

THE PERIODIC TABLOID

from Wayne State's Department of Chemistry

WINTER 2021



Chem shows its Warrior pride

By Tenecia Smith

When the Dean of Students Office put the call out for departments to show their Warrior pride in the 2019 Homecoming Office Decorating Contest, the chemistry department responded without hesitation. The main office staff and student assistants decorated the office while the rest of the students, faculty, and staff rallied votes. The department's efforts paid off when it was announced the winner via election by students, faculty, and staff throughout the university. The department was awarded a certificate of recognition and a plaque.

ACS-SA sets records

By WSU ACS-SA Executive Board

The Wayne State University American Chemical Society-Student Affiliates (WSU ACS-SA) successfully pulled off two major events this year: Hosting an annual chemistry symposium and, in honor of the International Year of the Periodic Table, creating the world's largest periodic table — the size of three football fields (more than 190,000 square feet)! Hundreds of volunteers from Wayne State, the ACS Local Section and other surrounding universities achieved worldwide recognition and exposure for the love of chemistry.

During the past year, the WSU ACS-SA chemistry club was also actively involved in the Detroit community. Members worked with the Cesar Chavez Academy High School to deliver a custom-made teaching laboratory for the students. The club also worked closely with the school to tutor students and deliver teaching labs.

This year, the club is focusing on staying active while social distancing. Students plan to run a video series on the group's YouTube channel, where they will host professors and researchers. They also plan to increase representation of diversity in the chemistry community through promotion of Black scientists and other underrepresented groups, and bring awareness to future events by being better equipped with knowledge of recent issues through workshops and daily discussion.

All interested in becoming members can reach the club at wsuacs@wayne.edu or on any of its social media platforms.





LETTER FROM THE CHAIR

Dear friends and alumni,

The past year has been the craziest that I can remember at Wayne State University (or anywhere else for that matter). The winter 2020 semester saw all of our courses move online and our building close in response to the COVID-19 pandemic. While our faculty and staff transitioned to online learning, members of our community also rallied to help with the pandemic efforts in Detroit. Shortly after the shutdown, a call was put out to help make hand sanitizer for first responders. Fifteen department members volunteered to help within three minutes of receiving the call. To maintain social distance, four volunteers ultimately participated: Gibson Kirui (Verani Lab), Bailey McCarthy Riley (Linz Lab), Regina Szlag (Rabuffetti Lab), and Joseph Wakpal (Nguyen Lab) prepared 45 gallons of sanitizer. After months of meetings, we were able to ramp up research over the summer to around 25% capacity.

The following provides a small sampling of what's happened in the department over the past year: Federico Rabuffetti was promoted to associate professor. Long Luo received a CAREER Award from the National Science Foundation. A team led by Stephanie Brock that included Chuck Winter, Federico Rabuffetti, Judy Westrick, and Mike Mei received a grant from the NSF for a new electron microscope to be housed in the Lumigen Instrument Center. Stephanie Brock also became a member of the WSU Academy of Scholars. Regina Zibuck led efforts to bring a Science Olympiad Detroit Urban Schools Initiative to Wayne State. Jeremy Kodanko received an Outstanding Graduate Director Award, and Nawana Lawson received an Outstanding Contributor Award. Sarah Trimpin received a WSU Board of Governors Faculty Recognition Award. Jennifer Stockdill received a Career Development Chair Award. Jackie Baldyga was promoted to Facility Coordinator II. Former department member Amanda Bryant-Friedrich was welcomed back as dean of WSU's Graduate School. I was honored to receive an Outstanding Graduate Mentor Award from Wayne State. Colin Poole retired after a long career at WSU and had a special editorial in the *Journal of Chromatography* in his honor. Our students also continue to thrive. Regina Szlag received a fellowship from the Michigan

Space Grant Consortium, and Brooke Corbin received an F31 predoctoral fellowship from the National Institutes of Health. A team of students from the Brock and Verani labs — Tepora Su'a, Isuri Weeraratne, Samudra Amunugama, Fredricka Morgan, Karunamuni Silva, Thranga Batugedara, and Abigail Cousino — was chosen to host a symposium at the spring 2021 national meeting of the American Chemical Society, and they applied for and received funding from the National Science Foundation to support it. The WSU Chem Club garnered national attention when it worked with other chem clubs in the region to assemble the world's largest periodic table on Wayne State's campus. We've also expanded our Equity and Inclusion Committee, Safety Committee, and Recruiting Committee to include students, and were overwhelmed with volunteers when we put out the call. Additionally, Jessica Hovey won a poster prize at the Ohio Inorganic Weekend, and the Linz Lab won the department's inaugural safety competition.

