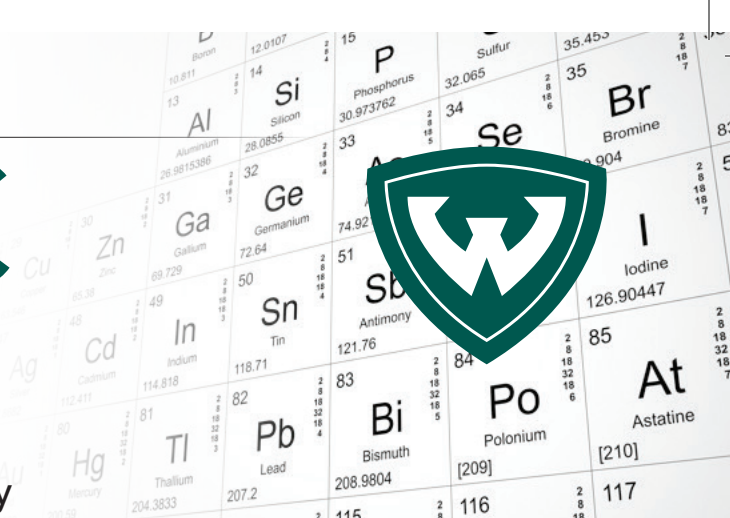


THE PERIODIC TABLOID

from Wayne State's Department of Chemistry

WINTER 2020



Members of Wayne State's ACS chapter with student participants at MiSci

Photo by Duke Debrah

Community chemistry

Written by John Karns

As Wayne State University's undergraduate chemistry club since 1943, the WSU American Chemical Society Student Affiliates (WSU ACS-SA) is the go-to club for undergraduate chemistry majors. While WSU ACS-SA is first and foremost a chemistry club, the chapter has been busy serving groups ranging from their own student body and the chemistry department to Girl Scout groups, local middle school visitors to Wayne State University, and elementary schools in disadvantaged local communities such as Hazel Park, Michigan.

The WSU ACS-SA planned exciting activities throughout the 2018-19 academic year. These events included Chemistry Days with K-12 students, and demos for Michigan Science Center summer campers and the middle school students who visited Wayne State for STEM Day. Chapter members also ventured into the community to provide chemistry

demonstrations and hands-on activities at events such as Chemistry Day at United Oaks Elementary and Girl Scout Chemistry Day.

As another initiative for National Chemistry Week, the WSU ACS-SA volunteered with the Detroit Local Section and organized many free events around Wayne State. With the Detroit Local Section, the chapter hosted a variety of activities such as making slime and paper chromatography. On campus, the organization put together free social functions for the student body. The group also hosted its annual symposium during the week, sporting a number of speakers ranging from industry to medicinal chemistry.

Contact WSU ACS-SA at wsuacs@wayne.edu for more information. Donate at warriorfunder.wayne.edu.

Promoting a culture of safety

Written by Tamara Hendrickson

The chemistry department continues to make strides toward its goal of having a safety culture that rivals that found in most industrial settings. This year, the Safety Committee rolled out two contests to reward students for their commitment to safety.

In the first, Professor Tamara Hendrickson conducts random Personal Protective Equipment (PPE) inspections, during which she hands out raffle tickets to students wearing full PPE. The Safety Committee will also host a departmentwide Safety Party on Dec. 13, which will include the raffle drawing. PPE-wearing students will be eligible for a variety of prizes, and the highlight will be a game show to identify the safest lab in the department.

Hendrickson and Professor Matthew Allen have been conducting monthly inspections to identify labs with demonstrated commitments to state and federal safety standards. The top labs will compete in the game show, and the winning team will receive financial support for a lab outing. We don't expect Men Without Hats to attend, but it is likely that the winning team will do the "Safety Dance" in celebration.



LETTER FROM THE CHAIR

Dear friends and alumni,

A lot has happened in the chemistry department over the past year, and this newsletter provides a few highlights. I encourage you to follow us on social media for more information on the current happenings of the department. Also, please join our Wayne State Chemistry Alumni and Friends group on Facebook and link up with us on LinkedIn.

The following highlights provide a small sampling of what happened in the department over the past year: Jennifer Stockdill was promoted to associate professor, and Wen Li was promoted to full professor. Jin Cha began serving as a program director at the National Science Foundation. Aaron Rury received a Young Investigator Award from the Air Force Office of Scientific Research. Stephanie Brock received an Outstanding Graduate Mentor Award from WSU. Long Luo was selected to be a member of the Langmuir Early Career Advisory Board and of the Detroit Section of the Electrochemical Society. Mary Rodgers became a member of the WSU Academy of Scholars. Sarah Trimpin received the Biemann Medal from the American Society for Mass Spectrometry. Tom Linz received a Starter Grant Award from the Society for Analytical Chemists of Pittsburgh. Mary Kay Pflum was named a Charles H. Gershenson Distinguished Faculty Fellow. Andrea Matti received a College of Liberal Arts and Sciences teaching award. Judy Westrick received a best paper award from the American Water Works Association. I was honored to be named a fellow of the American Chemical Society and of the American Association for the Advancement of Science. Diane Kudla retired, and Andrew Feig and David Crich moved to other opportunities. We are grateful for their contributions to WSU Chemistry.

Our students are also thriving. The WSU Chapter of NOBCChE received a Champions of Diversity and Inclusion Award, and the WSU Chem Club received a Commendable Chapter Award from the American Chemical Society. Additionally, Bailey McCarthy Riley (Linz Lab) received a first-place poster award at ANACHEM, and Kody Whisnant (Brock Lab) received an outstanding student poster award at the 2019 Michigan Catalysis Society Spring Symposium. We expect to see many similar successes in the future as

we welcomed a near-record size class of graduate students this past fall.

