborn

It's a wrap! Our \$400 grant report was submitted on May 31st. The ACS event uniting members with the YBTC Challenge is over for 2017. We had 13 ACS members involved, at least 590 students, and 8 teachers. On May 16, we joined Cheryl Ruetz and 140 of her 6th



graders at Creekside Middle School. During a chemistry demonstration, we had two teacher-nominated students teach us "Silver Circle" members how to video-tape the program! Marissa Fehsenfeld volunteered to oversee this portion of the demonstration while we were entertaining the crowd. There were approximately 7 segments that were combined and edited by Rebekah Dickerson and supplemented with information to create the following YouTube video:

https://youtu.be/3xot7zhq930

Funds were used to purchase materials for 16 *Chemistry-To-Go* Kits that will be distributed to teachers and the more active ACS members involved in this ACS program. Designed to encourage continued elementary outreach to spark interest in chemistry, supplies for eight different experiments with instructions are provided in the kit.

Thirty-seven students won the right to compete in the State Challenge competition, held April 29, 2017 at Pike High School based on the results of the local YBTC Challenges held in February and March in South Bend, Kokomo, Muncie, West Lafayette, Indianapolis North, Indianapolis South, Bloomington and Evansville.

The top four Indiana students in the 2017 You Be the Chemist Challenge were:

Placement	Name	Grade	School Teacher	
Champion	Ameya Belamkar	8th	Creekside Middle School, Carmel IN	Cheryl Ruetz
2nd Place	Vanessa Xiao	7th	Park Tudor School, Indianapolis IN	Cammy Dubie
3rd Place	Jacob Christensen	8th	Zionsville Middle School, Zionsville IN	Derek Grimm
4th Place	Jonah Christensen	8th	Zionsville Middle School, Zionsville IN	Derek Grimm



Photo by Larry Sernyk

ACS members that enjoyed working with the local area schools on this program in addition to the director Larry Sernyk included Kurt Graper, Christine Skaggs, Maria Alvim-Gaston, Patricia Maldonado, Tom Xiao, Lisa Smith, Joe Mick, Randy Pryor, Jessie Howard, Ben Woodworth, Andrea Moberly and Rebekah Dickerson. If you would like to volunteer next year, please contact Larry at issernyk@att.net.



Science Day at Ball State University

By Ryan Jeske

including:

Ball State Student Affiliates of the ACS held their annual Science Day on April 8, 2017. This year the event was located back in the Ball Gym with more space and easier access. Approximately 300 people attended this year. We had over 70 volunteers from 6 departments, including a teacher from Yorktown H.S. We had a 48 demonstrations and activities

Elephant's toothpaste
Genie in a bottle
Fake snow and super absorbent polymers
Edible polymers
Liquid nitrogen
CO₂ bubbles
Air cannons
Butterfly chromatography
Insects/entomology

Wildlife ecology
Flaming money
Electricity
The Physics of music
Physics demos on momentum and center of gravity
Weather forecasting and storm chasing







ACS Local Section "Think Like a Molecule" Poster Session

By Tamiko Porter

The 2nd annual "Think Like a Molecule" Poster session was held on the campus of IUPUI on Thursday, April 20. The event was a success thanks to all of our volunteers, judges and planning committee members. We'd especially like to acknowledge Meghan McLeod for organizing the judging session and John Goodpaster for stepping in as a replacement judge on short notice.



The evening started with an outstanding keynote from Dr. Bill Scott on

the "Distributed Drug Discovery (D3) Update: Educating Students in Drug Discovery Research Directed

toward Neglected Diseases." Following Dr. Scott, there were two judging sessions for the 43 posters.

There was an energizing buzz in the air as the 17 judges walked around to hear the presentations from our participants. It was a wonderful evening of sharing science and forming new connections.

We wrapped up the evening with an awards ceremony, presided by Dr.

Partha Basu, chair of the IUPUI Department of Chemistry & Chemical Biology. Each of the four award categories were presented by Dr. Tom Xiao (ACS Chair Award), Dean Simon Rhodes (Dean's Award), Joe

Kurek (Kurek Award) and Elmer Sanders (the Project SEED award). The complete list of winners is provided below.

Congratulations to all!