My sincere gratitude goes to returning chemistry alumni Rose Ryntz, Hasini Mundigala, Kapila Wadumesthrige, Pavithra Pathirathna, Christopher Lajeunesse, Linda McKenzie, Ed Thomas, Larry Roy, Jane Philip, and Ed Hortelano for taking time to return to campus or to virtually network with our current students.

The remainder of this newsletter contains stories about happenings from the past year, including new faculty member James Bour, our new lab coat vending machines, our departmental safety contest, and updates from our student organizations and alumni.

For alumni, please stay in touch. Send updates with your outstanding achievements and new jobs so that we can include them in future newsletters. We love to hear from you and want to keep in touch. Next time you are in the Detroit area — after the pandemic — please stop by to see the building and meet with friends, colleagues, and mentors.

Sincerely,

Matthew J. Allen
Professor and Chair

Re-Introducing NOBCChE WSU student chapter

By Saheed A. Ayodeji

The National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) is a professional organization founded to promote the inclusiveness of Black and minority students in STEM. The WSU NOBCChE student chapter was resuscitated in the 2017-18 academic year and enjoys the goodwill of the Department of Chemistry and the College of Liberal Art and Sciences. The student body has organized professional talks over the past four years through its lectureship series, where professionals from academia and industry impart professional principles and ideas on the budding scientists.

Although the activities for 2019-20 academic year were disrupted by the COVID-19 pandemic, WSU's student chapter of NOBCChE hosted an



Photo by Lydia Micheaux Marshall

erudite scholar from Louisiana State University, Professor Isiah Warner, for a lectureship program. In addition, members participated in community engagement/volunteer service at Cass Technical High School, where they mentored students in preparation for their 2020 Detroit Metro Science Fair. The highlight of the year was the institution of a \$1,000 scholarship for eligible, incoming Black/minority

graduate students to encourage their successful pursuit of STEM.

The baton of leadership of the organization was recently passed, with the organization electing Fredricka Morgan as its president.

Alumnus forges a career through chemistry and art

By Lisa Anga

Photo by Lydia Micheaux Marshall



Langley Spurlock's love of chemistry has taken him many places: industry, academia, government and, perhaps most importantly, his own art studio. Spurlock earned his Ph.D. in organic chemistry at Wayne State University with Professor Norman LeBel in 1963. After graduation, he worked in industry until his agricultural research division closed unexpectedly. He took this as an opportunity to pursue a career in academia, joining the chemistry faculty at Temple University and later at Brown University.

From Brown, Spurlock was called to Washington, D.C., where he took a policy position with the American Council on Education. This new career focus took Spurlock to the National Science Foundation, where he was in charge of evaluating the peer review system. Eventually, Spurlock moved to the Chemical Manufacturers Association and, after 12 years, retired as a vice president.

It was in retirement that Spurlock fully embraced his lifelong love of art. After attending the Corcoran College of Art and Design, he decided to marry his art with his training in chemistry. Through a partnership with retired advertising copywriter

and poet John Martin Tarrat, Spurlock embarked on a 15-year project to describe each of the 118 elements of the periodic table using art and verse.

Spurlock's work has been exhibited at the American Association for the Advancement of Science, the American Center for Physics, the National Gallery of Art in Washington, D.C., the Bass Museum of Art in Miami Beach, the Provincetown Museum in Massachusetts, and his home base, Studio Gallery in Washington, D.C. Spurlock's story is evidence of the varied and interesting career options afforded by a degree in chemistry.

The future of PPE



New PPE dispensers in the chemistry building.

By Kris Perun

Since 2009, colleges across the United States have looked for ways to improve the safety of students, researchers, and staff while in labs. Updates to policy and consistent availability of personal protective equipment (PPE) has created a safer learning environment. Due to cleaning recommendations, managing the logistics of lab coats has created a challenge on college campuses and in private industry.

In January, the Wayne State University chemistry department partnered with Cintas for a lab coat dispensing program. Wayne State was one of the first higher education institutions in the United States to implement this type of program, which is becoming increasingly popular; as of July 2020, several additional Tier One research institutions have followed suit.

The program provides students and researchers 24/7 access to a lab coat that provides the applicable protection. With just a swipe of their OneCard, the user selects their lab coat size and, within a few seconds, receives a laundered lab coat. Upon completion of the day's lab work, the user returns the lab coat to a return unit. Cintas visits Wayne State regularly to restock the unit and pick up lab coats that are ready for laundering.

Science Olympiad (almost) comes to Wayne State

By Regina Zibuck

Nine Detroit-area high schools planned to compete at the inaugural Detroit Urban Schools Initiative Science Olympiad Tournament on March 28 at Wayne State University. Like most events last spring, the tournament was canceled due to the COVID-19 pandemic.

