



WHAT'S HAPPENING IN THE CSN?

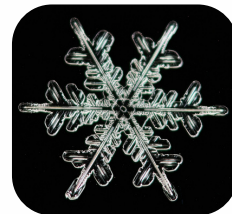
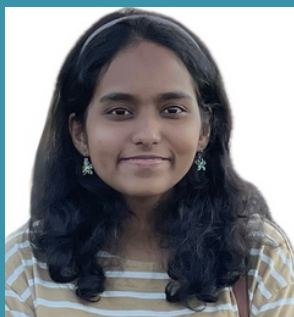


Image credit: Zdeněk Macháček

NSF Center for Sustainable Nanotechnology

WELCOME TO NEW CSN MEMBERS!



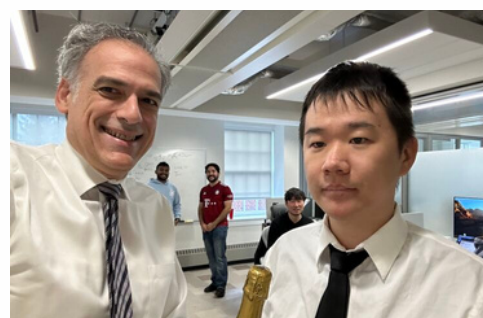
Welcome to recently-joined CSN members! (L-R top) Graduate students **Marina Youngblood** and **Supreetha Sivaraj** (Giraldo group), **Elias Buurma** (Fairbrother group), (bottom L-R) grad students **Anand Sahu** (Cui group) and **Yu (Cheryl) Chen** (Haynes group); and undergraduate student **Kenneth Encarnacion** (Giraldo group).



GOOD NEWS!



Andrew Northwick (Carlson group) successfully defended his thesis on September 11, 2024. Congratulations, Dr. Northwick!



Yinhan Wang (Hernandez group, right) successfully defended his thesis on December 10, 2024. Congratulations Dr. Wang!





GOOD NEWS!



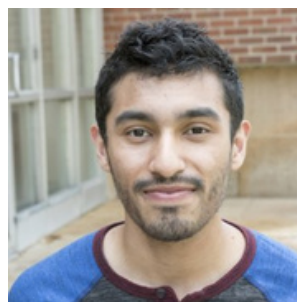
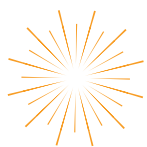
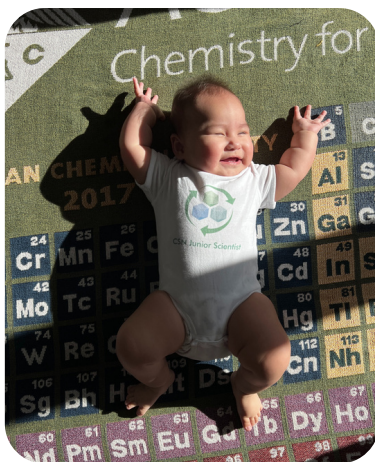
Suji Jun (Giraldo lab alum) has accepted a new position as a Research Associate at the Research Institute of Agriculture and Life Sciences at Seoul National University in South Korea.



Shreyasi Sengupta (Rosenzweig lab alum) has accepted a new position as a Materials Scientist at Anderson Materials Evaluation, Inc. in Columbia, MD.

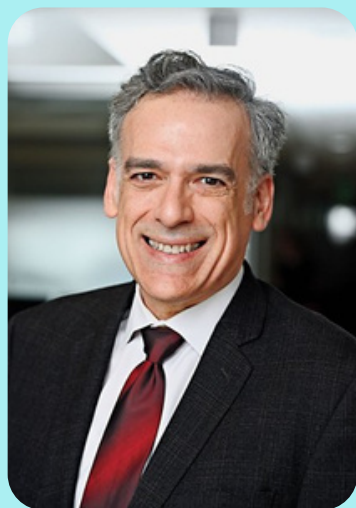


Nasim Ganji (Pedersen lab alum) has accepted a new position as a Senior Scientist at Cour Pharmaceuticals Development Co., Inc. in Skokie, Illinois.



6 month old Thea, baby of **Nikki Hoang** (Feng and Murphy groups) and **Rodrigo Tapia Hernandez** (Feng group), is rocking CSN gear!

Rigoberto Hernandez Elected 2025 ACS President-Elect



"Rigoberto Hernandez has been elected the 2025 American Chemical Society president-elect by ACS members. Hernandez will serve as society president in 2026 and immediate past president in 2027. These roles include serving on the board of directors from 2025 to 2027."

from [Chemical & Engineering News](#)

Congratulations, Rigoberto!