My sincere gratitude goes to our returning alumni Ravi Amunugama (Ph.D. 2002), James Bellow (B.S. 2011, Ph.D. 2016), Ashley Campanali (Ph.D. 2011), Jean-Paul Desaulniers (Ph.D. 2005), Hrant Hratchian (Ph.D. 2005), Arya Jayatilaka (Ph.D. 1994), Brian Johns (Ph.D. 1997), John Kadow (Ph.D. 1985), Thomas Knisley (Ph.D. 2012), Jeff Kohrt (postdoc 1996-98), Rose Ryntz (B.S. 1979), Elke Schoffers (Ph.D. 1996), Chris Senanayake (Ph.D. 1987), Raj Sharma (Ph.D. 2011), Brad Tait (Ph.D. 1986), Edward Thomas (Ph.D. 1977), Dajena Tomco (B.S. 2008, Ph.D. 2014), Haobin Wang (Ph.D. 1996), Judy Westrick (B.S. 1985), Maryam Yousif (Ph.D. 2017) and Fu-Shin Yu (Ph.D. 1988), for taking time to return to campus to network with students and share their post-WSU experiences.

The remainder of this newsletter contains stories about new senior lecturers Nancy Wu, Sean Hickey and Dajena Tomco; our new staff members Mishad Ahmed and Nawana Lawson; our new NMR and EPR Lab and X-ray Lab directors Dennis Anderson and Cassandra Ward; the Johnson-Pfizer Symposium (thank you to everyone who attended); our new mentorship program; new titrators in undergraduate labs; our upcoming departmental safety contest; updates from our student organizations; and updates from 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've made it easy to share your stories with us — we love to hear from you and want to keep in touch. Finally, next time you are in the Detroit area, please let us know and stop by to see the building and meet with friends, colleagues and mentors.

Sincerely,

Matthew J. Allen
Professor and Chair

NOBCChE chapter wins Champions of Diversity Award

Written by Samuel Mutinda

The WSU chapter of the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) continues to advance diversity in the chemical sciences and has seen great growth within the last academic year, both in terms of membership and professional development activities. One of the greatest accomplishments was winning the Champions of Diversity Award at the Wayne State Spirit of Community Awards ceremony.

The chapter continues to host professional lectureship events, in which accomplished professionals across the country engage with students and postdoctoral scholars to offer professional mentorship and deliver lectures. The chapter recently hosted accomplished scientists from industry and academia, including Dr. Anne Shim and Erika Peterman from BASF, Professor Paula Hammond from



Photo by Duke Debrah

MIT, and Professor Sossina Haile from Northwestern University.

The organization continues to engage with the Wayne State community in many other aspects, including volunteering at programs such as Build Detroit, in which members teach selected minority students to prepare them for their freshman year at Wayne State; Cass Technical High School student mentorship; and Wayne State's annual STEM Day.

Finally, the chapter recently ushered in new leadership, headed by President Duke Debrah, along with other talented and highly motivated executive board members. The handing-over ceremony was attended by Department Chair Matt Allen and faculty advisors Dr. Sarah Trimpin and Dr. Aaron Rury.

CASSANDRA WARD JOINS LIC

Written by Cassandra Ward

Photo by Dr. Johanna Birbeck



In December 2018, Cassandra "Cassie" Ward, Ph.D., joined the Lumigen Instrument Center (LIC) as the associate director of the X-Ray Laboratory. In 2014, Ward earned a Ph.D. in chemistry in the laboratory of Chris Elles at the University of Kansas. Her dissertation research used ultra-fast laser pulses to control photochemical reactions of photochromic molecular switches.

As the first member to join the Elles Lab, Ward developed the ultra-fast

laser spectroscopy experiments, including all of the LabVIEW programming, the detector hardware development and the optical layout. She then moved to the University of North Carolina-Chapel Hill, where she worked for Jerry Meyer as a postdoctoral researcher. There, Ward combined electrochemistry with steady-state and time-resolved spectroscopy to study Ru-bipyridyl complexes on transparent metal-oxide surfaces for applications in dye-sensitized solar cells.

With a background in developing novel instrumentation, Ward joined

the Linz Lab at Wayne State, where she developed a rapid thermocycling system to perform microfluidic digital quantitative PCR. Additionally, she developed a novel microfluidic gel electrophoresis system for the enhanced fluorescence detection of small molecules and nucleic acids. Cassie then transitioned to a postdoc position in the LIC X-ray laboratory prior to obtaining her current position. She manages and maintains the X-ray instruments and the optical spectroscopy instruments, trains and assists users on these instruments, and solves small-molecule, single-crystal structures.

The Mentoring Element

Written by Steve Zoski



Mentees Dean Jarois and Titiana Gorges were recognized at Honors Convocation for their participation in the inaugural Chemistry Industry Mentor Program

It has been energizing and — as expected — extremely rewarding; it has not only provided me the opportunity to forge a mutually respectful relationship with a bright, dedicated student, but also laid the foundation for continued interaction beyond her graduation,” said Roy. “It was an honor to provide her with a little guidance, advice and support, and I look forward to witnessing Titiana’s professional evolution and eventual success.”

For Titiana, the appreciation was mutual.

“One of the best experiences in my undergraduate career included the Industry Mentoring Program,” she said. “Dr. Roy is an outstanding doctor and mentor. I learned a lot about the application process for graduate/medical schools, giving me the opportunity to be the best applicant I can possibly be. I will forever remember all of the advice Dr. Roy gave me, and I will continue to be in contact with him throughout my journey in the medical field.”

