

COMMENCEMENT 2020



CHEMISTRY Diploma Ceremony

May 15, 2020

Virtual Ceremony available online after 12pm
www.rochester.edu/class-of-2020

May 17th, 3:30 pm

LIVE Virtual Chemistry Department Reception
Invitation with zoom link will be sent via Chemistry Dept. email



WELCOME

Chair's Welcome & Introduction

Todd D. Krauss

Professor of Chemistry and Chair

First and foremost, I want to say we hope you and your loved ones are well and will continue to remain so during these uncertain and unprecedented times. Although we can't be together in person, we want to celebrate candidates who will be receiving the Bachelor of Arts, the Bachelor of Science, the Masters of Science, and the Doctor of Philosophy degrees in Chemistry. Of course these achievements are special not just for the graduates, but for us faculty as well, because one of the distinguishing characteristics of the Department of Chemistry at the University of Rochester is our continued relationship with and pride in our Chemistry alumni. Today, graduates, we want to congratulate you on making that same transition, from students to alumni.

Best of luck Class of 2020!

PRESENTATION OF UNDERGRADUATE AWARDS

Dr. E. W. and Maude V. Flagg Award

Paul Sinclair

This award, established in 1982 as an endowed fund by Dr. John J. Flagg, '36, recognizes outstanding performance and promise in chemistry by an undergraduate student. A faculty committee appointed by the Chair of the Department of Chemistry selects the recipient. This award consists of a cash prize, as well as a certificate of recognition from the department.

John McCreary Memorial Prize

Andrew Sopchak

The John McCreary Memorial Fund was established in 1985 in tribute to the high academic and scientific standards, and to the personal dedication of John James McCreary. McCreary received his Bachelor of Science degree in Chemistry with High Distinction from the University of Rochester in 1975. John's career maintained its exemplary character until his untimely death in 1983. The award, given to an outstanding senior undergraduate student, consists of a cash prize and certificate.

American Chemical Society (ACS)
Outstanding Achievement in Chemistry,
Rochester Section Award

Paul Sinclair

This award is given to a senior with an outstanding academic record and consists of a cash prize, certificate, recognition at the ACS Annual Rochester Section Undergraduate Research Symposium in the spring, and the inclusion of the Awardee's name on a plaque in the department.

American Chemical Society (ACS)
Inorganic Chemistry Award

Michela Maiola

This award is given to a student who is selected by the faculty on the basis of outstanding academic achievement in inorganic chemistry. The award consists of a cash prize, certificate, and listing on the ACS website.

American Chemical Society (ACS)
Organic Chemistry Award

Jisoo Woo

This award is given to a student who is selected by the faculty on the basis of outstanding academic achievement in organic chemistry. The award consists of a cash prize, certificate, and listing on the ACS website.

American Chemical Society (ACS)
Physical Chemistry Award

Jana Jelusić

This award is given to a student who is selected by the faculty on the basis of outstanding academic achievement in physical chemistry, and to encourage further pursuits in the field. The award consists of a cash prize, certificate, and listing on the ACS website.

American Chemical Society (ACS)
Analytical Chemistry Award

Chanbin Lee

This award is intended to encourage student interest in analytical chemistry and to recognize students who display an aptitude for a career in the field. The award consists of a personalized certificate and souvenir item from ACS, as well as a cash prize and certificate from the department.

Carl A. Whiteman, Jr. Teaching Award

Yimin Talia Chen

Jana Jelusić

Chanbin Lee

Julian Maceren

Michela Maiola

Paul Sinclair

This award recognizes exemplary teaching by an undergraduate student in the Department of Chemistry. Carl Whiteman graduated from the University of Rochester in 1950 (B.S., Physics) and worked continuously in the Chemistry Department until his retirement in 1986. His enthusiasm and dedication to laboratory teaching made him a legendary figure among undergraduate chemistry majors. Carl continued his association with us until his death in 2007. This honor recognizes Carl's teaching excellence, as well as that of the recipients who receive a cash award, along with a certificate of recognition from the Department of Chemistry.

Chemistry Department Award

Yimin Talia Chen

John Clay

Brendan Courtsal

Julian Maceren

Jacob Rozowsky

The Chemistry Department Award is given to seniors in recognition of outstanding scholarship in the study of chemistry. The award consists of a cash prize and a certificate of recognition.