Milestones and Awards



Congratulations to **Erin Carlson** on receiving the **RSOA Cottrell Plus SEED (Singular Exceptional Endeavors of Discovery) Award** to support her proposal entitled *Eradication of Bacterial Resistance Mechanisms*.



Bob Hamers was a winner of **UW-Madison's "Cool Science Image" contest**. The image featured Bob's attempt to grown single-crystal LiCoO₂ samples for CSN studies, which produced a "crystal forest." **The award led to an article in Nautilus.**



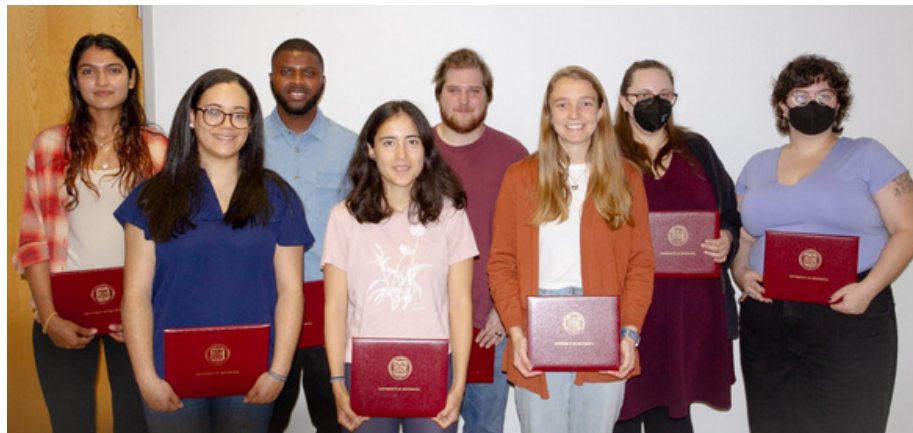
Shana Stoddard (2023 CSN Scholar-in Residence) received the **Lloyd N. Ferguson Young Scientist Award** at the 51st NOBCChE conference celebration!

CSN Affiliate **Michael Curry** **received the Stanley C. Israel Regional Award** meant to "recognize individuals and/or institutions who have advanced diversity in the chemical sciences and significantly stimulated or fostered activities that promote inclusiveness within the region" at Southeastern Meeting of the American Chemical Society.

Mike was also part of a team selected for the National Science Foundation Ideas Lab, a program that aims to diversify scientific research and the STEM workforce. The Ideas Lab was funded through the NSF Advancing Research Capacity at HBCUs through Exploration and Innovation (ARC-HBCU) program. Read more about the award and the program in press releases from the **NSF**, **North Carolina A&T**, and an article highlighting Mike on **InsideHigherEd.com**.



Milestones and Awards

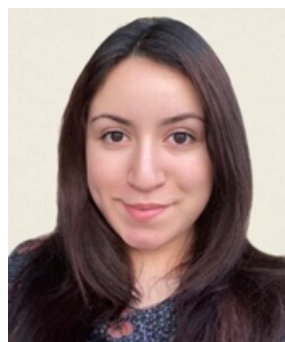


Wilanyi Alvarez Reyes (Haynes group, front left) received a fellowship from the **Wayland E. Noland Fellowships in Chemistry Fund** in recognition of achievements in the UMN Chemistry graduate program.

Congratulations to **Zita Sarkozi** (Carlson group) on passing her Oral Preliminary Exam!



Congratulations to **Lisett Guadalupe Diaz** for being elected as the next SPRING Board/Executive Committee Liaison! The term will run from January - August 2025.



CSN PUBLICATIONS

Find the most recent list of all center publications on the [CSN Google Scholar](#) page.

Chaoyi Deng, Yinhan Wang, Christopher Castillo, Yinong Zhao, Wandu Xu, Jiapan Lian, Kevin Rodriguez-Otero, Hannah J. Brown, Keni Cota-Ruiz, Wade H. Elmer, Christian O. Dimkpa, Juan Pablo Giraldo, Yi Wang, Rigoberto Hernandez and Jason C. White (2024). Nanoscale Iron (Fe₃O₄) Surface Charge Controls Fusarium Suppression and Nutrient Accumulation in Tomato (*Solanum lycopersicum* L.). *ACS Sustainable Chemistry & Engineering*. 12 (35), 13285-13296. Read the online publication [here](#).

Eleni M. Spanolios, Riley E. Lewis, Rhea N. Caldwell, Safia Z. Jilani and Christy L. Haynes (2024). Progress and limitations in reactive oxygen species quantitation. *Chemical Communications*. 60 (86), 12487-12501. Read the online publication [here](#).