Project Seed Award

 First Place: Clara Reasoner Poster #20 Project SEED HS Student

ACS Chair Award

- First Place: Sara Dille Poster #32 IUPUI
- Second Place: **Andrew Asberry** Poster #8 Dow AgroSciences
- Third Place: Jake Kinnum Poster #2 IUPUI
- Honorable Mention: Henok Baye Habtamu Poster #17 IUPUI

Dean's Award

- First Place: Alicen Teitgen Poster #41 IUPUI
- Second Place: Geno Samaritoni Poster #9 IUPUI





- Third Place: Clement Opuku-Temeng Poster #36 Purdue University
- Honorable Mention: Alex Latta Poster #3 IUPUI

Kurek Award

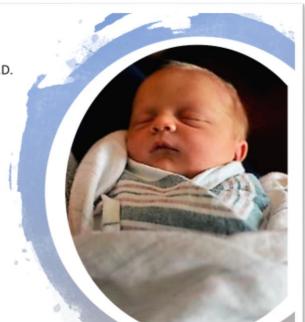
- First Place: Priya Dave & Juan Sanchez Poster #10 IUPUI
- Second Place: Jake Hitchens Poster #12 IUPUI
- Third Place: Emma Brown Poster #22 IUPUI
- Honorable Mention: Jonathan Gutierrez Poster #31 IUPUI



Congratulations to Amy C. DeBaillie, Ph.D. Manager – Product Delivery PM Eli Lilly and Company

Born on March 24, 2017 at 8:50 am 20 % inches tall 8lbs 7 ounces

Griffin Miles Merritt



Lori White wins ACS Award for Gladysmae Good – Chemistry Teacher of the Year By Linda Osborn

For her commitment to excellence in chemistry, by challenging and inspiring students, engaging in the K-12 chemistry education community, and through demonstrated leadership in helping seniors prepare for their future, **Lori White** has been named the winner of the 2017 Award for Gladysmae Good – Chemistry Teacher of the Year. Created in 2015, the award recognizes individuals within the Indiana local section who have contributed significantly to K-12 chemistry education. This award was presented by Erica Posthuma-Adams, who nominated Lori, at our Awards Banquet at the University of Indianapolis on May

9th with a surprise guest attending to assist with her recognition – the principal of The Cascade High School, Jon Acton.

"Thank you for letting me know. Lori would never share this information with any of us. She is as humble as she is talented."

Lori says she was very appreciative of this honor when she learned she had been selected for the award. She has taught chemistry at Cascade High School for fifteen years. Erica has seen her teach:

"She's innovative and her students are engaged and highachievers despite being in a small rural and not very affluent area."



In 1985, Lori received a BA in Chemistry Education from Olivet Nazarene University in Bourbonnais, IL. In 2006, she earned her Master's Degree in Education at the same University. Then in 2016, from the University of Indianapolis, through a Woodrow Wilson Fellowship for Educational Leadership, Lori received her MBAE.

Lori has volunteered at Celebrate Science Indiana and participated in the Teacher Appreciation/AACT ACS Local Section event. She is hard-working and extremely dedicated to her profession. A member of AACT, she stays current in her field and is active in HASTI and other teacher organizations.

Shouts outs found on the internet about Lori include the following:

"Lori does so much for all of the teachers, administrators, and especially her students. She gives of her time freely and without complaint. She is truly inspirational to all of us!"

"Lori is not only a teacher but is a teaching and learning coach in our building. Lori assists all teachers, but especially new teachers, in best practices. She is role model herself and teachers gravitate to her. Lori is a wonderful teacher herself. Her lessons are engaging, meaningful and well thought out. I would have been proud and privileged to have had any of my children in Lori White's classroom. She is the example of what great teaching looks like."

Cascade High School recently opened the Jon Mitchell Senior Academy, a section of the school focused on helping seniors prepare for their future. The goal is to help seniors transition from high school to life after high school, and provide 100 percent placement in college/advanced degree work, career sequencing, and military or civic service.

Mitchell was a cross country and track coach who was known for always encouraging his athletes. He died unexpectedly in 1992. Principal Jon Acton said they started the process last year after learning more about the opportunities offered by Brownsburg, Avon and some of the other bigger schools.

The Academy is run by four core teachers in a college union style atmosphere. Lori White is a Senior Academy teacher. She was one of the core teachers who went to visit the other schools and liked the concept.

"We knew that the way they were doing it wasn't for us, but we liked the concept of us helping the students," she said. "We want them to feel ownership like it was their lounge — that they respect it, feel pride and ownership in it. Our theme is success. We wanted to provide a venue for our kids to be successful as they transition."

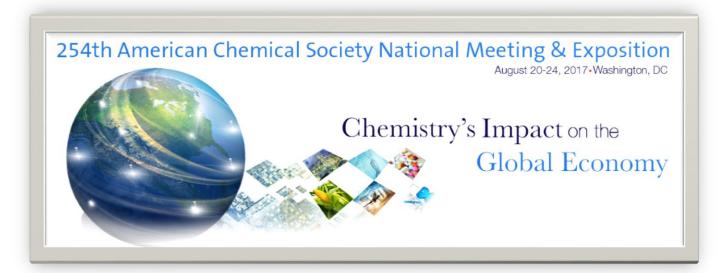
White has worked at the school for 15 years and never met Jon Mitchell, but said he has affected her positively.

"My desire is when my time here is over, I made a positive impact to everyone that crossed my path; that's what he did and that will be for the students that come through the Academy; to leave their legacy," she said.

For all these reasons and more, it was exciting to recognize Lori White, accompanied by her son, with this award as a small token of our appreciation.