COLLEGE AWARDS

Janet Howell Clark Prize

Yimin Talia Chen

The Janet Howell Clark Prize is awarded to a senior woman who has shown the greatest promise in creative work in one of the following fields - Physics, Chemistry, Biology, or Astronomy - and has shown outstanding versatility in the mastery of allied fields. The award consists of a cash prize and recognition at a special senior ceremony the Saturday of Commencement Weekend.

Ayman Amin-Salem Memorial Prize

Julian Maceren

Awarded to the member of the senior class who best evidences the qualities of good character and good citizenship, such as decency, reliability, responsibility and congeniality. Preference may be given to students who also have an interest in biology or the biological sciences, art, writing or athletics.

Catherine Block Memorial Fund Prize

Sarah Craig

The Catherine Block Memorial Fund Prize, established in memory of Catherine Block, an exceptional Chemistry student here at the University, is awarded each year to a woman in the Junior class in recognition of her outstanding ability and achievement in the field of science. The award consists of a cash prize and Sarah will be recognized at the Chemistry Department fall awards ceremony.



Special Thanks TO OUR PEER ADVISORS



Jana Jelušić



Julian Maceren



Jisoo Woo

We'd like to thank three of our seniors, Jana, Julian and Jisoo, for being Chemistry Peer Advisors for the 2019-2020 academic year. They received training from CCAS and were always willing to help other students plan their courses, connect with faculty, or help find research opportunities. With the help of these talented students, another layer of student support has been added to the Chemistry Department.

We are all grateful for their contribution to the department this year. Best of luck to you with whatever your bright futures hold!

AWARDED GRADUATE DEGREES

MASTER OF SCIENCE

Maria Aguilera
Nikki Bakas
Erin Christensen
David Detloff
Jackson Hernandez
Kaitlyn Houghtling
Melissa Jagrosse
Michael Klaczko

Emily Lasher
Robert Potenzino
Karla Sanchez Lievanos
Eric Schreiber
Prakhar Swarup
Jakub Vaith
Geemi Wellawatte
Francine Yanchik

DOCTORAL DEGREES (PH.D.)

Rebeckah Johnson Burke
Stephanie Hope Carpenter
Saikat Chakraborty
Theresa Elizabeth Iannuzzi-Boddie
Zhi Li
John D. McAnany
Justin M. Niziol
Astrid Marisol Parsons

Dylan E. Parsons
Zachary Tyler Piontkowski
Viktoria Charlotte Steck
Sreyoshi Sur
Oliver L. R. Swart
Jennifer M. Urban
Lauren Elizabeth VanGelder
Jade J. Welch

PRESENTATION OF UNDERGRADUATE DEGREES

BACHELOR OF ARTS (B.A.)

Yimin Talia Chen^{3†}
Ziyu Jia
Aidan Kendra²
Samantha Kerber
Chanbin Lee^{3†}
Cassidy Leight
Chunhao Liu¹
Tyler Mason

Tanner Metcalfe³
Colin Murphy
Zhenhuan Rick Qiu
Jacob Rozowsky^{3†}
Paulash Sarma
William Schlageter^{2**}
Gilbert Smolyak³
Andrew Sopchak^{3†}
Logan Worley³

BACHELOR OF SCIENCE (B.S.)

John Clay³
Jessica Conforti
Marissa Coschigano²
Brendan Courtsal²
Ruilin Gao
Lillian Huntoon
Jana Jelušić²

Julian Maceren^{3†}
Michela Maiola²
Philip Palermo¹
Aneara Ren
Annabel Selino³
Paul Sinclair^{3†}
Jisoo Woo³

Distinction

¹Distinction ²High Distinction ³Highest Distinction [†]Phi Beta Kappa
^{*} Take Five Scholar (beginning) ^{**} Take Five Scholar (finishing)

CLASS OF 2020



Yimin Talia Chen

Chemistry B.A. with Highest Distinction
Magna Cum Laude
Phi Beta Kappa

I will be attending medical school in the fall of 2020 at the University of Rochester. During my time at the U of R, I have been a teaching assistant for both organic and physical chemistry, as well as the president of the Undergraduate Chemistry Council from 2017-2019. I conducted research through the microbiology department in the Dunman lab, where I achieved heterologous expression of a novel antimicrobial lasso peptide in *E. coli* and co-authored a paper accepted for publication in CORNEA, a journal of clinical ophthalmology. My proudest moment of undergrad was probably either the time I accidentally burnt off my bangs over a Bunsen burner, or the time I thought square pentagonal was a valid coordinate geometry. I would like to thank my chemistry squad, the Dunman lab, my professors, my TAs, and ChemDraw for having made my undergraduate experience absolutely wonderful, and my family for supporting me all the way through.

