

# The Accelerator



### INDIANA SECTION OF THE AMERICAN CHEMICAL SOCIETY



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### CHAIR'S CORNER

Read Partha's thoughts as we look ahead at what to expect in the ACS Indiana Section for 2022.

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### **PAST CHAIR REVIEW**

Abdallah shares his thoughts as he steps down from his role as ACS Indiana Section Chair for 2021.

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### CALENDAR OF EVENTS

Check out upcoming opportunities to engage with ACS peers!



### A YEAR (OR TWO) IN REVIEW

Due to Covid and the many canceled events and shutdowns of the past few years, the Accelerator has been put on hiatus. We will use this issue to review some of ACS Indiana's recent and past events and news!

# CHAIR'S CORNER

Partha Basu





I am excited and honored to serve as 2022 chair of the Indiana Section of the American Chemical Society. I don't think I am alone in saying that the past two years have been challenging for all of us, and it is fair to say that we missed the in-person interactions. I would like to thank Dr. Abdallah Diagne for his local section leadership during this trying time. We have started the year by hosting executive committee meetings in a hybrid format that provides in-person interaction and the opportunity for those who want to join remotely. This year we gear up for the 2023 ACS Spring National Meeting to be held here in Indianapolis. We have strong leaders working diligently to make this meeting a success. So, if you can, please volunteer and reach out to the leaders offering your help for the collective vision. We are also very encouraged to see many new faces taking leadership roles as committee chairs. They are bringing in a full slate of programs, and new ideas, which is good for the local section as new ideas provide vitality. Our committee chairs and the executive committee members are working hard to bring the best possible experience to you. One of the section's missions is to connect with our community and keep a high level of engagement with our membership because the local section is about you, the member of the local section. We will continue to work on diversity, equity, inclusion, and respect. Our signature DEIR program, PRomoting Equity and Diversity In ChemisTry (PREDICT), designed and offered last year, will continue this year. Additional programming includes Think like a molecule, White River clean up, high-school outreach program, the chemistry of bourbon, applying chemistry to advance the circular economy, and many more. Please keep an eye on the website and look at your emails for more details. Thank you for what you do for the local section and for your membership.

### I'd like to introduce this year's Board members:

Chair: Partha Basu

Past Chair: Abdallah Diagne Chair-Elect: Christine Skaggs Secretary: Sandra De La Torre Treasurer: Arvind Jaganathan

Councilors: Erin Dotlich, Beth Lorsbach, Brian

Mathes, Robert Pribush

Alternate councilors: Linda Osborn, Mark Pobanz,

Tamiko Neal Porter, Tom Xiao

Members at large: Denise Durham, Greta Ren,

Hannah Zimmerman

Kids and Chemistry: Brian Mathes

Senior Chemists Committee: Linda Osborn Finance Committee: Arvind Jaganathan

Industry Relations Committee - Christine Skaggs

Awards Committee: Tom Xiao WCC: Carmin Burrell & Yuping Zhou

Webmaster: Abraham Hentz Environmental: Kymeri Davis

Long Range Planning: John Rohanna & Tony Trullinger

Public Relations: Rob Sammelson

EH&S: Sarah Dowling

YCC and Membership: Hannah Zimmerman

CMA & DEIR: Jade Bing

NCW: Bredon Sargent & Megan Kwiatkowski

Newsletter & CSI: Julie Holland

Newsletter Team: Andrea Moberly & Jordan Jewett

Public Relations: Rob Sammelson

EH&S: Sarah Dowling Webmaster: Abraham Hentz



Who: Anyone!

What: ACS IN General Body Meeting

When: May 2, 2022 @ 5:30pm-7:30pm

Where: The Center, 6320 Intech Way, Indianapolis, IN

46278

Why: Showcase on-going ACS efforts to the public, provide mingling and networking opportunities, gather local support for the upcoming National Meeting in 2023. Food, drinks, and giveaways will be provided, so come

join us!