Rym Boukhalfa, Christian O. Dimkpa, Chaoyi Deng, Yi Wang, Claudia Ruta, Generosa J. Calabrese, Saida Messgo-Moumene, Anuja Bharadwaj, Raja Muthuramalingam, Jason C. White and Giuseppe De Mastro (2024). Encapsulation in Silica Nanoparticles Increases the Phytotoxicity of Essential Oil from *Thymus vulgaris* in a Weed Species. *ACS Agricultural Science & Technology*. 4 (12), 1321-1331. Read the online publication [here](#).



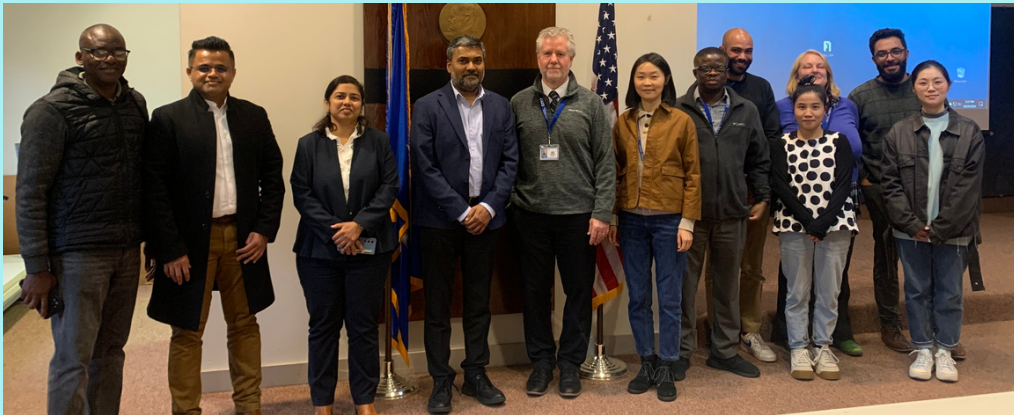
DID YOU KNOW?

CSN Shirt designs from 2016 through 2024 are still for sale at csn.threadless.com! All proceeds go to the SPRING social fund.



L-R: example products with designs from 2022, 2018 (official and unofficial), and 2024

Swapnil Ambade (**Fairbrother** group), the Minister of Commerce, and the First Secretary of Education, Science, and Technology from the Embassy of India in Washington, D.C. visited CAES as a part of efforts to foster collaboration between top Indian universities and U.S. research institutions/universities.



CSN Talks & Presentations



Bob Hamers, Miriam Krause, and Mike Schwartz attended the NSF CCI Directors' meeting at NSF Headquarters in Washington, DC in November



CSN Talks & Presentations



Erin Carlson presented on CSN work at the Fall ACS Meeting in a talk entitled, "Bacterial Resistance to Complex Metal Oxide Nanomaterials."



Christy Haynes gave invited seminars at the UMN Department of Biosystems and Bioproducts Engineering and at UT-Austin.



Jason White presented "CAES, nanotechnology, and agriculture: how we got here and where we are going" for the CAES seminar series in September.

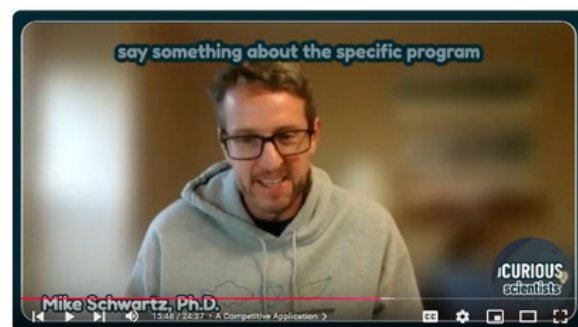


Della Mosley and **Mike Schwartz** co-facilitated "Empowerment through Healing: Introducing the Blafemme Healing Model for Black Chemists and Chemical Engineers" workshop, National Organization for the Professional Advancement of Black Chemists and Chemical Engineers 51st Annual Meeting.

Mike Schwartz also presented a poster at the Institute for Discovery Science meeting entitled, "Building a Culture of Wellness, Equity, & Liberation in the NSF Center for Sustainable Nanotechnology," gave invited presentations, entitled "Broader Impacts in the NSF Center for Sustainable Nanotechnology" at NSF headquarters in August, and participated in a panel discussion on center management for the NSF Biology Interfaces Institutes.