“As a BA major bound for medical school, Talia didn’t need to take a challenging graduate course like CHM 435. I’m glad she did though, as it was a pleasure to have someone so talented and dedicated in my class - she was engaged, thoughtful, and passionate about learning. That dedication has also shone through her leadership in teaching and outreach, and will be missed. The medical profession is fortunate to be gaining a scholar and physician of Talia’s caliber, and I have no doubt that she will continue to rise to the top in every way throughout her career.”



~ Prof. Shauna Paradine



John Clay

Chemistry B.S. with Highest Distinction
Other Major: Biochemistry

I will be graduating with a B.S. in Chemistry. Over the past two years, I have developed an interest in catalysis and have been working on the production of n-Butanol in the Jones group. Some of my fondest memories are in the research lab, my time as a student, and later workshop leader, in organic chemistry labs, and my time spent in the fascinating classes that the chemistry department has to offer. Outside of chemistry, I have enjoyed classes on Dante’s Divine Comedy, as well as my time studying mathematics and psychology. In my free time, I enjoy reading, making and solving crossword puzzles, exploring, and biking. I plan to pursue a career in medicine after graduation. I would like to thank Tarah DiBenedetto, Professor Bill Jones, the Jones group, and my family.

“I remember John’s first email to me in March of 2018, which seems like a long time ago now. Our group is interested in making new fuels and chemicals from ethanol, and John began to synthesize a bimetallic ruthenium complex so that we could examine it for activity. He continued to work in my lab for his Senior thesis, looking at bulky transition metal bases of zinc and copper for the Aldol condensation, a key reaction that allows us to convert ethanol to butanol. I have enjoyed having John several of my classes, and he has become almost like a graduate student with his strong interest in chemistry. Thank you, John!”

~ Prof. William Jones





Jessica Conforti

Chemistry B.S.

I am a student athlete on the softball team here at the University of Rochester, and will be continuing my chemistry education at Baylor University in the analytical division of their Ph.D. program. Throughout my time at the University of Rochester,

I have been extremely lucky to have obtained two highly noted research internships with Bristol-Myers Squibb and Catalent Pharma Solutions, working in both their analytical departments. The analytical focus I desired also translated to my work in Professor Michael Neidig's laboratory for my senior research, in a catalysis-focused analysis of Kumada cross coupling reactions. I am excited to begin my next step towards an industry position in the pharmaceutical field and am grateful for all that Rochester has had to offer!

"It has been a tremendous pleasure having Jessica work in my group during her senior year. Her project focused on the development and testing of new ligands for iron-catalyzed cross-coupling reactions and she has made tremendous progress in such a short time in the lab. A huge contributor to her success is her high enthusiasm for chemical research and an overall positive work ethic and attitude. She just loves research. I am excited that Jessica will be pursuing a Ph.D. in analytical chemistry at Baylor University after graduation and I expect great things from Jessica as her education continues."

~ Prof. Michael Neidig



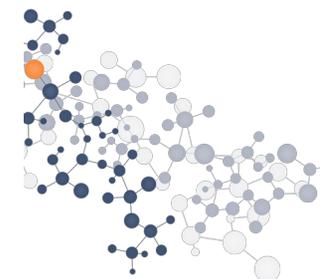
Marissa Coschigano

Chemistry B.S. with High Distinction

During my four years at the University of Rochester, I was given many opportunities that helped me determine where my passions lie. I served as a workshop leader for several different chemistry courses which helped me realize my interest in teaching. I was also a member of the Undergraduate Chemistry Council and helped with tutoring and science demonstrations. I did my senior research work with Professor Alison Frontier on expanding the scope of the Nazarov cyclization. Next year I will be attending Johns Hopkins University to begin a Ph.D. in Chemistry with a focus on organic synthesis. I would like to thank Prof. Frontier for mentoring me in my research endeavors, Dr. H. for giving me my first workshop leader opportunity, and my family and friends for their support along the way.

"Marissa has helped more students learn chemistry at UR than any workshop leader that I have worked with. Starting as a workshop leader in general chemistry in her sophomore year, Melissa has been an invaluable resource to me and her students. For the past two years, she has been a TA or workshop leader for multiple classes each semester. Her insight and advice has helped improve both my general and organic chemistry courses. Marissa's dedication to her students, organizational ability, and trusted advice have left the UR Chemistry a better place than when she arrived. Best of luck at Johns Hopkins this fall!"