The Department of Chemistry Industry Mentor Program will continue in 2020-21. Students interested in applying can contact erin@wayne.edu, while alumni who are interested in mentoring may email steve.zoski@wayne.edu.

experiences; all mentors said they believe they made a difference.

Larry Roy, M.D., a 1980 chemistry graduate and current vice president of quality and patient safety at Advocate Children’s Hospital, mentored Titiana Gorges, a 2019 chemistry graduate.

“Mentoring Titiana has been a wonderful and fulfilling experience.

This was the inaugural year of the Department of Chemistry’s Industry Mentor program. Alumni mentors meet with student mentees bimonthly to discuss goals and provide firsthand leadership. Mentors came from a variety of fields, giving students the chance to meet with someone who has pursued a path relevant to their own. The inaugural class of mentors were Ph.D.s and M.D.s who took mentees into their labs or hospitals for insightful

WSU Chemistry hosts Johnson-Pfizer Symposium

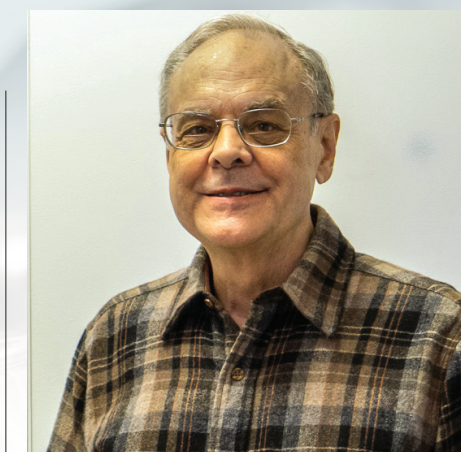
Written by Lisa Anga

Last spring, alumni from across the country returned to campus to celebrate the career of Distinguished Professor Emeritus Carl Johnson and the hiring of Professor Hien Nguyen as the Johnson-Pfizer Endowed Chair during the annual Johnson-Pfizer Symposium.

Attendees viewed presentations from alumni of the Johnson Lab, including Dr. Brian Johns, chief scientific officer at HemoShear Therapeutics; Professor Elke Schoffers from Western Michigan University; Dr. Chris Senanayake, CEO of AstaTech Inc.; Dr. John Kadow, senior director of medicinal chemistry at Viiv Healthcare; and Dr. Judy

Westrick, director of the Lumigen Instrument Center at Wayne State University.

The event also included a presentation by Dr. Jeff Kohrt, senior principal scientist at Pfizer. Following the symposium, alumni, faculty and students gathered for a reception, where many fond memories of the Wayne State chemistry department were shared. Thank you to everyone who participated in this exciting event. To be included in future alumni events, please update your profile at alumni.wayne.edu/connect/update.



Alumni Spotlight: Lou Pepoy

Written by Lisa Anga

Lou Pepoy never intended to earn his Ph.D. in organic chemistry. In fact, Pepoy was more interested in physics than chemistry while in high school. But with a little luck, a lot of hard work and the guidance of his master’s advisor at John Carroll University, Pepoy found his way to Carl Johnson’s lab at Wayne State.

Upon graduating from WSU, Pepoy took a job at DuPont in New Jersey, where his work focused on pigmentation for the auto industry. Eventually, he found his way to Holland, Michigan, and took a position at Chemetron — which eventually merged with BASF — where he spent 18 years. Pepoy ended his career at Merck in Savannah, Georgia, and moved back to Holland to begin his retirement.

Last spring, during the Johnson-Pfizer Symposium, Pepoy was able to reconnect with former Wayne State classmates Walt Siegl, Peter Rogers and Gerry Dutra — and, of course, his former advisor, Carl Johnson. Pepoy, who has supported the chemistry department for over 40 years, said he is grateful for his experience at WSU.

“My time in the chemistry department led to a satisfying and interesting career in the industry,” he said. “I am happy to give back to such an important program.”

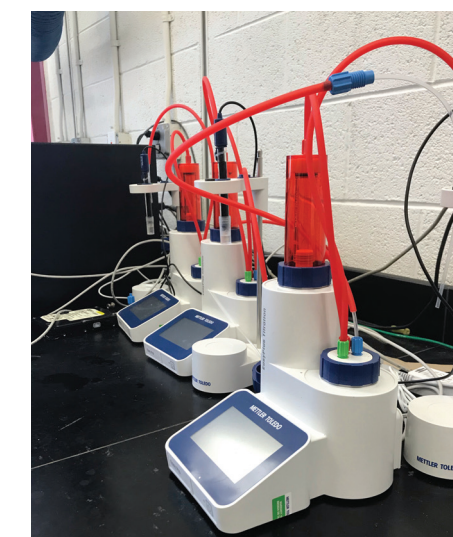
Integrating industry into undergrad

Written by Andrea Matti

Integrating industrial practices into teaching labs is an important concept to student education. It is vital for students to see instrumentation applied in industrial settings — such as pharmaceutical companies — so they can see the progression of science and use the type of instrumentation employed at nonteaching levels.

Consequently, five new auto-titrators were installed into the General Chemistry II/Analytical Chemistry Laboratory. These instruments enable students to compare their methods of doing a titration to an instrument using the same technique. Because laboratory reports in this course are graded on accuracy, using auto-titrators gives the students a glimpse into the efficiency of analytical instruments.