The goals of Science Olympiad are to bring science to life, show how science works, emphasize problem-solving aspects of science and the understanding of science concepts, develop teamwork and cooperative learning strategies among students, promote high levels of achievement and a commitment to excellence in students' study of the sciences, and foster students' interest in STEM careers.

By combining events from many disciplines, Science Olympiad encourages a wide cross section of students to get involved in active, hands-on group participation. Science Olympiad competitions are like academic track meets, consisting of a series of team events. Medals and trophies are awarded to the top teams and the winning team is invited to compete at the state tournament.

Plans for 2021 are underway for either an in-person or virtual tournament. If you wish to volunteer to help coach/mentor a team or volunteer on tournament day, contact event coordinator Regina Zibuck in the Department of Chemistry at rzibuck@wayne.edu.



Celebrating safety

By Tamara Hendrickson

The chemistry department held its inaugural Safety Party and Contest in December 2019. In addition to food, drinks, and topical music — including "Safety Dance" by Men Without Hats — the party included the culmination of two safety contests, a raffle, and a game. Raffle tickets were awarded to students and other researchers throughout the year when they were observed wearing proper personal protective equipment in the lab. Raffle prizes included gift certificates to local restaurants and memorabilia with department and WSU logos.

Students were also invited to participate in a quiz bowl-style competition with questions on chemical safety, Wayne State University and Detroit. First place went to the Lintz Lab, with second place going to the Allen Lab. Both labs received cash prizes to support lab outings. The party was sponsored by the department and Dean Stephanie Hartwell of the College of Liberal Arts and Sciences. We look forward to restarting this tradition once the pandemic is over.

Improving diversity and inclusion

By the Fehl Group

In the summer, the death of George Floyd at the hands of Minneapolis police officers led to a national reckoning with the systemic racism and entrenched inequality in American society and institutions. The Detroit STEM community is not immune to this reckoning. We at the individual, lab, and department levels must put in the work to help improve our community.

Here's what we are doing in the Fehl Lab to learn, discuss, and act:

- We start each of our weekly group meetings with a Diversity and Inclusion (D&I) Minute that features scientists in underrepresented groups, identifies issues and red flags, and practices ways to be more inclusive.
- We have started a quarterly book club to help us communicate and work through pressing D&I topics as a team. This fall, we're reading *Biased* by Jennifer Eberhardt.
- We use our Twitter platform for a monthly "Media Moment" to feature podcasts, articles, and music we find inspiring for a discussion open to the department and WSU STEM community.

Look for periodic email and Twitter announcements (follow [@FehlLab](https://twitter.com/FehlLab)) for how to join us and normalize our conversations and actions to inspire inclusion and feature new voices, including yours. Contact Charlie Fehl for more information at charlie.fehl@wayne.edu.

DEGREES AWARDED 2019-20



BACHELOR'S

Dominic Aiosa
Samia Alkatie
Qassim Alosaif
Narsees Alwaily
Mohammad Anwar
John Asni
Batoul Ayad
Ahmed Ayantayo
Stevanya Baho
Ian Belger
Sean Bevis
Guriqbal Bhullar
Jose Cardiel Nunez
Sarah Cherry
Riaz Chowdhury
Anthony Cicalo
Taylor Cichoski
Kelcie Conway
Graham Cwycyshyn
Micheal Demopoulos
Ina Dimitrievikj
Aya Dudar

Waleed Eliwat
Emma Graffice
Jamil Haddad
Myles Hardeman
Mark Hess
Mohamed Isaa
Ahmad Jaradat
Ryan Katz
Natalie Kelly
Yousef Kosho
Chase Leslie
Hafsa Masood
Yara Mohamed
Janela-Michelle Mojica
Jeana-Rene Morency
Aroma Naeem
Michael Nelson
Zachary Owczarzak
Andrew Porter
Karam Razooq
Ali Reda
Victoria Roby

Barbara Sadik
William Sexton
Leenah Silmi
Tristin Smith
Noah Stempniewski
Urvashi Thongam
Aldrin Trompeta
Vera Ujkic
Jason Withorn
Kenneth Yuk
Teresa Zimmerman

MASTER'S

Name	Degree	Advisor
Chris Acquah	M.A.	Brock
Rasoul Daliri Asbforoushani	M.A.	Rodgers
Malawara Arachchige Tharindu Nimanthaka Karunaratne	M.A.	Winter
Iftekher Mahmud	M.A.	Ahn
Susan A. White	M.A.	Kodanko
Pietro Geisler	M.S.	Pflum
Sandeep Nadella	M.S.	Kodanko