# The Work/Life/Volunteer Balance

### Julie Austin

During our last local section ACS meeting, I was quite impressed with the new energy and ideas that the younger chemists have brought to the table, especially centered around engaging new members and around volunteerism.

Throughout our adult lives, many of us will find ourselves overwhelmed by either too much work, too many things going on at home, or a combination of both. Finding a good work/life balance can be a challenge and it often leaves us feeling stressed out and burned out. Taking on additional responsibilities like volunteering for organizations such as ACS may seem like it's just a little too much.

I began volunteering with ACS in 2014 when I stepped up to take over this newsletter and starting volunteering to chair events. But when Covid hit, work got a lot more stressful, and I got overwhelmed and burned out. It's not always easy to keep on top of that work/life balance and still have energy for something that is 100% volunteer based. However, I really enjoy being a part of this newsletter. I love connecting with you and providing content that connects you to the local section ACS. This is important with the upcoming 2023 Spring National ACS meeting being held here in Indianapolis.

This brings us back full circle to the new ideas and energy from the younger chemists. Christine Skaggs (Industry Relations Committee, Chair Elect) really hit the nail on the head for me. When we volunteer for a committee, we shouldn't be trying to do it all on our own. Having small group of people working together to chair an event takes the stress from one person trying to accomplish it all. It also allows us to learn leadership skills through learning to delegate responsibilities and teamworking skills when we come back together to accomplish our goals.

Moving forward, The Accelerator is going to be put together by a team including Andrea Moberly (design and editor), Jordan Jewett (writer and editor), and me, Julie Austin (article solicitation, writer, and editor). I'm very excited about revitalizing this newsletter and I already love the new design direction that Andrea has taken it.

I hope as we move closer to the 2023 National Meeting, the local section will be hearing from some of you looking for ways to reach out, get involved, and volunteer. It doesn't have to be an overwhelming experience, but it will be rewarding.

If you want to become more involved in the ACS, please contact our current chair, Partha Basu, at <a href="mailto:basup@iupui.edu">basup@iupui.edu</a> or you can write to The Accelerator team at <a href="mailto:acsaccelerator@gmail.com">acsaccelerator@gmail.com</a>.



The Huron Valley Local Section is hosting the Central Regional Meeting of the American Chemical Society June 7-10, 2022. This four-day event will take place at Eastern Michigan University's Student Center. Register by May 20 to take advantage of the early registration rates.

### 12 Days of Science Claus

Science Clause came to town on December 3, 2021. An annual event favorite organized by the Wayne Township Education Foundation was held at the Chapel Hill Center in Wayne Township and included the following stars along with many excited child volunteers.

- · Rick Crosslin, Wayne Scientist in Residence
- · Keith Ramsey, Bridgeport
- Mary Mason, Chapelwood
- · Just Abner, Maplewood
- Allison Kempers, Wayne Township Preschool

This is one of so many great events that the ACS Indiana local section sponsors. Enjoy the highlights of the show via this link and look for Science Clause and elves to educate in a fun way again this December!

https://wtef.wayne.k12.in.us/12-days-of-science-claus/



### IT'S NOBCCHE'S 50TH ANNIVERSARY!



National Organization for the Professional Advancement of Black Chemists and Chemical Engineers

NOBCChE (National Organization for the Professional Advancement of Black Chemists and Chemical Engineers) is a non-profit professional organization dedicated to assisting black and other minority students and professionals in fully realizing their potential in academic, professional, and entrepreneurial pursuits in chemistry, chemical engineering, and allied fields. The National office of the ACS is an official sponsor of NOBCChE. For information on the history of NOBCChE, please visit NOBCChE History.



April 21, 2022 - 11:00 am - Noon EST

As we celebrate Earth Day this April, we are pleased to invite you to join a technical webinar on the Circular Economy in Indiana. Learn about what the circular economy is & the important role chemistry plays from guest speaker Ken Miller, PhD (Retired Chemist/Sustainability Director). Hear examples of it being practiced in Indiana by guest speaker Kelvin Okamoto, PhD (Green Bottom Line, President/Gen3Bio, Inc., CEO/Green Dot Bioplastics, CTO). Finally, hear why it is important in Indiana by guest speaker Allyson Mitchell (Circular Indiana, Executive Director).