Photo by Steven Chase

Left to right: Lori White, Jon Acton, Erica Posthuma-Adams



Join the ACS in Washington DC for the 254th National Meeting!







Music and Chemistry in Perfect Harmony

By Linda Osborn

Sometime in early December 2017, the Local Section ACS is planning an event similar to the successful "Solving Art Mysteries through Chemistry at the IMA" event held last year; however, this year we are uniting forces with the music world!

Greg Smith is chairing a committee that is growing as interest is heightened by this magical combination.

ACS Members	Affiliation
Chair: Greg Smith	Indianapolis Museum of Art
Anne Wilson	Butler
Mark Pobanz	Dow AgroSciences
Taylor Kenyon	Eurofins Lancaster Laboratories
Rebekah Dickerson	Heritage Research Group
Tom Xiao	Eli Lilly
Linda Osborn	Heritage Research Group
Chris Bodurow	Eli Lilly
Matt Gardlik	Woodard, Emhardt, & Henry
Ann Cutler (IPG grant writer)	University of Indianapolis
Raymond Drost	Calumet
Collaborators	
James Larner	Marian
Sally Childs-Helton	Butler
Rusty Jones	Butler
Anthony Marinello	Illinois State University
Perry A Accetturo	Indianapolis Symphony Orchestra
Beth Perdue Outland	and the second second second
betti Ferdue Outland	Indianapolis Symphony Orchestra

As you can see from this list, we have many ACS members and collaborators that we are working with to plan this activity. Ann Cutler is spearheading the writing of an IPG grant due on June 30th. If you have any ideas for such a combination, please let us know (<u>linda.osborn@hrglab.com</u>). Stay tuned for more information as the program is developed!



In the meantime, here's a link with fun information on how music impacts our brains: https://www.fastcompany.com/3022942/the-surprising-science-behind-what-music-does-to-our-brains

Chemistry at the Indianapolis Museum of Art

By Julie Holland

This year, the IMA is hosting a series of exhibitions called CSI: Conservation Science Indiana, which focuses on how conservationists and scientists use chemistry and physics to better understand art.

What Lies Beneath, runs from now until August 6, 2017. In this exhibition, you'll learn how conservators look beneath the paint to reveal hidden secrets about a painting. http://www.imamuseum.org/exhibition/what-lies-beneath

Chemistry of Color, which runs until December 31, 2017, explores the relationship between the chemistry of natural and synthetic pigments and dyes which have been used in art over a period of 4,500 years. http://www.imamuseum.org/exhibition/chemistry-color

Exhibits are free with the admission to the museum.

The CSI series is sponsored by the National Endowment for the Arts



March for Science Indianapolis

By Julie Holland

Even though heavy rain was predicted, on April 22nd, an estimated 10,000 people gathered at the Indiana State House in order to support truth in science. The crowd was made up an age diverse group of scientists and teachers from all facets of STEM as



well as those in the community who support science in general.

Although the march was born out of frustrations the scientific community has felt in recent months over the current administration's dismissal of scientific evidence and the threats to withdraw federal funding, the speeches that were given steered clear of controversial political statements. Instead, the speeches focused on topics such as sustaining biodiversity in Indiana ecosystems, habitat loss of our pollinating and migrating species, water quality, climate protection, infrastructure, and food availability.

In addition to the speeches, the event sponsored several call to action initiatives including asking supporters to call local and state representatives, volunteer time to help STEM programs, donate materials and supplies to school STEM programs, get involved with your local community initiatives to help advocate for science, support the local museums, and many others.

The March was sponsored by many Indianapolis organizations including Earth Day Indiana, PropelUp, United State of Indiana, Indiana's American Federation of Teachers, LaunchFishers, Center for Inquiry Indiana, IndianaFIRST, Defenders of Wildlife, Central Indiana Science Outreach, Hoosier Environmental Council, Indiana Forest Alliance, denkbots, and Indiana Science Communication and Education





After the speeches and calls to action, the participants took to the street to march to the Earth Day festival at Military Park. While marching, I had the pleasure of reading many thoughtful signs including the following slogans: Make America Smart Again, There Is No Planet B, Science ≠ Alternative Facts, and Science Is Not a Liberal Conspiracy. Several college age girls walking next to me began march chants including, "What do we want? Facts! When do we want them? Now!" and "Hey Hey, Ho Ho, Alternative Facts Have Got to Go."

For video and a larger gallery of the event, you can go to: https://www.facebook.com/ScienceMarchIND/

Chemists Celebrate Earth Day

by Julie Holland

Just last year, the Local Section ACS began sponsoring a booth on Earth Day. This year, instead of sponsoring our own event, the Local Section joined the Indiana Earth Day festivities at Military Park on April 22nd. The theme for this year's event was "Celebrating Our Pollinators," so our booth handed out activity books on pollination which included information about flowers, insects, birds, and bats, pictures to color, word searches and mazes. In addition, we handed out ACS swag including patches, temporary tattoos, and pencils. For a demo, the Chair of the event, Paul Ridenour, did an acid/base color experiment using white flowers treated with phenolphthalein.