DOCTORATES

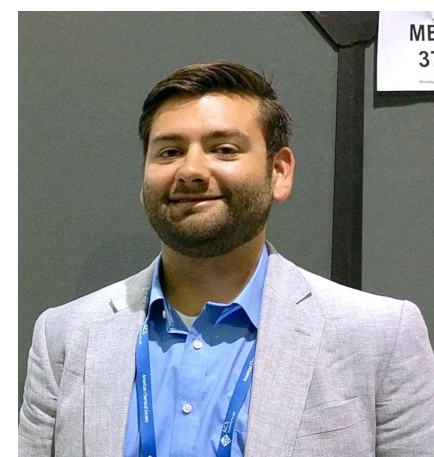
Name	Degree	Advisor
Kumuduni Tauni Dissanayake Dissertation Title: Synthesis, Structure, and Luminescence Properties of Rare-Earth-Doped Alkaline-Earth Fluorohalide Upconverting Nanocrystals	Ph.D.	Rabuffetti
Prabuddha Madubashitha Dodanduwa Waduge Dissertation Title: Exploring the Binding of Aminoglycosides and Effect of Peptides on Functionally Important Regions of the Ribosome	Ph.D.	Chow
Nour El Harakeh Dissertation Title: Investigation of Mechanism in 3D-Containing Electro/Photocatalysts for Proton/Water Reduction	Ph.D.	Verani
Kudamaduwege Inosha Dilani Gomes Dissertation Title: Substrate Trapping to Discover the Role of Histone Deacetylase Proteins Beyond Epigenetics	Ph.D.	Pflum
Lucas Ash Hamlow Dissertation Title: Modification of Bruker Amazon ETD and Solarix Mass Spectrometers Towards Infrared Multiple Photon Dissociation: Structural Characterization of Modified Nucleosides	Ph.D.	Rodgers
Bett Kimutai Dissertation Title: Non-Canonical Targets, Reaction Kinetics, and Cellular Potency of Amino Acid-Linked Platinum(II) Compounds	Ph.D.	Chow
Samuel Itumo Mutinda Dissertation Title: Synthesis and Characterization Of The Ternary Phase Co ₂ -xRh _x P Nanoparticles and Their Composition-dependent Electrocatalytic Activity Towards The Oxygen Evolution and Hydrogen Evolution Reactions, and Their Performance in Overall Water Splitting	Ph.D.	Brock
Samarage Sameera Prasad Perera Dissertation Title: Rare-Earth-Activated Group VI d ⁰ metal Oxides as Thermosensitive Phosphors	Ph.D.	Rabuffetti
Michael Gabriel Pirrone Dissertation Title: Influence of Conformational Restriction on the Antibacterial Activity and Ribosomal Selectivity of Aminoglycoside Antibiotics	Ph.D.	Crich
Udumbara Menike Rathnayake Dissertation Title: Functional Characterization of Accessory Proteins and Novel Activities in Direct and Indirect Trna Aminoacylation	Ph.D.	Hendrickson
Ruixi Wang Dissertation Title: Nonadiabatic Dynamics: A Semiclassical Approach	Ph.D.	Cherynak
Madusha Lakshani Watuthanthrige Perera Dissertation Title: Use of Alkoxyamines to Quantify and Map Uracils and to Kill B Cell Cancers	Ph.D.	Bhagwat
Whitney Wood Dissertation Title: tRNA Aminoacylation: New Protein Players and New Reactions	Ph.D.	Hendrickson
Guanyu Yang Dissertation Title: Modification of 4,5-Aminoglycosides to Overcome Drug Resistance Bacteria and Toxic Side Effect	Ph.D.	Crich



Dr. Prabuddha Madubashitha Dodanduwa Waduge



From left to right: Dr. Udumbara Menike Rathnayake and Professor Tamara Hendrickson