In the basement hallway of the A. Paul Schaap Chemistry Building and Lecture Hall, the walls are lined with

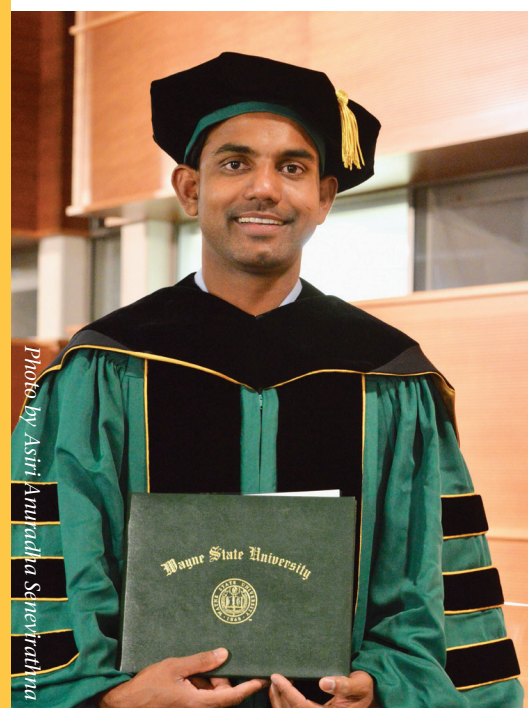


instrumentation from past decades that show how far science has come in developing new techniques. It is important to bring that same kind of inspiration into the classroom.

Exposing students to advances in science not only ignites an appreciation for the progression of science, but also exposes students to techniques not typically seen in undergraduate teaching laboratories.

DEGREES

AWARDED 2018-19



Dr. Dhanushka Munkanatta Godage

BACHELOR'S

Marwa Abdel-Maguid	Jacob Frazier	Yashkumar Patel
Eugersa Agolli	Titiana Gorges	Krishna Paul
Abeer Ali	Urvashi Gupta	Andrea Preenkocevic
Amira Alnabolsi	Anthony Hanna	Sahil Rafai
Ithar Alsarraf	Douglas Haslitt	Hassan Ramadan
Jamal Anwar	Shane Jackowski	Ali Ramzan
Reneh Araj	Dean Jarois	Kendyl Richter
Zahidur Arif	Shervyn Karthanal	Tyler Roshak
Ali Ayoub	Austin Kelly	Adam Schlichther
David Bahling	Christopher Komorous	Kaylie Schneider
Melissa Ballard	Dayzsa Lewis	Guy Shelley
Floriana Bebri	Philip Maassen	Andrew Spaulding
Kayla Belavek	Troy Magier	Joseph Srebernak
Nicole Beller	Lance Maroki	Raman Srinivasan
Kejsi Bendo	Paul Marshall	Ramona Stamatina
Raihanah Bohamad	Kimberly Maynard	Amanda Vanderlugt
Adrianna Breckenridge	Obadeh Mohiddin	Joseph Wafer
Benjamin Brown	Renieh Nabaty	Dreana Williams
Arnulfo Cazares	Joseph O'Brien	Zerilda Xaka
Nirmeen Chouaib	Mackenzie Olbrys	Todd Yee
Anthony Costa	Lauren Oppenheiser	
Garrett Figley	Dhruvil Patel	

MASTER'S

Name	Degree	Advisor
Nathan Cunningham	M.S.	Rodgers

DOCTORATES

Name	Degree	Advisor
Philip Adero Dissertation Title: Cation Clock Reactions for the Determination of Relative reaction Kinetics in Glycosylation reactions	Ph.D.	Crich
Marim Alnaed Dissertation Title: Chemical and Physical Studies of Charge Transfer Excited States of Ruthenium Complexes with Aromatic Ligands	Ph.D.	Li/Endicott
Harsha Amarasekara Dissertation Title: Influence of Side Chain Conformation on the Mechanism(s) of Glycosylation Reactions; Investigation of Sialidation Reaction Mechanism(s) by Kinetic Studies	Ph.D.	Crich
Christine Arbour Dissertation Title: Harnessing the Reactivity of the N-Methyl Diaminobenzoyl Linker to Access C-Terminally Modified and Macrocyclic Peptides	Ph.D.	Stockdill
Karan Arora Dissertation Title: Synthesis, Characterization, Computational & Biological Evaluation of Cages Bioactive Molecules	Ph.D.	Kodanko
Lina Basal Dissertation Title: Multimodal Europium(III)-Containing Complexes with Application in Redox Sensing	Ph.D.	Allen
Kyle Blakeney Dissertation Title: Synthesis of Volatile and Thermally Stable Aluminum Hydride Complexes and Their Use in Atomic Layer Deposition of Metal Thin Films	Ph.D.	Winter
Bibek Dhakal Dissertation Title: Stereoselective Synthesis of Legionaminic Acid and Pseudaminic Acid Glycosides	Ph.D.	Crich
Sandeep Dhanju Dissertation Title: 3D Momentum Imaging Spectroscopy Probing of Strong-Field Molecular and Surface Dynamics	Ph.D.	Crich
Danushka Ekanayake Dissertation Title: Insights and Challenges in the Development of Molecular Copper-Based Electrocatalysts for Water Reduction	Ph.D.	Verani

DOCTORATES (continued)