~ Dr. Benjamin Hafensteiner





Brendan Courtsal

Chemistry B.S. with High Distinction

I've been blessed to have been able to work in the lab of Prof. David McCamant studying methods of determining the extinction coefficients of H-aggregates, and applying them to transient absorption spectroscopy.

Your undergraduate classes teach you a lot, but there is such a staggering amount of fascinating material that is best learned in a research setting. Many thanks to all the professors and graduate students who have been patient and committed to teaching me the fundamentals, and other more obscure theory and techniques, of chemistry.

"Brendan started work in my lab in the summer of 2019 and showed immediately that he would have absolutely no problem transitioning from the detailed demands of coursework to the open-ended challenges of research. He made quick work of our initial plan to measure the dimerization equilibrium constants in solution and finished his senior project doing analysis of femtosecond transient absorption spectra that I'd been wanting to pursue for years. Throughout the project, Brendan showed a maturity and careful, analytical methodology that will serve him well in whatever he pursues. He's been a great member of our lab and we'll all miss him next year."

~ Prof. David McCamant



Ruilin Gao

Chemistry B.S.

It has been a wonderful time and experience to study at the University of Rochester. In May 2020, I will be graduating with a B.S. in Chemistry. I did my senior research with Professor Todd Krauss and Ph.D. student mentor, Sean O'Neill, on the thesis of Tin Sulfide Nanoplatelets for Photocatalytic Hydrogen Production. After graduation, I plan on pursuing a master's degree in chemistry. I would like to thank my family, my friends, Prof. Krauss, Sean and the rest of the group for their advice, inspiration, encouragement and support for my undergraduate years.

"Congratulations Ruilin! It was a pleasure to serve as Ruilin's advisor for her senior thesis project. Ruilin worked on a novel synthesis of nanometer sized square platelets of tin sulfide (SnS). SnS contains earth abundant elements and has a long lived photoexcited state, making nanoplatelets of SnS very attractive as potential light harvesters for the solution phase synthesis of chemical fuels using sunlight. We want to wish Ruilin good luck next year as she prepares for matriculation in a Chemistry master's program for the fall of 2021!"

~ Prof. Todd Krauss





Lillian Huntoon

Chemistry B.S.

During my senior year at the University of Rochester I conducted research with Prof. Ellen Matson's research group and graduate student, Eric Schreiber, on polyoxovanadium clusters and their use as charge carriers in nonaqueous redox flow batteries. I also had the

great opportunity to be on the varsity women's rowing team in conjunction with a scholarship from the NROTC program. After I graduate I will be commissioning into the Marine Corps as a Second Lieutenant and heading to flight school to train to become a pilot.

"I first got to know Lily when she was a student in my inorganic chemistry class. Lily always came to class with a smile. I was super excited when she asked if she could do her senior research project in my laboratory. Lily joined the group in the Fall of 2019 and started working on our flow battery project – she had an unparalleled commitment to her project and immediately fit into our group. I'm sad that we only got one year to work with Lily, but I'm confident that she will make an excellent pilot in the Marines."

~ Prof. Ellen Matson



Jana Jelusić

Chemistry B.S. with High Distinction

During my undergraduate career at the University of Rochester, I was lucky to have found my passion in studying chemistry and translate that knowledge into research. One of the most rewarding experiences has been working on my Senior Thesis in the

Bren Lab in collaboration with the Krauss Lab on Multicomponent

Systems for Photochemical Hydrogen Evolution. I started research through National Science Foundation Research Experience for Undergraduates (NSF REU) in Summer 2018, and translated it into Senior Thesis project throughout the remaining two years. I have benefited greatly and hopefully contributed to students' benefit while serving as an Undergraduate Teaching Assistant in CHM 132 (Spring 2018, 2019, 2020), CHM 211 (Fall 2019), and CHM 252 (Spring 2020). I am grateful to have received Best Poster in the Natural Sciences Division at the Undergraduate Research Exposition in Spring 2019, and to have been chosen as one of the recipients of Junior Scholar Award in Fall 2019. I will be continuing my research in the Bren Lab after graduation, and applying to graduate programs in chemistry. I am grateful to Prof. Kara Bren who has been an invaluable source of inspiration and support and a role model for intellectual curiosity, teaching skills, and academic rigor. I would also like to thank my mentors, Saikat and Emily, for encouraging and supporting my ideas and enthusiasm for new discoveries. Additionally, I am thankful to Prof. Todd Krauss, Prof. Lewis Rothberg, and Prof. Pengfei (Frank) Huo for their demonstrations of three main aspects of teaching – organization, mastery of the material, and communication skills. Finally, I would like to express my gratitude to my family, my mother Božena, sister Jelena, brother Vlado, and my best friend Ragyie, for all their love, support, patience and understanding.