Dr. Michael Pirrone



Photo by Safiq Photography

Dr. Nour El Harakeh

In Memoriam

Remembrance of William L. Hase

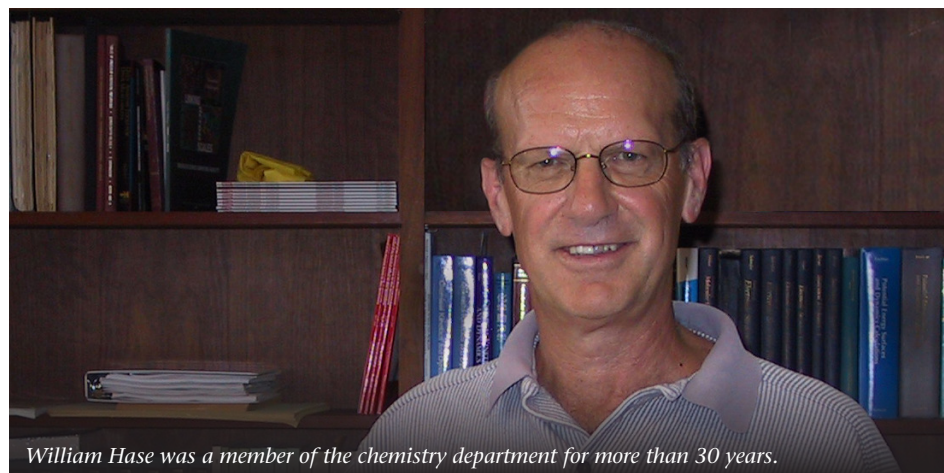
By Mary T. Rodgers

It is with great sadness that we report the loss of our friend and former colleague, William L. Hase, who died on March 23, 2020, from cancer. Hase was a highly valued colleague in the Department of Chemistry for more than 30 years before he moved to the Department of Chemistry and Biochemistry at Texas Tech University as the Robert A. Welch Chair.

Hase was born in 1945 in Washington, Missouri. He received his B.S. in chemistry from the University of Missouri in 1967, his Ph.D. in chemistry from New Mexico State University in 1970 with John D. Simons, and pursued postdoctoral studies at the University of California, Irvine with Don Bunker.

Hase joined the faculty of the Department of Chemistry at Wayne State University in 1973. He rapidly rose through the ranks, being promoted to associate professor in 1978, professor in 1981, Wayne State Academy of Scholars in 1994, and distinguished professor in 1997. During his more than 30 years of service, he was a highly dedicated professor, researcher, and mentor to both students and early career faculty, particularly to the physical chemistry division.

Hase originally came to Wayne State as an experimental physical chemist, but quickly shifted his research focus to theoretical/computational chemistry, where he made numerous seminal contributions that shaped many aspects of this field. Hase began applying theoretical and computational approaches to study unimolecular reactions with the goal of understanding these reactions in terms of classical and



William Hase was a member of the chemistry department for more than 30 years.

quantum dynamics and relating them to statistical rate theories, in particular, Rice-Ramsperger-Kassel-Marcus (RRKM) theory. Later, Hase investigated gas-phase SN₂ reactions and was the first to discover non-RRKM and transition state theory (TST) dynamical features of these reactions.

Hase also made vital contributions to the study of scattering of ions and molecules at surfaces and the ensuing energy transfer processes that enable soft landing of ions on surfaces or lead to surface-induced dissociation (SID). His approaches were applied to a variety of systems; in particular, studies of peptide dissociation. Hase is well known for the development of his direct dynamics program system VENUS, which became the cornerstone of his chemical dynamics simulation efforts.

Hase founded the annual Mesilla Chemistry Workshop in 1997. His vision for this meeting was similar to that of the department's Frontiers in Chemistry seminar series, which brings together leading scientists from around the world to discuss a different topic at the frontiers of physical chemistry each year.