Name	Degree	Advisor
Lin Fan Dissertation Title: 3D Momentum Imaging Spectroscopy Probing of Strong-Field Molecular and Surface Dynamics	Ph.D.	Li
Chenchen He Dissertation Title: Characterization of Protonated Modified Nucleosides and Amino Acid-Linked Cisplatin Analogues Using Tandem Mass Spectrometry Complemented by Theoretical Approaches	Ph.D.	Rodgers
Pavithra Hetti Achchi Kankanamalage Dissertation Title: Pyridine Platforms for Catalytic Water Reduction Based on Nickel and Iron Complexes	Ph.D.	Verani
Malsha Hettiarachchi Dissertation Title: Binary and Ternary Transition Metal Princtide Nanoparticles and Their Three-Dimensional Assemblies: Towards Promising Magnetic Refrigeration Materials	Ph.D.	Brock
Indika Hewavitharana Dissertation Title: Moderating Nanoparticle Chalcogenide Reactivity By Morphology Control: Ion-Exchange Vs. Covalent Crosslinking Lead Sulfide Quantum Dot-Conducting Substrate/Porous Silicon Composite for Radiation Detectors	Ph.D.	Brock
Ryan Hollingsworth Dissertation Titles: Synthesis of open-chain and macrocyclic xanthene-bridged bimetallic cobalt, nickel, and copper complexes for cooperative catalysis	Ph.D.	Groisman
Thilini Hollingsworth Dissertation Title: Design, Synthesis, and Reactivity of Homo- and Heterobimetallic Complexes Bridged by a Xanthene Linker	Ph.D.	Groisman
Wathsala Lakmali Iwadunna Waduge Dissertation Title: Atomic Layer Deposition (ALD) and Atomic Layer Etching (ALE) of Thin Films: Synthesis and Characterization of a New Class of ALD Precursors, ALD of PrAlO ₃ Thin Films, and Thermal ALE of Cobalt Metal Films	Ph.D.	Winter
Robol Lenorage Chamika Lenora Dissertation Title: Magnetic-Resonance-Imaging Relevant Properties and Kinetic Inertness of Lanthanide Cryptates	Ph.D.	Allen
Ao Li Dissertation Title: Design of Ruthenium(II) Polypyridyl Complexes for Effective Caging Nitriles and Aromatic Heterocycles	Ph.D.	Kodanko
Xiaoxiao Liao Dissertation Title: Design and Synthesis of Olgio-(3,5-Dithio-β-D-Glucopyranoside) as β-(1→3)-Glucan Mimetics	Ph.D.	Crich
Kangmin Liu Dissertation Title: Solvent Effects and Charge Transfer States in Organic Photovoltaics	Ph.D.	Chernyak
Dhanushka Munkanatta Godage Dissertation Title: Functional Study of SMYD2 Glutathionylation in Cardiomyocytes	Ph.D.	Ahn
Nisansala Muthunayake Dissertation Title: Investigation of the In Vivo Activity of Ribosome-Targeting Peptides and Aminoglycosides in Escherichia Coli	Ph.D.	Chow
Hasina Saraha Dissertation Title: Strategies for Controlled Disulfide Formation to Access Neuroactive Conotoxins and Investigation of Novel Palladium-Labile Cystine Protecting Groups	Ph.D.	Stockdill
Mathes Hewage H. Sirinimal Dissertation Title: Harnessing Radical Reactivity for the Construction of Natural Product Frameworks and Transition Metal Catalyst Stability in a Modified Kochi Coupling Reaction	Ph.D.	Stockdill
Sachini Siriwardena Dissertation Title: Biochemical and Cellular Studies of Apobec3 Family DNA-Cytosine Deaminases	Ph.D.	Bhagwat
Supuni Thalalla Gamage Dissertation Title: Insights into Nucleic Acid-Platinum(II) Compound Interactions and Structural Impacts	Ph.D.	Chow
Yi-Jung Tu Dissertation Title: Applications of Molecular and Quantum Mechanical Methods for Studying the Chemical reactions of Inorganic and Organic Systems	Ph.D.	Schlegel/Cisneros
Peng Wen Dissertation Title: Toward Better Keys for Lectin Locks: Glycoconjugates Versus Glycomimetics	Ph.D.	Crich
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. Wathsala Lakmali Iwadunna Waduge