Due to the predicted storms and cool weather, attendance was not as high as was expected. If not for the March for Science ending at Military Park, attendance would have been even lower. However, it was a very fun and worthwhile event to sponsor. With the theme of Pollinators, there were quite a few local beekeepers who were passing out information on pollination and selling local honey and products made from honey and beeswax. There were representatives from many different Indiana organizations featuring information on Indiana parks, forests and wildlife, habitats, energy, air, wind, water, environment, climate, landscape, soil, gardening, native plants, food, health and many more (http://www.earthdayindiana.org/exhibitors/).

Based on the other booth participants, we should have either a storyboard or handout communicating who and what the ACS is, what programs we support, and how we contribute to the community.



2017 Indianapolis Project SEED Poster Session

Thursday, the 20th of July from 4:00-8:00 PM
4:00 Poster Session, Medical Sciences Atrium 6:00pm Awards Ceremony¹
Emerson Hall Auditorium²
Indiana University School of Medicine



¹The Van Nuys Medical Sciences Building is at 635 Barnhill Drive. Guest parking is available at Vermont Street garage, on Vermont between Barnhill Drive and University Boulevard. ²Emerson Hall is next to the MS building, same cul-de-sac, 545 Barnhill Drive www.iupui.edu/map. Additional Program Information is available at www.indyprojectseed.org

The Indianapolis Project SEED Interns request the pleasure of your company as they present their research findings at the 2017 Indiana High School Scientific Research Symposium together with over 100 high school students from multiple programs across Indiana, at the IU School of Medicine Atrium. More details are available at: www.IndyProjectSEED.org/july20.pdf.

Project SEED was established by the American Chemical Society in 1938 for economically disadvantaged high school students. High School juniors or seniors that meet the qualification are given a rare opportunity to work alongside scientist-mentors on research projects in industrial, academic, and government laboratories. The Indianapolis program was established at the Indiana University School of Medicine in 1973 and continues this day as one of the largest and longest running program in the nation.

Student stipends are provided by the ACS national endowment for Project SEED with local matching funds provided by the ACS Indiana Section membership, the IUPUI School of Science, the Indiana University School of Dentistry and private donors. Programming support for the students is provided by the Indiana CTSI through the Indiana CTSI Project STEM program and the IUPUI School of Education.

Please join us in celebration the interns' accomplishments with their families, mentors, school teachers and supporters from our local scientific community.

Project Seed Member Update: Malcom Wiseman by Julie Holland

In the April 2017 Accelerator, we featured a young Project Seed member, Malcom Wiseman, who interned at Eli Lilly during the summer of 2016. Although he had planned to return to the summer program at Lilly this year, Malcom was awarded a \$5000 scholarship through the ACS, admission to Prairie View A&M University (north of Houston, TX) and an opportunity to spend this summer taking college credit courses.

On behalf of the Local Section ACS and Project Seed, we would like to congratulate Mr. Wiseman for working so diligently to achieve the success he has achieved thus far in his academic career and we look forward to seeing what this young man will do in the future.

2017 ChemLuminary Nominations

by Linda Osborn

Finalists have been named for the 19th Annual ChemLuminary Awards, which recognize ACS members and groups for their extraordinary work promoting chemistry during 2016.

This year, five international chapters, five regional meetings, eight technical divisions, and 40 local sections were nominated by 18 committees for 44 different awards. Winners will be announced at the 254th ACS National Meeting & Exposition on Tuesday, August 22, 2017, 8:00 PM, at the JW Marriott in Washington, DC.



The ChemLuminary Awards Planning Committee informed us that the Indiana Local Section has been selected as a finalist for the following ChemLuminary Award(s):

Award Nomination	Activity	Chair
Best New Public Relations Program of a Local Section	The Chemistry of Cheese	Maria Alvim- Gaston
Best Overall Local Section Minority Affairs	Impress for Success: STEM College & University Students	Tamiko Porter
Fostering Interactions between Local Sections and Student Chapters	ACS 2016 Think Like a Molecule Poster Session	Tamiko Porter
Global Engagement Award for Local Sections	Ernest Eliel Workshop - US and Cuba collaboration	William Scott
Local Section Partnership Award	Celebrate Science Indiana 2016	Julie Holland
Most Creative NCW Celebration Using the Yearly Theme	Solving Art Mysteries through Chemistry	Greg Smith
Most Innovative Activity in a Local Section for Senior Chemists	Chemistry of Cheese Part II	Ann Cutler
Outstanding Community Involvement in CCED	Earth Day 2016 at Heritage	Linda Osborn
Outstanding Continuing Public Relations Program of a Local Section	Awards Night Banquet	Kathy Stickney
Outstanding Performance by a Local Section (Large Size)	All Activities!	All

U. S. National Chemistry Olympiad: Parts 2 and 3

by Julie Holland

Part 2 of the USNCO contains 8 written questions covering chemical theory and models while Part 3 consists of 2 problem solving laboratory practicals.