"I have been very lucky to have Jana as a Chem 132 student, a Chem 132 workshop leader, a Chem 262 student, and finally as a senior research student. She is someone who puts everything she has into what she does. Jana has brought her wonderful combination of boundless enthusiasm and thoughtfulness to her research project in which she has been using a multidisciplinary approach to develop new systems for storing solar energy as hydrogen fuel. I look forward to working with her as she continues her research in the coming year."

~ Prof. Kara Bren





Aidan Kendra

Chemistry B.A. with High Distinction
Other Major: Biochemistry

I'm a biochemistry and chemistry major and I performed my undergraduate research in the Samuelson Lab in the Biomedical Genetics Department working on a project entitled "Sumoylation Represses Diverse Pro-toeostatic Stress Responses in *C. elegans*". On the rare occasions that I'm not in lab, I'm usually at rehearsal playing violin in the pit for a musical theater group. Starting in the fall, I'll be studying in the Chemical Biology Ph.D. program at Johns Hopkins University.

"I was fortunate to have Aidan in both general chemistry and organic chemistry during his time at UR. He excelled in all of my courses. His excellence in the classroom speaks to his ability to learn complex material and creatively answer challenging problems. I wish him the best in his future endeavors."

~ Dr. Benjamin Hafensteiner



Samantha Kerber

Chemistry B.A.
Other Major: Studio Arts

There haven't been many dull moments in the last four years when I look back. I became a supervisor at Event and Classroom Management, a place I love working with coworkers that I adore. I built an irregular heptagon canvas for a self-portrait. I created art using a MIG welder, a plasma cutter, and a hammer and anvil. I learned to use a glove box and a Schlenk line to remove air and water from sensitive chemical reactions. I learned about myself, friendships, relationships, and how to do stuff that's hard to do. I'm very thankful for the people that kept me sane through the chaos and doubt. I'm a double major in chemistry and studio art and I don't know exactly what I'm going to do with my degree. I do know, however, that I will use what I've learned here at the University of Rochester to make it awesome.

"Sam is graduating with a double major in Chemistry and Studio Art and we put that combination to good work this semester, when Sam built a new independent study course that sought to understand and contrast the different color wheels used by artists and optical engineers. Additionally, Sam studied the connections between the molecular structure of different chemical pigments and their stability and color tones. This was a really fun independent study project to be part of and I hope that Sam continues to build a career at this interface between chemistry and art."

~ Prof. David McCamant





Chanbin Lee

Chemistry B.A. with Highest Distinction
Magna Cum Laude
Phi Beta Kappa

During my time at U of R, I enjoyed the supportive educational atmosphere where peers, professors, and TAs were very open and helpful to enhancing my learning experience. I have been

a teaching assistant in chemistry, physics, math and computer science courses. I have enjoyed playing intramural soccer with UR students for the last three years. I worked with Professor Ben Miller on conjugation of RNA-targeted compounds to increase cellular delivery to target HIV selectively. I plan to pursue research on cornea biomechanics with Professor Geunyoung Yoon during my gap year and attend medical school to become an ophthalmologist who can train physicians in third world countries. I am especially grateful to Professor Goodman for his guidance in my freshman year. A special thanks to my parents, younger brother and Jini for their loving support.

"I first got to know Chanbin as a student in Chemistry 132 (Gen Chem II), and later in Chemistry 262 (Biological Chemistry). He was an outstanding and enthusiastic student in both classes. In Biological Chemistry, he often presented me with thought-provoking questions that led me to see things differently – it is always great to learn from a student! His thoughtfulness and curiosity will serve him well."

~ Prof. Kara Bren



Cassidy Leight

Chemistry B.A.