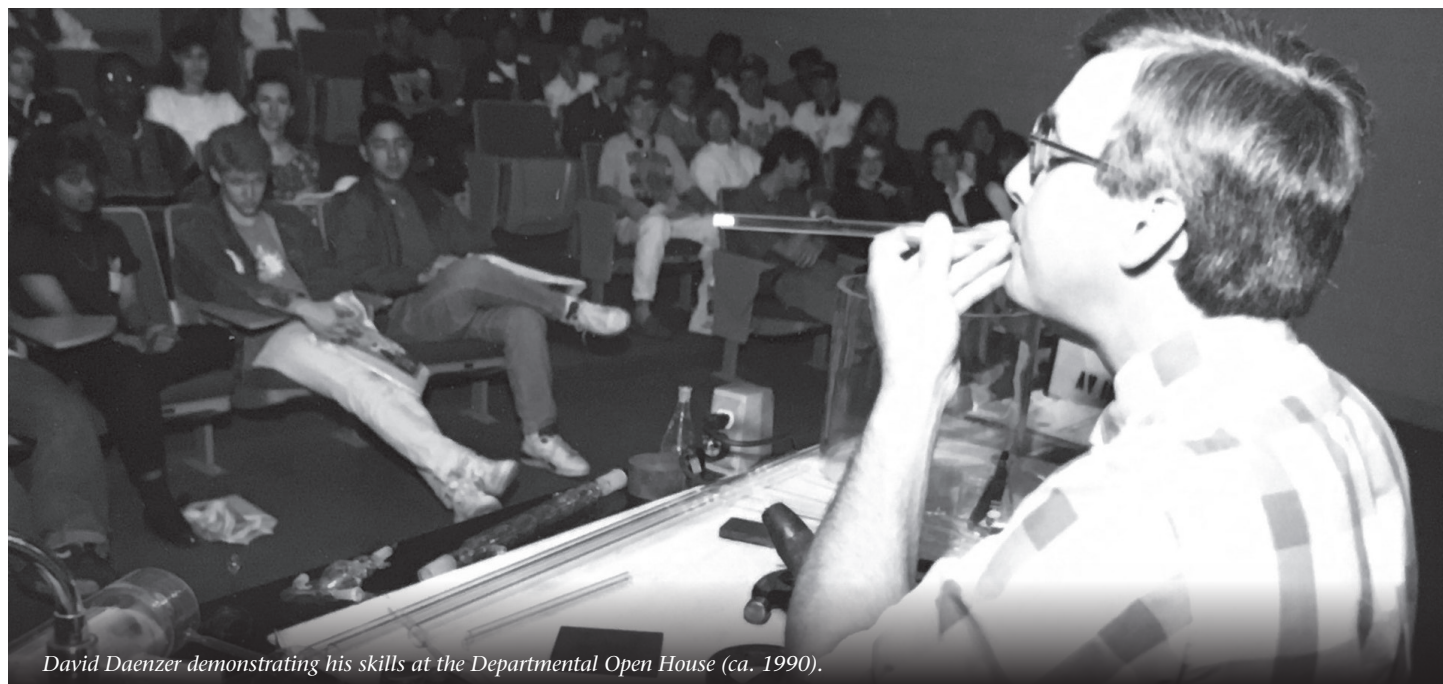


From left to right: Dr. Robol Lenorage Chamika Lenora, Professor Matt Allen, and Dr. Lina Basal



Dr. Malsha Hettiarachchi

In Memoriam



David Daenzer demonstrating his skills at the Departmental Open House (ca. 1990).

Retired WSU glassblower David Daenzer

By David M. Coleman

David Daenzer, 66, of Mount Clemens, Michigan, passed away on Sept. 15.

David was born July 1, 1953, in Sheboygan, Wisconsin. He completed his B.S. in education at Concordia Teacher's College in Seward, Nebraska; he also trained at Salem Community College in New Jersey for scientific glassblowing. He first managed the glass shop at the Ethel Corporation in Ferndale, Michigan, before coming to Wayne State University as a glassblower until his retirement in 2009.

David was an exquisite craftsman who took delight in partnering with Wayne State researchers to design glass systems that always exceeded initial

expectations. While employed by the College of Liberal Arts and Sciences, his work transcended many departments, particularly impacting the chemistry department. In later

years, David reported to the director of the Central Instrument Facility/Lumigen Instrument Center. He was always willing to quietly teach his craft to graduate students who showed keen interest.

After his retirement, the position of glassblower was eliminated, as it became increasingly difficult to get the fast and collaborative service that researchers had become so accustomed to. David continued to

work from his own shop, Daenzer Glass Design, until 2019. He was an active member and supporter of

the American Scientific Glassblowers Society, holding many positions, including president in 1994.

David is survived by his wife of 42 years, Katrina Daenzer; his son, Sean (Audrey) Daenzer; and numerous grandchildren and relatives.

A memorial service was held on Sept. 30 in Seward, Nebraska. Donations may be made in remembrance of David to the Dunklau Center for Science, Math and Business at Concordia University at 800 N. Columbia, Seward, NE 68434.

In addition to his scientific prowess, David was a gifted artist who annually delighted colleagues and friends with myriad Christmas ornaments that he sold or gifted. His humor was infectious.

He will be missed.



Notoriously difficult to fabricate, a Klein Bottle that David gifted to the author.

Awards, Scholarships and Fellowships

GRADUATE AWARDS for 2018-19

Departmental Citations for Excellence in Teaching Service

Eric Davis
Pietro Geisler
Chathuranga Chinthana Hewa
Rahinduwege
Jessica Hovey
Joseph Knoff
Rabiul Islam
Amirreza Samarbaksh
Cathleen Saraza
Nicholas Toupin
Austin Walsh

Graduate School Citations for Excellence in Teaching

Adeleye Adewale
Brooke Corbin
Duke Debrah
Henadeera Appuhamilage Dona
Disni Gunasekera
Herath Mudiyansele G. Herath
Aparni Kithulgoda Gamage
Dhanushika Kukulage
Lawrence Mendoza
Alan Mlotkowski
Regina Szlag
Maheeshi Yapa Abeywardana

Esther and Stanley Kirschner General Chemistry Teaching Award

Bailey McCarthy Riley

Herbert K. Livingston Award for Excellence in Teaching

Jessica Stewart

Esther and Stanley Kirschner Graduate Award in Inorganic Chemistry

Samarage Sameera Perera

Dan Trivich Memorial Award for Research in Physical Chemistry

Sebastien Hebert
Harrison Roy

Biological Chemistry Graduate Student Award

Ramin Sakhtemani

Norman A. LeBel Endowed Graduate Award in Organic Chemistry

Rachel Beltman
Jiayi Li

James C. French Graduate Award

Aparni Kithulgoda Gamage

Clifford G. Drouillard Annual Chemistry Award

Jordan Burton
Sudheer Kurup

GRADUATE SCHOLARSHIPS and FELLOWSHIPS for 2018-19

ARC and Surendra Gupta Family Endowed Scholarship

Sandeep Nadella

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

Paul DeMent
Joseph Knoff
Aparni Kithulgoda Gamage
Nicholas Toupin

A. Paul and Carol C. Schaap Research Fellowship

Christine Arbour

Schaap-Rumble Graduate Research Fellowship

Zachary Devereaux
Kudamaduwege Inosha Gomes
Amanda Grass
Nour El Harakeh
Tyler Jenks
Samuel Mutinda
Madusha Lakshani Watuthantrige
Perera