This year, two high school students made the US National top 50: Alan Jiang (Lawrence Central) and Parker Jou (Carmel).



Five students made the US National to 20 and were invited for the high honors study camp: Andrew Wu (Park Tudor), Allen Zhang (Carmel), Allen Zhao (Park Tudor), Branden Yap (Carmel), and Kevin Liu (Carmel).

Just this week, we learned that Branden Yap is going even further in the competition!

Congratulations to Branden Yap who is one of the 4 U.S. finalists to make it to the U.S. National Chemistry Olympiad Program which will participate in the 49th International Chemistry Olympiad in Nakhon Pathom, Thailand July 6-15, 2017!

2017 ACS Awards Banquet Recognizes Silver Circle Members, USCNO, and Gladysmae Goodyear Winners by Kathy Stickney

The University of Indianapolis hosted the 2017 Central Indiana ACS Awards Banquet on May 9, which commenced with a keynote address by Dr. Chitta Das of Purdue University. Dr. Das's engaging presentation outlined the role of deubiquitinase (DUB) enzymes in regulating ubiquitin signaling and described his research in evaluating their effect on Parkinson's disease.



Dr. Chitta Das, Associate Professor of Chemistry, Purdue University

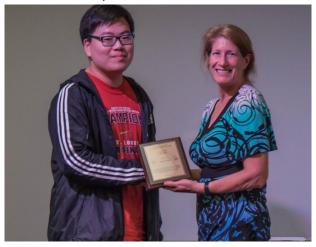
After dinner, the awards presentations recognized several groups of people from our central Indiana local ACS section, including our distinguished ACS 50-, 60-, and 70-year members, secondary students and their teachers who excelled in individual and school competitions, the recipient of our section's Gladysmae Good – Teacher of Chemistry Award, and those students who qualified for and competed at the national level in the U.S. National Chemistry Olympiad.

School and student winners of our National Chemistry Olympiad exam were recognized in a previous newsletter. However, by the time of the banquet we had received news that five of our section's winners received national Top 20 U.S. National Chemistry Olympiad honors! Congratulations and top accolades to: Kevin Liu of Carmel; Andrew Wu of Park Tudor; Brendan Yap of Carmel; Allen Zhang of Carmel; and Allen Zhao of Park Tudor. Thank you to Dr. Bob Pribush and Dr. Jianping Huang for your wonderful service in sponsoring this competition for the section and helping our section's students attain national recognition.

Other awards presented at the banquet included:

K-12 Student Volunteer of the Year - Victor Xiao

This award was presented to Victor for being an outstanding K-12 student volunteer at ACS Indiana Section events including National Chemistry Week at the Children's Museum of Indianapolis.



Victor Xiao (award presented by Kathy Stickney, University of Indianapolis)

<u>Hoosier Science and Engineering Fair (SEFI) – ACS Award Winners</u>

The following projects were chosen as best chemistry posters from the many projects competing in the state science fair. These outstanding students were recognized at the banquet:

1st Place: **Cheyenne Flood** - Grade 12, from Terre Haute, IN. Intermolecular Forces Affecting Solutions (Sponsor: Glen Cook).

2nd Place: **Amin Rimawi** - Grade 9, from Fishers, IN. Which Food Best Helps People with Iron Deficiency Anemia? (Sponsor: Mia Sankari).

3rd Place: **Jenny Wang** - Grade 12, from West Lafayette, IN. The Effect of Pollutant Bisphenol A on Cancer Cell Proliferation (Sponsor: Jane Schott).



SEFI awardee Amin Rimawi (award presented by Linda Osborn of Heritage Research Group)

ACS-IUPUI "Think Like a Molecule" Poster Session Award Winners

Recipients of awards at the section's April 2017 ACS-IUPUI poster session, organized by Tamiko Porter of IUPUI, were recognized at the banquet. Awards were presented in four different categories for the ACS-IUPUI poster session, and our winners were as follows:

ACS Project Seed Poster Presentation Award

First Place: Clara Reasoner - Project SEED High School Student

ACS Chair's Poster Presentation Award

First Place: Sara Dille - IUPUI

Second Place: Andrew Asberry - Dow AgroSciences

Third Place: Jake Kinnum - IUPUI

Honorable Mention: Henok Baye Habtamu - IUPUI

IUPUI Dean's Poster Presentation Award

First Place: Alicen Teitgen - IUPUI

Second Place: Geno Samaritoni - IUPUI

Third Place: Clement Opoku-Temeng - Purdue University

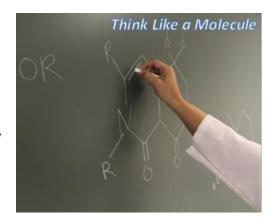
Honorable Mention: Alex Latta - IUPUI

Kurek Student Poster Presentation Award

First Place: Priya Dave & Juan Sanchez - IUPUI

Second Place: Jake Hitchens - IUPUI Third Place: Emma Brown - IUPUI

Honorable Mention: Jonathan Gutierrez - IUPUI





ACS-IUPUI poster session award winners (Photo by Steven Chase)