As a chemistry student at the U of R, I took a special interest in the inorganic aspects of the field while working on my degree. I completed a language and service-based study abroad program in Italy and made the Dean's List five

times. Outside of schoolwork, I competed for the University's track and field team, worked at the campus gym, was a member of UR Strong Artists, and interned for a congressional campaign. Instead of following the more traditional paths of academia or industry, I will be attending Northeastern University's School of Law after graduation. There, I will most likely study either Intellectual Property or Environmental Law. I would like to thank my family, friends, coaches, teammates, lab partners, and everyone else who helped me out along the way!

"I first got to know Cassidy when she was enrolled in my undergraduate inorganic chemistry class. That particular semester, I decided to try a extra credit assignment where students could "tweet" as elements, describing scientific reports that had been recently published in the literature. Cassidy totally owned this assignment. Her "tweets" on behalf of the element mercury were creative and funny. I'm so proud of all that Cassidy has accomplished and look forward to hearing about more success stories as she heads to Northeastern University for Law School this fall!"

~ Prof. Ellen Matson





Chunhao Liu

Chemistry B.A. with Distinction

Cum Laude

Other Major: History

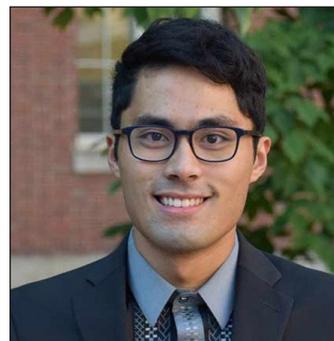
I just completed my senior year at the University of Rochester and will graduate with a B.A. in History and Chemistry. My study experience at the University of

Rochester has been an adventurous trip to understand the truth of the world. I am grateful to all instructors who taught me with their enthusiasm and resourceful knowledge on their expertise. For the past four years, I have studied plenty of chemistry, such as organic chemistry with Dr. Benjamin Hafensteiner, inorganic chemistry with Prof. Michael L. Neidig, and chemical instrumentation with Prof. David McCamant who was my chemistry adviser. I also worked as a lab assistant for the Organic Chemistry Lab in my junior year. At the same time, I did two independent studies with my History professors, Prof. Elya Zhang and Prof. Thomas Fleischman, on the historical issues in the socioeconomic development of the state. I also learned various historical knowledge from Prof. Laura Smoller, Prof. Dahpon Ho, and Prof. Matthew Leno. This fall, will I start my master's program in social science (MAPSS) at the University of Chicago. I want to thank Professors McCamant, Zhang, Fleischman, Smoller, and all of my family members and friends who had supported me.

“Chunhao was one of my favorite students in CHM231 when he took my course back in 2018 because he seemed to really enjoy chemistry and brought a lot of enthusiasm to the course. I still remember his excitement about learning about the inner workings of the ICP-MS instrument for his independent writing assignment. It's a very cool instrument and not everyone gets it! Overall, Chunhao has been a great student to have in the department and we'll all miss his enthusiasm in the classroom.”



~ Prof. David McCamant



Julian Maceren

Chemistry B.S. with Highest Distinction

Magna Cum Laude

Other Major: Spanish

Phi Beta Kappa

Throughout my time at the U of R, I have pursued a multifaceted education, completing both a B.S. in Chemistry and a B.A. in Spanish. Interested in the intersection between medicine,

biology, and chemistry, I worked in Dr. Danielle Benoit's lab synthesizing nanoparticle carriers designed to treat tooth decay. My experiences with UR research encouraged me to explore research outside of Rochester and further deepen my understanding of chemistry research. During my summers, I conducted research as part of the Rutgers New Jersey Center for Biomaterials Internship Program and the summer before my senior year, I participated in the AMGEN scholars program at University of Texas Southwestern Medical Center. After graduation, I hope to pursue both my M.D. and Ph.D. in Chemistry through a combined M.D./Ph.D. program.

“Julian was one of the top students in my Chemical Instrumentation course where he showed impressive skills in scientific writing as well as collecting great data and analyzing it carefully. He was so good in the course that I was happy to work with Julian when he was a Teaching Assistant in that same course this year. He was the kind of TA that I could depend on for the most challenging grading and to bravely guide students through the more frustrating aspects of the lab. He's been an outstanding member of the department and we'll all miss him next year!”