Samarage Sameera Perera

Michael Pirrone

Ramin Sakhtemani

Wilfried Heller Research Fellowship

Matthew Bailey

Willard R. Lenz, Jr. Endowed Memorial Scholarship

Jessica Groenvelt
Joseph Knoff

UNDERGRADUATE AWARDS for 2018-19

John H. Secrist Memorial Award in General Chemistry

Amber Stephens

J. Russell Bright Award for Distinction in General Chemistry

Frass Ahmed

Wiley Award in Advanced Organic Chemistry

Kayla Belavek

Esther and Stanley Kirschner Undergraduate Inorganic Chemistry Award

Ali Ramzan

American Chemical Society, Division of Inorganic Chemistry Award

Ali Ramzan

Merck and Company Award in Biochemistry

Julia Chase

David and Beverly Rorabacher Award in Quantitative Analytical Chemistry

Obaidah Bitar

David and Beverly Rorabacher Research Award in Analytical Chemistry

Frank Yenchick

American Chemical Society, Division of Analytical Chemistry Award

Dean Jarois

Wilfried Heller Award in Physical Chemistry

Natalie Kelly

American Chemical Society, Division of Physical Chemistry Award

Chase Leslie

Hugh and Mary Ann Kelly Chemistry Undergraduate Endowed Research Scholarship

Sherrell Haney

Frank Yenchick

American Chemical Society, Detroit Section Award for Outstanding Chemistry Graduate

Kayla Belavek

UNDERGRADUATE SCHOLARSHIPS for 2019-20

Uzoma Azuh Endowed Memorial Research Scholarship in Chemistry

Jamil Haddad

John Pallo

Ralph E. and Helen G. Carter Endowed Scholarship

Amatullah Burhani

Aroma Naeem

Kenneth Yuk

Chemistry Undergraduate Scholarship

Kostana Ligori

Kamal Safah

Dale H. Chidester Memorial Endowed Scholarship in Chemistry

Noah Stempniewski

Seoyoung Woo

James C. French Undergraduate Chemistry Scholarship

Riaz Chowdhury

Kelly Shaye Patero

Jane and Frank Warchol Foundation Scholarship

Sean Bevis

George H. Wheatley Memorial Scholarship

Ian Belger

Kelcie Conway

Mary G. Wood Memorial Endowed Scholarship

Ahmad Jaradat

Logan Nguyen

CHEMISTRY INDUSTRY MENTOR PROGRAM

Dr. Rose Ryntz and Dean Jarois
Dr. Ed Hortelano and Noah

Stempniewski

Dr. Larry Roy and Titiana Gorges

Dr. Nithin Thummala and Syed

Ahmed Musavi

2019 CHAIR'S HONOR LIST

Fatima A

Omar Abbas

Frass Ahmed

Zeyad Al-Hakim

Hira Ali

Aya Aoode

Tristan Attisha

Hussein Bazzi

Allison Berger

Wade Burson

Samantha Cherney

Riya Chhabra

Emmanuel Dannug

Rida Farook

Mahfujul Haque

Lauren Harven

Katia Hermes

Devin Holcomb

Khush Hussain

Sonal Joshi

Arsh Kaiser

Sudharshana Kanduri

Breanna Konowalski

Alex Kuang

Julia Mlinarevic

Marwa Moubadder

Arjun Muralidharan

Livia Philip

Glen Angelo Quicho

Devyn Ryan

Duaa Saleh

Kaylee Sayen

Jeremey Schwartz

Priya Sharma

Nolan Shoukri

Sarabjot Singh

Noor Sulaiman

Chidera Ubah

Joseph Wingett

Genevieve Yarema

Arbora Yzeiri

Anna Zakharian

CHEMISTRY GRADUATES FOR 2019 ELECTED TO PHI BETA KAPPA

Kayla Belavek

Kejsi Bendo

Marva Malik

Obadeh Mohiddin

Renieh Nabaty

MacKenzie Olbrys

Ali Ramzan

FACULTY AWARD

Darrell Ebbing, Ph.D. Endowed Faculty Development Award

Zhenfei Liu

Welcome, **NANCY WU**

Written by Nancy Wu

Photo by Bismah Jamshed



Senior Lecturer Nancy Wu comes to WSU from the University of Michigan, where she earned her Ph.D.

in chemical biology. Her doctoral research was in RNA enzymology, specifically in elucidating the kinetic mechanism and inhibition of protein-only ribonuclease P.

Wu received postdoctoral training in chemical education research at the University of Michigan. As a postdoctoral fellow, she was the instructor for general and organic chemistry lab courses.

Wu was born and raised in San Francisco, where her curiosity in chemistry first began in high school. She completed a B.S. in chemistry

at UCLA. As a California native, Wu has a love for the outdoors and tries to go hiking or camping whenever she is able. She looks forward to contributing to and learning from the community of educators and students at Wayne State.

Welcome, **DAJENA TOMCO**

Written by Dajena Tomco

Photo by Bismah Jamshed



Dajena Tomco recalls playing “classroom” with friends growing up in Albania, teaching subjects like literature, history and science. At 18, she came to the United States to pursue higher education and seek new opportunities.

Dajena began her college career at Macomb Community College in Clinton Township, Michigan,

taking English as a Second Language courses. Tomco then transferred to Wayne State University, where she completed her bachelor’s in chemistry. Tomco earned her doctoral degree in inorganic chemistry in Wayne State’s chemistry department.

Upon completion of her graduate work, Dajena joined Marygrove College in Detroit as an assistant professor of chemistry, where she worked with a student population

that consisted of diverse cultural, racial and social economic backgrounds. A majority of her students were the first in their families to attend college.

Tomco said she is delighted to rejoin the department and happy to be teaching at her alma mater. “Wayne State is in the heart of Detroit, where students from all backgrounds are offered a rich, high-quality education — I know that I was!”

ALUMNI Updates

Calvin Emanuel, Ph.D. 1999, hosted the 15th annual national You Be The Chemist Challenge.

Hrant Hratchian, Ph.D. 2005, received a CAREER Award from the National Science Foundation.

S.D.M. Chinthaka, Ph.D. 2008, was promoted to full professor at the University of Sri Jayewardenepura.