Learn more about the Circular Economy in Indiana

Register Here



Who should join and participate?

- Researchers interested in learning more about the circular economy
- Chemists that want to know more about how our industry can foster change
- Indiana stakeholders that want to know how they can contribute and benefit

In celebration of Earth Day 2022 and in recognition of the essential role of chemistry in achieving a sustainable global economy, the Indiana local section of the ACS, together with Circular Indiana and The Heritage Group are hosting an Earth Week Webinar entitled: "Applying Chemistry to Advance the Circular Economy".

The Earth Day theme for 2022, "Invest in Our Planet", is focused on achieving a "Green Economy." This webinar will address what it means to invest in a green economy and how, together with circular economy principles, it can be achieved.

The circular economy defines a new relationship between society and the finite materials that it depends on. The circular economy requires society to evolve past the wasteful practices of the existing linear economy to a society that retains the value of resources embedded in the products we need and enjoy. By securing the value of resources for continuous use, the resiliency of both nature and the economy are possible along with a quality of life for all.

To achieve a circular economy, renewable and recoverable materials, and processes to do so must be implemented. These processes, collectively referred to as the "Re's", include Reduce, Reuse, and Recycle. All of these processes depend on innovations in chemistry to deliver what society needs. This Webinar will illustrate the vital role of chemistry and highlight examples.

Indiana is currently lagging behind the average USA performance in material resource management, but Indiana has great potential to benefit from the environmental and economic opportunities provided by a Circular Economy. Examples of Indiana achievements will be provided, and the steps being taken by Circular Indiana will be spotlighted.

# Past Chair Review

Abdallah Diagne



Coming out of a tumultuous yet ultimately successful 2020 year, the Indiana Local Section approached 2021 with aplomb, motivated to turn challenges into positive opportunities to continue to serve Central Indiana and consistently seek to improve lives through the transformative power of chemistry.

The Indiana Local Section recognized the strong need for vibrant committees to carry out successful programming during the year, and therefore a number of highly motivated volunteers were named as new chairs of the YCC, CMA and Membership Affairs committees. This exercise led to collaborative events between the committees such as the Chemistry of Beer event. This was a successful and well-attended event at a local brewery that enabled both student scientists and lay members of the community to enjoy a didactic and interactive lecture about the organic chemistry of their beers. This was the first in-person event the Local Section had held in more than a year, allowing some members to finally meet each other, and helping sustain strong morale.

Other valuable collaborations between the YCC and external partners like NOBCChE and the IUPUI Graduate Student Chemistry Society: MOLE led to successful implementation of the Park Tudor Outreach Series. We helped the Park Tudor Women in STEM distribute STEM kits filled with at-home demo items and ACS flyers and other items to over 200 students and produce an accompanying 1-hour interactive video that featured local experts discussing the science behind the topic of drugs and disease. It is our hope that such early impactful exposure to ACS for these young scientists will inspire them to pursue careers in chemistry, and to continue their engagement with the ACS. One of the leading high school students of this endeavor has since begun to serve as the leader of the Outreach Sub-Committee of the YCC.

The Indiana Local Section successfully accomplished its mission of growing and strengthening the local chemistry community by routinely interfacing with and reaching out to K-12 science students and their instructors. Our continued support of the You Be the Chemist challenge helped propel the Carmel Chemistry Club—"Coffee Waste to Biofuel"—to become one of 5 national finalists in the competition. Two Carmel High School students, Canaan He and Jack Liu of Carmel High School were recognized as top 20 finalists in the US National Chemistry Olympiad competition and participated in the training camp. We successfully completed the CCEW and NCW Illustrated Poem Contests and produced the national winner in the NCW K-2 contest. Our well-regarded Project SEED program impressively pivoted to a Virtual Research Program and leveraged Zoom to give students unprecedented access to professional scientists during the program. This included virtual research opportunities at Eli Lilly that would have otherwise been off-limits to high school students. Finally, at the University level, we conducted a virtual "Think Like a Molecule Poster Session" in conjunction with the widely attended Indiana University Bicentennial event, leveraging the Whova platform to facilitate the networking and research presentations of 48 students.