~ Prof. David McCamant





Michela Maiola

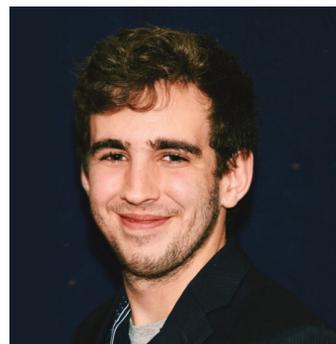
Chemistry B.S. with High Distinction
Cum Laude
Other Major: Business

These past four years at the University of Rochester have challenged me intellectually, provided an excellent environment for me to grow as a scientist, and have been a lot of fun.

I am incredibly grateful to have re-searched in Prof. Matson's lab for the past two years and would like to thank Prof. Matson for always supporting me and pushing me to do my best, as well as Brittney Petel for her patience and positivity as she taught me countless techniques in the lab. I would also like to thank my parents for their endless support and interest in everything I pursue, especially chemistry. I will be graduating with a B.S. in Chemistry and a B.A. in Business and I am very excited to be pursuing a Ph.D. in Chemistry from the University of Michigan starting in the fall.

"I've had the privilege of knowing Michela since her Sophomore year of college. I've worked with her as a student, as a teaching assistant, and as an undergraduate researcher. Michela worked in my lab for three summers, and has been the most productive undergraduate from my group (three papers, one first-author!). Michela has been an asset to our team over the past three years and will be sorely missed as she transitions to graduate school at the University of Michigan. I cannot wait to see what's next for Michela – she is destined to have a bright scientific future!"

~ Prof. Ellen Matson



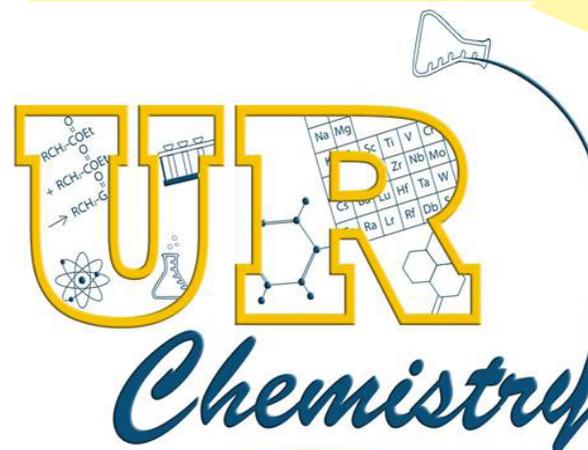
Tyler Mason

Chemistry B.A.
Other Major: Physics

I am graduating with a B.S. in Physics, a B.A. in Chemistry, and a minor in Math. During my time here, I had the opportunity to work in Pierre Gourdain's extreme state physics laboratory where I had the opportunity to apply science to build things. This experience helped me realize my love for building things, and is largely the reason I decided to pursue a career in engineering. Next year, I will be staying at the U of R to work on my Ph.D. in chemical engineering, where I hope to study clean energy.

"Tyler is a native of the Finger Lakes having grown up around the shores of Owasco Lake. He escaped a future in Biochemistry opting for a broader training in Physics (B.S.), Chemistry (B.A.) and Math (minor). I met Tyler when he was a student in Physical Chemistry (CHM 251) where we definitively made sure that he got to flex all those brain muscles simultaneously. Tyler wants to help the world transition to clean energy and with this in mind he has decided to start a Ph.D. in Chemical Engineering at the U of R. We wish him great success!"

~ Prof. Ignacio Franco





Tanner Metcalfe

Chemistry B.A. with Highest Distinction
Cum Laude
Other Major: Neuroscience

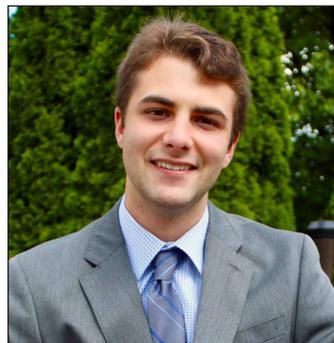
I am graduating with a B.A. in Chemistry as well as a B.S. in Neuroscience. During my time here, I had the wonderful opportunity of working in the Nedergaard Lab, a neuroscience lab focused on pathologies such as

traumatic brain injuries that can arise from or cause alterations to the glymphatic system, a fluid-movement system in the brain. Outside of the classroom, I was President and Captain of the hockey team as well as President of GlobeMed at the University of Rochester, a group that promotes health in rural India. Next year, I will be attending medical school here at the University of Rochester School of Medicine and Dentistry in hopes of pursuing a career in the field of sports medicine. I would like to thank everyone who helped get me to this point thus far! To my professors: thank you for challenging me to be the best person I could be. To my parents: thank you for helping me every step of the way. To my friends and classmates: We did it! Thanks for your friendship and fun times over the past 4 years, I look forward to seeing the great places you go and things you accomplish in the future!