Gladysmae Good – Teacher of Chemistry Award – Lori White, "The" Cascade High School

This award was presented for Ms. White's commitment to excellence in chemistry, by challenging and inspiring students, engaging in the K-12 chemistry education community, and through demonstrated leadership in helping seniors prepare for their future.

Photo by Steven Chase Left to right: Lori White, Jon Acton, Erica Posthuma-Adams

Each year, we are thrilled to recognize our 50- and 60-year ACS members. This year we also had the extraordinary privilege of having a 70-year ACS member in our section! We were also able to recognize those that had served leadership roles in our local section as well! The section would like to recognize the following these members of the ACS who have reached their anniversary years:

Fifty-Year Members

Dr. Ronald Burton
Dr. Michael Flaugh*
Dr. Ann Hunt*

Dr. James McCarthy

Sixty-Year Members

Dr. James Beck

Dr. Michael Karickhoff

Seventy-Year Member

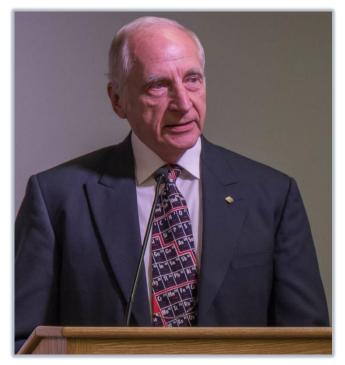
Mr. Charles Baker

Mr. Lee Morrow, Jr.
Dr. Howard Silverstein*
Dr. Gerald Smith*
Dr. Samuel Wendel*



*These members attended and offered remarks about their long and productive professional careers.

Thank you for a lifetime of dedication to the field of chemistry and for paving the way for future generations of scientists!



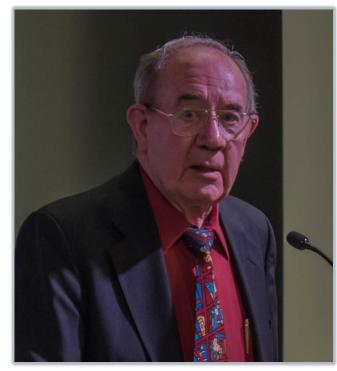
Dr. Michael Flaugh – 50-year ACS member



Dr. Ann Hunt – 50-year ACS member



Dr. Howard Silverstein – 50-year ACS member



Dr. Gerald Smith – 50-year ACS member

All photos by Steven Chase



Dr. Samuel Wendel – 50-year ACS member Photo by Steven Chase

Past Chair – Linda Osborn

The section would like to thank Linda Osborn for her amazing leadership through 2016.



Linda Osborn

Photos by Steven Chase

Finally, the Indiana Section gratefully acknowledges Steve Chase for photography at the event and Dr.

Meghan McLeod for technology support. The well-attended banquet brought together people of all ages and experience levels in chemistry, and gave our section's high-achieving young scientists a firsthand look at how the ACS could shape lives and careers for future success. Finally, thank you to our 2017 Indiana Section ACS Chair Dr. Tom Xiao and the entire executive committee who organizes our extensive programming.



Some of our hard-working Indiana Section ACS committee members! (Photo by Steven Chase)

Mark your calendars for next year's event: Tuesday, May 15, 2018!



Special thank you to Steven Chase for all of the published Awards Banquet photographs. If you are interested in viewing more of Steven's work or procuring his photography services, please visit:

Youtube: Timeless Perspective Instagram: @TimelessPerspective

Councilor Summary from the 253th American Chemical Society National Meeting by Brian Mathes

The San Francisco National Meeting was a terrific meeting for the Indiana Section as well as the ACS as a whole. All four of the councilors attended the meeting as well as our new District Director, Chris Bodurow! All four of our councilors have been integrated into their committees and we will follow up on that more in future Accelerator issues.



Here is a summary of some of the business that occurred at the national meeting:

Council Selections: The ACS council selected Bonnie A. Charpentier and Willie E. May as candidates for 2018 President-Elect. These two candidates, along with any candidates selected via petitions, will stand for election in the Fall National Election. The Committee on Nominations and Elections announced the results of the election held prior to the San Francisco meeting to select candidates from the list of nominees for Directors from District III and District VI on the Board of Directors for the term 2018-2020. By internet ballot, the Councilors from these districts selected Alan B. Cooper and Teri Quinn Gray as District III candidates; and Rita R. Boggs and Paul W. Jagodzinski as District VI candidates. Further, the Committee announced the selection of the following candidates for Directors-at-Large for 2018-2020 terms: Kenneth P. Fivizzani, Wayne E. Jones, Bonnie A. Lawlor, and Barbara A. Sawrey. The election of two Directors-at-Large from among those candidates and any selected via petition will be conducted in the fall. Ballots will be distributed to the Council on or before October 1, 2017.