Our most significant and impactful outreach in the educational and professional development sectors was through the DEIR Grant-funded Promoting Equity and Diversity in ChemisTry (PREDICT) Symposium in September. Its major goal was to mitigate professional development and educational inequities experienced by low income, first-generation students, and other under-represented minority groups in STEM fields. This goal was accomplished by both conducting an outreach campaign wherein we provided 100 kits containing learning materials to AP science students at Pike and Kokomo High Schools, and by hosting a two-day virtual symposium that featured 25 sessions—seminars, workshops, roundtable panels, a graduate student lightning talk contest, and networking sessions with industry, government, and academic professionals. The Symposium attracted nearly 400 participants from 30 states and 10 countries, aided by the METT Grant-supported Whova platform, which permitted seamless networking opportunities between under-represented minority groups and their interlocuters within the Local Section and beyond. It featured keynote lectures from important ACS stakeholders such as then Chair-Elect Angela Wilson and District II Director Christina

professional development subject matter experts such as Valerie Young-imposter syndrome.

The PREDICT enabled us to decisively establish a multifaceted social media presence, while reinforcing the ACS's commitment to an inclusive approach to improving lives through chemistry. The vast majority of the PREDICT Symposium sessions were recorded through Zoom and posted on our YouTube page, making them available to the general public in near perpetuity. Building on the success of the PREDICT program in facilitating professional development and networking between the Local Section membership and industry/academic colleagues at local institutions, the WCC instituted a nascent series of Lunch & Learns, wherein successful female scientists are invited to an informal discussion with Indiana Local Section members. The first edition was highly productive and well-attended, and we are excited to continue to implement this event series in 2022.

Finally, the Indiana Local Section has made tremendous progress in implementing a world-class set of ancillary programming to the 2023 National Meeting in Indianapolis. A diverse and eclectic group has coalesced around this event, and they have collectively raised substantial funds to date, drummed up significant interest and excitement among our city partners, and delineated a set of very interesting and didactic events to take place in the Downtown area during the conference.

Overall, I am very proud of the tremendous performance of the Indiana Local Section in a challenging year and environment. I am very grateful to our wonderful and energetic volunteers who displayed remarkable flexibility to adapt to the circumstances. Initiatives taken in 2021 such as a revamping of our social media presence, and the establishment of the PREDICT Symposium as a yearly endeavor, will sustain the success of the Indiana Local Section longitudinally.

#### WHITE RIVER CLEAN-UP ENVIRONMENTAL SUSTAINABILITY EVENT

As scientists, we are intimately aware of the volume of single use plastic and other consumables that are used within our own labs. Unfortunately, this is not a problem that is isolated to the laboratory and is a far-reaching and widespread issue. The White River is a major river in the Indianapolis area that flows through most of Central and Southern Indiana. Regretfully, the aquatic environment is plagued by ecosystem degradation and pollution from illegal dumping of waste. However, the non-profit group, Friends of the White River is on the forefront for combating this problem.

Friends of the White River's main mission is to protect, preserve, and promote the vital resource, which is the White River, and to facilitate community involvement in their sustainability effort. The Indiana Local ACS section has partnered with this organization to organize a half-day White River clean-up event. Come out and support your local community on Sunday, May 22, 2022, from 8:00 AM to 12:00 PM. Lunch, a reusable water bottle, and a t-shirt will be provided. The number of volunteers is limited to 30.