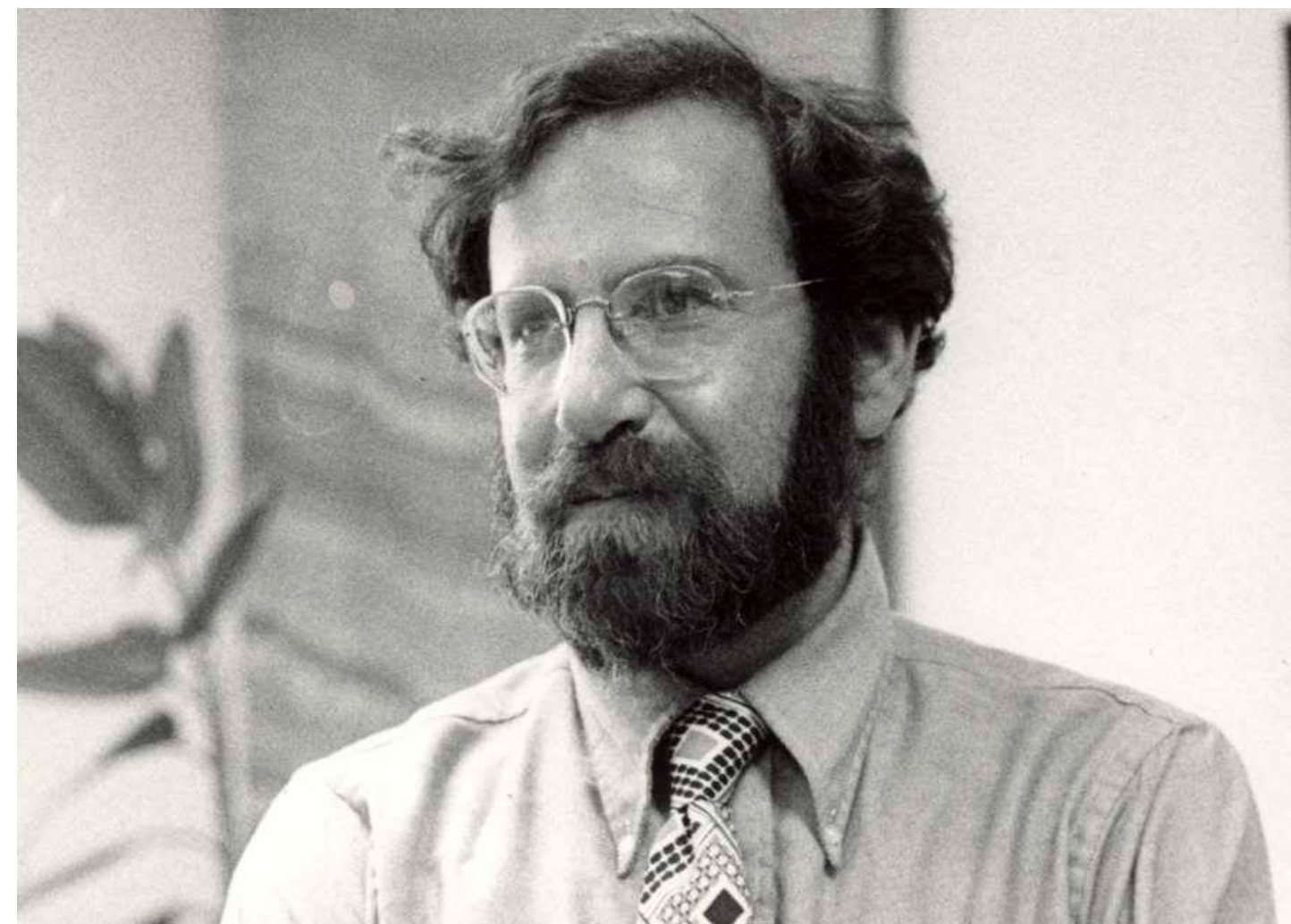
Hase strongly influenced my choice to pursue my academic career at WSU and was a constant source of advice and support early in my

career. I fondly remember PChem dinners and our many scientific discussions and social interactions. I felt a great loss when he moved to Texas Tech, but our common research interests regularly brought us together at scientific conferences. Although we spoke of collaborating often, somehow we only managed to publish one paper together. At the time of his passing, we had just begun to work on a joint proposal.

Colleagues and former members of Hase's research group are planning a symposium to celebrate his life and scientific contributions that will take place at the ACS Spring 2021 meeting. A special memorial issue of the *International Journal of Mass Spectrometry* is also currently being prepared and several nice tributes have been written in his honor.

Hase will be greatly missed, and is survived by wife, Alice M. Young (also formerly of WSU); his daughter; and his three brothers.

The family would value donations in Hase's name to the South Plains Food Bank, the South Plains Wildlife Rehabilitation Center, or the William L. Hase and Alice M. Young Fellowship in Chemistry at the University of Missouri (407 Reynolds Alumni Center, University of Missouri, Columbia, MO 65211).



Morton Raban

By Carl Johnson and Robert Bach

Retired WSU chemistry professor Morton Raban died on Feb. 12, 2020. He was 79. A native of St. Louis, Raban received a bachelor of arts from Harvard University in 1962, followed by a Ph.D. in organic chemistry under the guidance of Professor Kurt Mislow from Princeton University in 1967. He joined Wayne State University as an assistant professor in 1967 and became professor of chemistry here in 1974. Raban published more than 100 papers and patents on stereochemical and chiroptical properties of organic molecules. Early in his career, he coauthored with Mislow two landmark chapters in the book series *Topics in Stereochemistry* on "Stereoisomeric Relationships of Groups in Molecules" and "Modern Methods for the Determination of Optical Purity."

Throughout his career, Raban was influential in developing the stereochemical concepts of enantiomeric and diastereotopic protons and the advancement of NMR techniques to study stereochemistry. His work was supported by grants from the National Institutes of Health and the National Science Foundation.

Raban retired from Wayne State in 2008. He was an aficionado of opera and fine arts. His docent tours were so popular that he was named a volunteer of the year by the Detroit Institute of Arts. He was also very active as a Harvard alumnus and was a board member of the Harvard Club. He is survived by his wife, Diane Raban; two children; two stepchildren; and two grandchildren.

Welcome, James Bour

By James R. Bour



Photo by Cassandra Cramer-Bour

The Department of Chemistry welcomes James Bour, Ph.D., as an assistant professor. Bour is a native Michigander who completed his

bachelor of science at Hope College in 2013 and received his Ph.D. at the University of Michigan as a National Science Foundation Graduate Research Fellow working with Professor Melanie Sanford. Bour's thesis work concentrated on the elementary reactivity and catalytic applications of highly oxidized late transition metal organometallics.