2018 Member Dues: The Council voted on the recommendation of the Committee on Budget and Finance to set the member dues for 2018 at the fully escalated rate of \$171. This rate is established pursuant to an inflation-adjustment formula in the ACS Constitution and Bylaws.

Committee Updates: The Council approved the recommendation of the Committee on Committees that the Committee on Project SEED be continued; and that the committees on Chemists with Disabilities, on Public Relations and Communications, and on Women Chemists be continued contingent on approval of the Board of Directors.

Special Discussion: The Council conducted a special discussion, "ACS Yesterday and Today: Paving the Way to Tomorrow," to gather input for the Joint Board-CPC Task Force on Governance Design. Forty Councilors approached the floor microphones to share observations, comments, and suggestions to assist the task force in identifying opportunities and issues for governance improvement. The task force offered three questions to guide the discussion: What should the Society and its governance do differently to achieve its objectives? If you could change one thing about ACS governance, what would it be? What should the task force leave "as is"? A poll conducted at the conclusion of the discussion revealed that 57% (222) of the Councilors disagreed that the current governance structure, processes and procedures are already optimal to achieving the objects of ACS in the 21st century, 16% (54) agreed, and 27% (104) needed more information. Three-hundred and six (84%) said they would be willing to provide additional input and feedback to the task force. They will be contacted by the task force in the coming weeks.

What should the Society and its governance do differently to achieve its objectives? If you could change one thing about ACS governance, what would it be? What should the task force leave "as is"?

Budget and Finance In 2016: ACS generated a Net from Operations of \$23.8 million, which was \$7.2 million higher than 2015. Total revenues were \$526.8 million, increasing 2.9% or \$15 million over 2015. Expenses ended the year at \$503 million, which was \$7.8 million or 1.6% higher than prior year. This was

attributable to a continued emphasis on expense management across the organization. Additional information can be found at https://www.acs.org/content/acs/en/about.html. Click on 'ACS Financial Information'. There you will find several years of the Society's audited financial statements and IRS 990 filings.

The Board is developing a statement based on the Society's Core Value of diversity and inclusion in response to the repeal of the North Carolina law known as House Bill 2 ('bathroom bill') and similar proposed legislation in Texas, and is assembling a representative group of stakeholders to advise it on actions relating to the location of Society meetings.

Membership: As of December 31, 2016, the ACS membership was 156,129, which is 0.5% less than on the same date in 2015. The number of new members who joined in 2016 is 23,700. The Society's overall retention rate is 83.5%. The Committee on Membership Affairs also reported that the number of international members has increased to 27,388, exceeding the committee's target by 5%. Retention of graduate students increased by 2% to 76.2%.

San Francisco Meeting Attendance: Total 18,850

2023 National Meeting Brainstorming Session

By Frederique Diess



As many of you know, Indianapolis will host the ACS National Meeting & Exposition for the second time in 2023 (March 26-30). For the first Indyhosted National Meeting in 2013, the Indiana Local Section demonstrated the regional interest in building and maintaining a strong Chemistry community at every level: education, industry, academia, and outreach. To make Indianapolis 2023 a success, we are currently laying down the framework for the National Meeting.

A second brainstorming session held in preparation of the meeting took place on April

24th 2017 at the University of Indianapolis. There were 20 participants in attendance representing various groups of chemistry leaders of Central Indiana. The discussion group included representatives from both local companies (Dow AgroSciences, Heritage, Eli Lilly) and local universities (IUPUI, University of Indianapolis, Butler, Ball State).

The session started with a brief reminder of the key numbers from the first ACS National Meeting of 2013 and an overview of the results from the first brainstorming held September 2016 (Summary in the Accelerator December 2016 issue).

The attendees split into three groups to discuss the ideas gathered during the previous brainstorming and to assess them regarding their potential impact for a successful 2023 meeting including the estimated resources they will require. The ideas were split between the three following questions:

- 1. What should the Indiana Section do to achieve the best attendance (members and exhibitors)?
- 2. What should the Indiana Section do to achieve the best program (technical, plenary)?
- 3. What should the Indiana Section do to achieve the best destination experience?

Although each group was focusing on one set of ideas, every group had the full list in order to reorganize some of the ideas that would cross between the three 'themes.' Similar ideas were grouped under common categories and discussed in detail evaluating feasibility, program impact, and defining how they can be accomplished by the Indiana Section members.