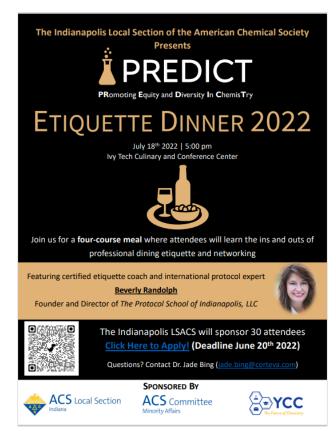


Please sign-up using the following link: <a href="https://forms.gle/WHMUZPoikqqXfZWcA">https://forms.gle/WHMUZPoikqqXfZWcA</a>
For more information or questions, contact Kymeri Davis (<a href="https://kymmoral@iu.edu">kymmoral@iu.edu</a>).





https://docs.google.com/spreadsheets/d/1oCOKYRfZ6PJwYVI2uEikJc3XIM-vgal6xe9MNiDaYoM/htmlview



#### Sign up here:

https://docs.google.com/forms/d/e/1FAIpQLSfJ9pMVyhpJkRI V2pZQk-twvx4llsVqh5FaXbz8f8lJcoVGFg/viewform



The Industry Relations committee and the Indiana local section members made tie blankets for the Little Red Door Cancer Agency. Organization collaborators included: IUPUI Sigma Kappa Sorority, IUPUI MOLE, Wayne State DPT, Park Tudor HS Women in STEM Club. Approximately 300 blankets were made by approximately 100 volunteers during this event!



# CONGRATULATIONS TO THE 2022 INDIANA SECTION ACS USNCO EXAM WINNERS!

The 2022 Indiana Section ACS USNCO Exam held at Carmel High School on Saturday, March 26, 2022. A total of 84 students took the exam (of 111 registered): 56 (of 69 registered) first year exam (average score 26/60) and 28 (of 42 registered) advanced exam (average score 34/60).

Students who scored high on the exam will be contacted and invited to participate in the second phase of the USNCO competition, which is a written exam plus a practical laboratory exam, to be held in the IUPUI Department of Chemistry on Saturday, April 23, 2022.

Schools finishing in the top 5 in the First Year Exam and in the top 5 in the Advanced Exam will select one teacher to receive a one-year membership in the American Association of Chemistry Teachers (AACT).

### FIRST YEAR EXAM

Place	Student	School
1st	Richard Gao	Carmel
2nd	Ghaian Kalainesan	Carmel
3rd (tie)	Adam Madni	Carmel
3rd (tie)	Kaden Xu	Park Tudor
Honorable Mention	Yash Bhargava	Carmel
Honorable Mention	Jihoon Kwan	Carmel
Honorable Mention	Eva Qiao	Carmel
Honorable Mention	Alex Yan	Farragut
Honorable Mention	Insia Zaidi	Park Tudor

Place	School
1st	Carmel
2nd	Park Tudor
3rd	Creekside
4th	Farragut
5th	Zionsville

### PERPETUAL PLAQUE AWARD

Student	School
Jack Liu	Carmel
Darren Li	Columbus North
Deesha Roopesh	Creekside
Michael Schwebach	East Central
Shlok Kulkarni	Hamilton Southeastern
Akshay Guttikonda	North Central
Sophia Liang	Sycamore
Edward Hu	Park Tudor
Celeste Pence	Union County
Vishnu lyer	University
Akkash Rathansabapathy	Zionsville

### **ADVANCED EXAM**

Place	Student	School
1st	Jack Liu	Carmel
2nd	Canaan He	Carmel
3rd	Harry Zheng	Carmel
Honorable Mention	Bhargava Murtha	Carmel
Honorable Mention	Grace Yang	Carmel
Honorable Mention	Alex Lu	Park Tudor

Place	School
1st	Carmel
2nd	Park Tudor
3rd	Zionsville
4th	Hamilton Southeastern
5th	North Central

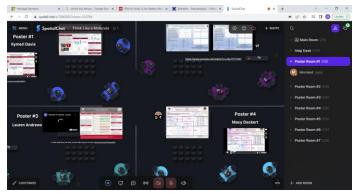
### QUALIFIED FOR NATIONAL EXAM

Student	School
*Canaan He	Carmel
*Jack Liu	Carmel
Harry Zheng	Carmel
Grace Yang	Carmel
Darren Li	Columbus North
Anish Kambhampati	Hamilton Southeastern
Shlok Kulkarni	Hamilton Southeastern
Akshay Guttikondra	North Central
Edward Hu	Park Tudor
Alex Lu	Park Tudor
Vishnu lyer	University
Akkash Rathansabapathy	Zionsville
Alvin Xu	Zionsville

<sup>\*</sup>Students automatically qualifying based on their scoring in the top 20 nationally and attending the USNCO Training Camp in 2021.