Following graduation in 2018, Bour joined the Massachusetts Institute of Technology as an Arnold O. Beckman Postdoctoral Fellow. While at MIT, he worked in the lab of Professor Mircea Dincă on the synthesis of novel phosphine-containing metal-organic frameworks and effects of nanoconfinement on molecular catalysis.

Bour's research program at Wayne State draws inspiration from his graduate work and postdoctoral research. His group will investigate the synthesis of new porous organic materials and the synthetic applications of organometallics confined in such materials. Members of his lab will be trained in materials and organometallic synthesis as well as more traditional organic and inorganic chemistry.

Outside of lab, Bour enjoys camping in Michigan's state parks with his wife, Cassandra. They look forward to exploring Michigan's urban settings, starting with Detroit's unique food and art scene.

ALUMNI Updates

Hrant Hrachian, Ph.D. 2005, received tenure and promotion at the University of California Merced.

Tek Lamichhane, Ph.D. 2009, started a job at the Food and Drug Administration (FDA) as a lead reviewer at CDRH, Office of Health and Technology 4, White Oak, Maryland.

Dinuka Abeydeera, Ph.D. 2009, took a new position as a senior applications scientist at Carterra in Salt Lake City.

Kevin Crampton, B.S. 2012, is a postdoctoral researcher at Pacific Northwest National Laboratory after

completing a Ph.D. at the University of California Irvine.

Nate Hardin, B.S. 2016, completed a Ph.D. at the University of Michigan.

Sue White, B.S. 2016, M.A. 2020, received the 2020 Outreach Volunteer of the Year award from the American Chemical Society.

Yuan-wei (David) Nei, Ph.D. 2017, took a job at the FDA as a chemist at the Center for Tobacco Products, Office of Science, Division of Product Science in Beltsville, Maryland.

Hedieh Torabifard, Ph.D. 2017, will be assistant professor in chemistry at the University of Dallas.

Ji-Yung Tu, Ph.D. 2018, will be assistant professor in the Department of Applied Chemistry, National Chi Nan University.

Chamika Lenora, Ph.D. 2018, started a job as a chemist at Nth Degree Technologies.

Christine Arbour, Ph.D. 2019, received an NIH postdoctoral fellowship for her postdoctoral studies at MIT.

Lucas Hamlow, Ph.D. 2019, started a position in the Chemistry Support Department at GE Appliances in Louisville.

Mohammed Hawsawi, Ph.D. 2020, accepted a position as an assistant professor of organic chemistry at Umm AlQura University in Saudi Arabia.

In remembrance of alumni who have passed away over the past year:

Frank Warchol, B.S. 1951

Philip Dmetroschoko, B.S. 1993

Awards, Scholarships and Fellowships

GRADUATE AWARDS for 2019-20

Departmental Citations for Excellence in Teaching Service

Isaiah Adelabu
Fatemeh Aghabozorgi
Vinicius Alevato
Gihan Basnayake
Marcos Imer
Kate Lehman
Rana Morsy
Daniel Oppong
Michael Overbeek
Ruchiranga Ranaweera
Cathleen Saraza
Shakila Peli Thanthri
Sara Worku

Graduate School Citations for Excellence in Teaching

Rachel Beltman
Prabuddha Dodanduwa Waduge
Pietro Geisler
Sun Jeong Im
Umesh Kaluarachchige Don
Jiayi Li
Nadee Nisanka Jayarathne
Matarage Don
Timothy Quainoo
Thomas Rose-Gray
Mahesh Yadab

Esther and Stanley Kirschner General Chemistry Teaching Award

Regina Szlag

Herbert K. Livingston Award for Excellence in Teaching

Courtney Kondor

David F. Boltz Award in Analytical Chemistry

Ruchiranga Ranaweera

Esther and Stanley Kirschner Graduate Award in Inorganic Chemistry

Dinesh Amarasinghe
Amanda Grass

Dan Trivich Memorial Award for Research in Physical Chemistry

Paul Hoerner
Adedayo Sanni

Biological Chemistry Graduate Student Award

Jessica Stewart

Norman A. LeBel Endowed Graduate Award in Organic Chemistry

Madhawe Arachchi
Larry Mendoza

James C. French Graduate Award

Joseph Knoff

GRADUATE SCHOLARSHIPS and FELLOWSHIPS for 2019-20

ARC and Surendra Gupta Family Endowed Scholarship

Sudheer Kurup

Dr. Cal Stevens Memorial Scholarship (created by the Surendra and Karen Gupta ARC Foundation)