Mark Saly, Ph.D. 2010, was promoted to director of process chemistry at Applied Materials.

Ashley Campanali, Ph.D. 2011, was granted tenure at Grand Rapids Community College.

Joel Garcia, Ph.D. 2013, is now an associate professor at De La Salle University.

Derek Averill, Ph.D. 2014, started a position as chief science advisor at Sonoma Lab Works.

Lanka Wickramasinghe, Ph.D. 2014, began a position as a senior scientist at Solvay Chemicals Company.

Asha Hitihami Mudiyansele, Ph.D. 2015, started a position as a research chemist at Magni Industries.

Levi Ekanger, Ph.D. 2016, received a postdoctoral fellowship from the American Heart Association and also accepted a position as an assistant professor at the College of New Jersey.

Ruchira Liyange, Ph.D. 2016, started a position as a chemist at Diversified Chemical Technologies.

Sue White, B.S. 2016, received a

Salutes to Excellence Award and a Distinguished Service award from the Detroit Section of the American Chemical Society.

Yanlong Zhu, Ph.D. 2017, was promoted to staff scientist at the University of Wisconsin-Madison.

Lina Basal, Ph.D. 2018, started a position as a research scientist at Gilead.

Travis Ness, Ph.D. 2018, started a position as a senior scientist at Amide Technologies.

Larry Roy, B.S. 1980, will retire from a distinguished career in medicine in December. Dr. Roy spent 30 years at Advocate Children’s Hospital in Chicago, most recently as the VP of Quality and Patient Safety.

Brian Johns, Ph.D. 1997, was named chief scientific officer of HemoShear Therapeutics.

Welcome, **SEAN HICKEY**

Written by Sean Hickey

Photo by Bismah Jamshed



The Department of Chemistry welcomes Sean Hickey, Ph.D., as a new senior lecturer. Hickey completed his M.S. in organic chemistry at the University of Michigan.

Hickey is originally from Slidell, Louisiana, a suburb of New Orleans. He received his B.S. in chemistry from the University of New Orleans. In 2001, he took a position as an instructor and manager at the University of New Orleans, serving as the undergraduate coordinator.

In 2014, Hickey took a position as a product designer for Wiley Publishing.

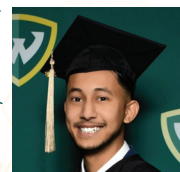
Also in 2014, Hickey began his Ph.D. studies in chemical education at UNO. In 2017, he took a position as an organic chemistry lecturer at Xavier University of Louisiana.

At Wayne State, Hickey will initially teach and modify the organic chemistry 1 and 2 lab sequence. He is excited about the opportunities for performing chemical education research focusing on the scholarship of teaching organic chemistry.

Welcome, **MISHAD AHMED**

Written by Mishad Ahmed

Photo by Bismah Jamshed



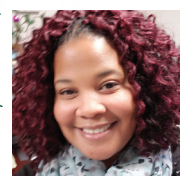
Mishad Ahmed obtained his bachelor’s in accounting in December 2018 from the Mike Ilitch School of Business at Wayne State University. While pursuing his bachelor’s, he interned at Northfield Medical as a financial support specialist and volunteered with

Accounting Aid Society as a tax preparer. Shortly after his graduation, he became the accounting assistant senior in the Department of Chemistry at Wayne State University, where his duties include invoice payments, purchase order processing and travel reimbursement. While working as an accounting assistant at Wayne State University, he plans to pursue an M.B.A.

Welcome, **NAWANA LAWSON**

Written by Nawana Lawson

Photo by Bismah Jamshed



On April 1, 2019, Nawana Lawson left the Office of Environmental Health and Safety to join the chemistry department as its solutions room manager. Many thought it was an April Fool’s Day joke because she had been with the Office of Environmental Health and Safety her entire career at Wayne State University — more than 17 years!

Lawson is a Detroit native and is no stranger to the world of chemistry. She obtained her bachelor’s in chemistry from Michigan Technological University and her master’s in organic chemistry from the University of Missouri-St. Louis.

Her new duties, as solutions room manager for the undergraduate chemistry courses, are also familiar to her because she worked in the solutions room at Oakland

Welcome, **DENNIS ANDERSON**

Written by Dennis Anderson

Photo by Dr. Johanna Birbeck



Dennis Anderson joined the Lumigen Instrument Center in October 2018 as a senior research scientist in charge of the NMR and EPR laboratories. Anderson attended college at Purdue University and received an M.S. in chemistry from the California Institute of Technology.

Anderson began his career as the instrumentation facilities manager at Occidental College in Los Angeles. He then worked in the chemistry department at Central Michigan University for nearly six years.

Anderson next joined Pfizer Global Research & Development in Ann Arbor, Michigan, and then spent 11 years at the company’s main research and development facility in Connecticut.

Anderson enjoys training for and riding in long-distance road cycling events. He took up kayaking a year and a half ago and likes to travel when possible.



**WAYNE STATE
UNIVERSITY**

THE PERIODIC TABLOID

Department of Chemistry
5101 Cass Avenue
Detroit, MI 48202



See what our
department is up to!



Twitter:

twitter.com/waynestatechem

Instagram:

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

Facebook:

[facebook.com/wsuschemistry](https://www.facebook.com/wsuschemistry)

LinkedIn:

[Wayne State University Chemistry](https://www.linkedin.com/company/wayne-state-university-chemistry)

Ph.D. Alumni

YouTube:

[go.wayne.edu/chem-youtube](https://www.youtube.com/channel/UCzYqZt0G08b0F18tUkY6TQ)

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

Welcome to the incoming graduate student class of 2019!



Photo by Mary Iverson