### Think Like a Molecule Poster Session 2022

The Indiana Section of the American Chemical Society hosted our annual "Think Like a Molecule" poster session on April 7. This year the event was virtual and hosted on the SpatialChat platform. This platform allowed students to show their poster as well as a video presentation of their research. We had 28 posters submitted by undergraduate and graduate students from 4 local Indiana colleges. We were also fortunate to have 10 judges comprised of local ACS members and industry professionals who scored the posters and presentations and awarded our 10 cash prizes. Even though the poster session was virtual we did



have a live stream event on April 7 to announce and recognize the award winners who are listed below. The organizing committee would like to thank all of this year's judges and presenters for their participation and congratulate all of the winners of their awards!

Award	Place	Recipient
2022 ACS Poster Session	Grand Prize	Tommy Zhang
ACS Chair's Award	1st	Joelle Miller
	2nd	Kyle J. Colston
	3rd	Santillan Rodriguez
Kurek Student Award	1st	Lauren Andrews
	2nd	Wesley Beck
	3rd	Safiya Sankari
Dean's Choice Award	1st	Oreoluwa Cherebin
	2nd	Paul Grocki
	3rd	Eray Schulz

**2022 ACS Poster Session Winner** (All Posters Eligible). This is the highest award and given to the poster with the highest overall score regardless of presenter status (high school student, undergraduate student, graduate student, or professional).

**ACS** Chair's Award (All Posters Eligible). This award is given to the poster with the highest overall scores regardless of presenter status (high school student, undergraduate student, graduate student, or professional).

**Kurek Student Award** (Undergraduate Posters Only). Dr. Joseph T. Kurek, who worked with Nobel Prize winner Herbert C. Brown, taught his students to "Think Like a Molecule". This award is named in his honor and is awarded to undergraduate students that demonstrate an exceptional understanding of chemistry in their research.

**Dean's Choice Award** (Graduate, Post-docs, and Professional Posters Only). This award is given to graduate students, post-docs, or professionals that demonstrate data-driven innovation within their research.

### **BSU Science Day**

ACS Indiana Local Section partnered with Ball State University Student Affiliates of ACS (BSU SAACS) to host Science Day 2022 on Saturday, April 9. They had over 350 guests and were very grateful for the financial partnership! Enjoy the photos below from this event.



## Upcoming ACS Indiana LS Events

Event	Date
Technical Webinar: Circular Economy in Indiana	4/21/2022
Chemists Celebrate Earth Week Illustrated Poem Contest	4/24/2022
USNCO - National Exam	4/23 - 5/1/2022
Awards Ceremony and General Meeting	5/2/2022
Advancing Circular Economy in Indiana Symposium	5/6/2022
Earth Day River Clean-up	5/20/2022
Project SEED	Summer 2022
Mental Health Awareness (Virtual)	Summer 2022
Chemistry of Bourbon	June 2022
PREDICT Etiquette Dinner	7/18/2022
PREDICT Webinar/hybrid Series	9/16/2022
Career Development Symposium	9/1/2022
Celebrate Science Indiana	10/1/2022
Sustainability Booth at CSI by Circular Indiana	10/1/2022
Lunch & Learn (Speaker from Industry)	October 2022
National Chemistry Week	11/1/2022
Professional Networking Event	11/1/2022

# Accelerator Newsletter Team: Julie Holland Austin Jordan Jewett Andrea Moberly

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 Accelerator Team is responsible for all unsigned and staff articles.

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