Finally, Mike participated in summer undergraduate research panels at the NOBCChE National Meeting and for the NOBCChE chapter at George Mason University. He also appeared on a YouTube video entitled "[Experts Discuss 9 CRUCIAL Questions to Succeed in Undergraduate Research](#)" (for Curious brains YouTube page, produced by NSF MONET's Vanessa Rosa).



Experts Discuss 9 CRUCIAL Questions to Succeed in Undergraduate Research



All-Hands UIUC

October 6 - October 8, 2024 at University of Illinois at Urbana-Champaign



Flash Talk and
Improvisation
sessions



Fun between
talk sessions



All-Hands ctd...

October 6 - October 8, 2024 at University of Illinois at Urbana-Champaign





Latest from Sustainable Nano

See Sustainable-Nano.com for all CSN blog posts & podcast episodes



Title screen of Chinny Tiu's SciArt video, featured in her blog post

Blog posts & podcast episodes published since the last newsletter:

- [Carbon Dots and Duckweed: An Artistic Journey](#) by SURE student Chinny Tiu
- [Colors of the Aurora Borealis: Nature's Spectroscopic Spectacle](#) by Bob Hamers
- [¿Cómo se puede utilizar el crochet para modelar la nanociencia?](#) Translation of "How crochet can be used to model nanoscience" by Abby Stitgen; translated by Regina González Lona; edited by Wilayi R Alvarez Reyes & Lissett G. Diaz.



There was a mini CSN reunion at the CCI table at the National Diversity in STEM (NDiSTEM) Conference in Phoenix, AZ. L-R: **Leopoldo Posada**, **Halley Le**, **Ariana Schroeder**, **Miriam Krause**, & **Lissett Diaz**



Miriam Krause and **Mike Schwartz** got to see the sights in DC while traveling for the NSF CCI Directors' Meeting



SPRING ACS



The CSN's **Nanomaterials & Sustainability: A Chemistry Perspective** symposium and our final All-Hands Meeting will take place at the spring 2025 ACS Meeting, March 23-27 in San Diego, CA.

Tentative Schedule

Monday, March 24

- Afternoon: COLL Poster Session
- 8:00 - 10:00pm: Sci-Mix Poster Session

Wednesday, March 26

- Morning: Symposium Talk Session 1
- Afternoon: Symposium Talk Session 2
- Evening: CSN Reception

Thursday, March 27

- Morning: Symposium Talk Session 3

If you are presenting at the CSN symposium, stay tuned for information coming soon about conference registration, flights, and hotel reservations.



Please contact **Miriam Krause** (mkrause@umn.edu), **Mike Schwartz** (mpschwartz@wisc.edu), and **Denise Williams-Harris** (will7710@umn.edu) with any questions about the ACS/All-Hands meeting.

Opportunities!

Applications are open for the [ACS GCI Green & Sustainable Chemistry Summer School](#). The deadline to apply is January 3, 2025.

ACS GCI Green & Sustainable Chemistry Summer School

Don't miss out on this once-in-a-lifetime opportunity – apply by January 3, 2025!

Sunday, July 27 – Friday, August 1, 2025
Burlington, Vermont

Applications are open for the [CAS Future Leaders Program](#). The deadline for Ph.D. students and postdocs to apply is January 26, 2025.

Expense-paid trip to CAS Headquarters in Columbus, Ohio August 11-16, 2025	— \$1,000 USD — 3-year ACS membership — Profile featured in C&EN (2018, 2019, 2022, 2023, and 2024 articles) — Complimentary registration for the ACS meeting — Opportunity to present your research at the ACS meeting — Complimentary registration for an ACS Professional and Leadership Development course at the ACS meeting — Lifetime membership in the CAS Future Leaders Community	Expense-paid trip to ACS Fall 2025 in Washington, D.C. August 17-21, 2025
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LOST IN CYBER-SPACE?

Links to frequently requested CSN documents and information sources.

Newsletter submissions:

Awards, highlights, lab exchanges, publications, FUN, etc. [link](#)

CSN Documents and Downloads

- Nanodatabase Login: [link](#)
- Nanodatabase Help page: [link](#)
- CSN calendar: [link](#)
- CSN Operations Guide: [link](#)
- CSN participants list (Names, group, and email addresses): [link](#)

CSN Reporting Forms

- Report lab exchange activities: [link](#)
- Report Outreach Activity: [link](#)
- Report Awards and Other Activities: [link](#)

CSN SuggestionOx (Anonymous Feedback to Admin)

- Admin (goes to Christy): [link](#)
- SPRING Board liaison: [link](#)

ADMIN EMAILS

- Bob (rjhamers@wisc.edu)
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- Miriam (mkrause@umn.edu)
- Mike (mpschwartz@wisc.edu)



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