New promising ideas also emerged from the group discussions. For example:

- Special activities around business (short presentations followed by a social mixer, opportunities for start-ups and venture companies)
- Presentations and a workshop about safety in academia and industry
- Prior to the meeting, a competition to develop a phone app that outlines the technical program and what Indianapolis has to offer
- Offer some "virtual" meetings

Additionally, the groups tried to focus on ideas to promote student participation including a strong career fair, special student oriented activities, and transportation to and from local universities.

After a one-hour small group session, each group summarized their ideas and presented them to the larger group giving an estimation of the impact to the National Meeting and the required resources for each of the main categories ideas they discussed. The group assessed both previous and new ideas, fine-tuned them, developed a pathway to accomplish them, and proposed timelines in which activities should be completed.

One of the key points discussed is the desire for the main activities, special technical programs, and other special local events and activities to be related to the theme of the 2023 Meeting. However, the themes for ACS National Meetings are not the decision of the Local Sections, and the Spring 2023 theme has not yet been revealed. From the responses, energy, and involvement of the participants at the brainstorming sessions, it is clear that Indiana is willing to make Indianapolis 2023 a successful ACS National Meeting!

Thank you to all the attendees of the brainstorming for their time, work and great ideas, as well as to those who could not be present but participated via emails, and thank you to everyone continuing our common effort to make **Indianapolis 2023** a success. We need help from every member of the Local Section and every contribution matters. If you would like to join the discussion, have any ideas or comments to share, please feel free to contact Frédérique (fdeiss@iupui.edu) or any member of the Indy 2023 ACS National Meeting Strategic planning committee.

Mid to Year End Calendar of Events

ACS Calendar of Events	Date	Location		
Project SEED Poster Session	Thursday, July 20	IUPUI		
Baseball Night	Monday, July 24; 7 pm	Victory Field		
252nd National ACS Meeting & Expo	Aug 20-24	Washington, DC		
Deadline for Illustrated Poem Contest- NCW	Wednesday, September 20			
Celebrate Science Indiana	Saturday, October 7	Indiana State Fairgrounds		
Teacher Appreciation	Saturday, October 7	Indiana State Fairgrounds		
Election	Monday, October 16	Electronic ballot		
NCW – Chemistry Day & Illustrated Poem Contest	Saturday, November 4	Indianapolis Children's Museum		
Impress for Success	November, TBD			
End of Year Celebration	Tuesday, December 12			
Chemistry and Music	December, TBD			
Be sure to look out for the fall return of Kids In Chemistry at the Children's Museum!				

Outside the Box: Non-ACS Science in Indianapolis

by Julie Holland

With Science on Tap on summer hiatus, I went to Eventbrite to see what other science related activities are going on in the Indianapolis area. These are some of the things I found which may be of interest to you.

June 28-30: 38th annual **Indiana Water Resources Association Symposium** at Turkey Run, Marshall Indiana. This 3 day event focuses on the current threats to Indiana waterways.

https://www.eventbrite.com/e/38th-annual-indiana-water-resources-association-symposium-tickets-33717402659?aff=es2

August 16, 7-9 pm: *Science behind History* sponsored by Café Inquiry and Central Indiana Science Outreach (CINSO) at the Broken Beaker Distillery (643 Mass Ave). Join 3 conservators from the Indiana State Museum and the Indiana Historical Society on how art objects and historical papers are cleaned and preserved.

https://www.eventbrite.com/e/the-science-behind-history-tickets-34554185499?aff=es2

October 21, 9 am 2- pm: Hoosier Woman in STEM Wikipedia Edit-a-thon sponsored by the Indiana Historical Society. This event is being put together to better document and update the contributions of women in STEM have have been historically overlooked or downplayed.

https://www.eventbrite.com/e/hoosier-women-at-work-wikipedia-edit-a-thon-tickets-32965968098?aff=es2

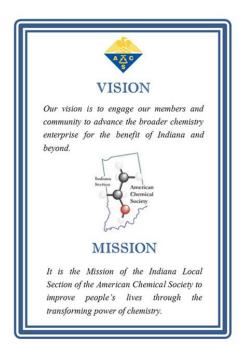
And don't forget the ongoing Year of Science at the Indiana Historical Museum!

Newsletter Editor and Design Julie Holland ACSaccelerator@gmail.com

Section Chair and Design Linda Osborn Linda.Osborn@hrglab.com

DesignAndrea Moberly
andrea.moberly@hrglab.com

The Indiana Section of the ACS publishes the Accelerator at least three times a year. The Section is not responsible for statements or opinions printed in this publication. The Editor is responsible for all unsigned and staff articles.



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If you are interested in learning more about the Chemistry of Fireworks, please visit the following links:

https://www.youtube.com/watch?v=nPHegSull_M

http://www.pbs.org/wgbh/nova/fireworks/

https://www.acs.org/content/dam/acsorg/education/resources/highschool/chemmatters/articlesbytopic/oxidationandreduction/chemmatters-oct2010-fireworks.pdf