Rachel Beltman
Jessica Groenevelt
Jiayi Li

Knoller Fellowship

Dulani Dhanapala
Amanda Grass

Schaap-Rumble Graduate Research Fellowship

Adeleye Adewale
Henadeera Appuhamilage Dona
Disni Gunasekara
Rabiul Islam
Harshani Jayabahu Arachchilage
Aparni Kithulgoda Gamage
Hashini Munasinghe
Nuwan Chinthaka Punchi Naide
Acharige
Yakubu Seidu
Tepora Su'a
Aldora Devale Kapuralalage Isuri
Weeraratne

Wilfried Heller Research Fellowship

Tyler Jenks

Willard R. Lenz, Jr. Endowed Memorial Scholarship

Courtney Kondor
Rana Morsy

UNDERGRADUATE AWARDS for 2019-20

J. Russell Bright Award for Distinction in General Chemistry

Madeline Arnold

Harold B. Cutter Memorial Award in Organic Chemistry

Melanie Rofoo
Hadi Yassine

Wiley Award in Advanced Organic Chemistry

Teresa Zimmerman

Esther and Stanley Kirschner Undergraduate Inorganic Chemistry Award

Natalie Kelly

American Chemical Society, Division of Inorganic Chemistry Award

Emily Yatooma

Merck and Company Award in Biochemistry

Myles Hardeman
Seoyoung Woo

David and Beverly Rorabacher Award in Quantitative Analytical Chemistry

Cham Alden

American Chemical Society, Division of Analytical Chemistry Award

Natalie Kelly

Wilfried Heller Award in Physical Chemistry

Julia Chase

Hugh and Mary Ann Kelly Chemistry Undergraduate Endowed Research Scholarship

Ci Lee

Clifford G. Drouillard Annual Chemistry Award

Urvashi Thongam

American Chemical Society, Detroit Section Award for Outstanding Chemistry Graduate

Natalie Kelly

UNDERGRADUATE SCHOLARSHIPS for 2020-21

Uzoma Azuh Endowed Memorial Research Scholarship in Chemistry

Vince Pallo

Ralph E. and Helen G. Carter Endowed Scholarship

Anthony Bally
Sydney Kasmer

James C. French Undergraduate Chemistry Scholarship

Sabrina Hollowell
Syed Ahmed Musavi
Logan Nguyen

Dr. Bacon Ke Annual Scholarship

Wade Burson
John Karns
Norah Krayem
Vince Pallo
Varunika Savla
Seoyoung Woo

George H. Wheatley Memorial Scholarship

Syeda Shaheen

Mary G. Wood Endowed Scholarship

Chris Carter

CHEMISTRY INDUSTRY MENTOR PROGRAM

Dr. Ed Hortelano & Logan Nguyen
Dr. Jane Philip & Sydney Alexis Elebra
Dr. Larry Roy & Jamil Haddad
Dr. Rose Ryntz & Urvashi Thongam
Dr. Ed Thomas & David Solar

2020 CHAIR'S HONOR LIST

Nabila Ahmed
Philip Alkhouri
Madeline Arnold
Tristan Attisha
Alexa Atty
Cammie Brewster
Niharika Chinta
Michael Cholagh
Kimberly Deering
Mario Goro
Meherab Grewal
Spencer Haisha
Isis Hang
Sydney Kasmer
Sanehdeep Kaur
Kawleen Kaur
Richard Lewandowski
Emmanuel Meram
Arjun Muralidharan
Anthony Nardone
Hashmat Nawaz
Katharine Newell
Kaelan Patel
Linh Pham
Melanie Rofoo
Devyn Ryan
Mahmood Sanad
Amina Sharif
Amnah Sharif
Nolan Shoukri
Alexander Sonaglia
Sydney Suede
Anika Tasnim
Chidera Ubah
Carson Wilson
Lauren Zack

CHEMISTRY GRADUATES FOR 2020 ELECTED TO PHI BETA KAPPA

John Asni
Amatullah Burhani
Graham Cwycyshyn
Myles Hardeman
Natalie Kelly
Aroma Naem

FACULTY AWARD

**Darrell Ebbing, Ph.D. Endowed
Faculty Development Award**
Charlie Fehl

See what our department is up to!



Twitter:

twitter.com/waynestatechem

Instagram:

[instagram.com/waynestatechem](https://www.instagram.com/waynestatechem)

Facebook:

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YouTube:

[go.wayne.edu/chem-youtube](https://www.youtube.com/channel/UC...)

To keep up to date with what our students are doing, visit NOBCChE's and the Chem Club's Facebook pages at [facebook.com/wsunobcche](https://www.facebook.com/wsunobcche) and [facebook.com/WSUACSSA](https://www.facebook.com/WSUACSSA).



Welcome to the incoming graduate student class of 2020!



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