“Tanner did exceptionally well in all of his courses in the Department, particularly in Chemical Instrumentation, CHM 231. As a teaching assistant for CHM 231 Tanner showed a great ability to lead students through the inevitable troubleshooting of those highly technical experiments. We want to congratulate Tanner and wish him the best of luck as he pursues a M.D. at the University of Rochester School of Medicine. As an alumnus, Tanner you are also welcome anytime to drop by the 7 AM Tuesday morning UR skate at GVP, but go easy on the Chemistry faculty.”



~ Prof. Todd Krauss



Philip Palermo

Chemistry B.S. with Distinction

My time at the University of Rochester has been a wonderful experience. I was an Inorganic Chemistry workshop leader for Prof. Ellen Matson as well as a member, tutor, and later business manager, for the Undergraduate Chemistry Council. I have conducted

independent research with Prof. William Jones on bisoxazoline-pincer ligated first row transition metal complexes for the past two years. I have also performed with the varsity marching pep band for four years. I plan on pursuing my Ph.D. in Chemistry at the University of Pittsburgh starting this fall and would like to thank my family, friends, as well as Astrid Parsons, and Kylie Ritz for all of the help along the way.

“Philip joined my group in Fall of 2018 to start work in my lab on a project involving the synthesis of new bisoxazoline ligands to make transition metal catalysts. Working with graduate students Astrid Olivares and Kylie Ritz, he went on to investigate the use of a new cobalt catalyst for alkene hydrogenation. Philip synthesized authentic samples of the organic substrates that were used in the investigations, allowing us to publish a manuscript on this work in the journal Polyhedron. I am always impressed to see the delight that Philip has when he is exposed to new discoveries in chemistry, and to see his fascination at learning new material.”

~ Prof. William Jones





Zhenhuan Rick Qiu

Chemistry B.A.

The four years I spent at the University of Rochester have been a wonderful experience. They gave me a set of scientific skills that will benefit me for the rest of my career. I was a teaching assistant for General Chemistry for three semesters with Prof. John-Carl

Olsen. I learned a lot about leadership and how to address a crowd properly. I would like to thank Prof. Dave McCamant for letting me do research in his laboratory as an undergraduate. I gained first-hand knowledge of how science is done in real life. I want to thank Prof. Huo for his class in Thermodynamics as well as Computational Chemistry that has led me to pursue a Master's degree in Data Science and Analytics this fall.

"I got to know Rick in my Chemical Instrumentation course in the fall of 2018, where he showed that he was extremely capable in physical and computational chemistry. Because of his skills in this area, I was happy to have him join my lab to do research last summer and into the fall. I wish Rick all the best in his Master's program and his future career."



~ Prof. David McCamant



Aneara Ren

Chemistry B.S.

I will be graduating with a B.S. in Chemistry and did my senior thesis research with Prof. Bill Jones and graduate student, Tarah DiBenedetto, on the hydrosilation of olefins catalyzed by a copper N-heterocyclic carbene complex. I plan to be travelling to East

Asia to learn of the different cultures and to explore my roots. I also plan to work in the industry before pursuing a Ph.D. in Chemistry. I would like to thank my friends and family for supporting me throughout my undergraduate career. A special thank you to Prof. Jones, Tarah, and everyone else in the Jones group for giving me the opportunity to do research in their laboratory and for teaching me invaluable research skills.

"Aneara joined my group in Fall of 2019 to work with grad student Tarah Dibenedetto on making a copper N-heterocyclic carbene complex for use in catalysis. Aneara found that while making the catalyst wasn't too difficult, tracking down reactivity was! Just before our 'pause,' Aneara discovered that the compound could be used to catalyze hydrosilation of olefins. This reaction has special significance for me, because when I was an undergraduate, I worked on olefin hydrosilation with iron for my senior thesis. This work holds great promise, and I am thankful to Aneara for opening this new door of research. Best wishes!"

~ Prof. William Jones





Jacob Rozowsky

Chemistry B.A. with Highest Distinction
Magna Cum Laude
Other Major: Computational Biology
Phi Beta Kappa

Throughout my undergraduate years, I have harnessed every opportunity the University of Rochester has to offer. I explored research projects in the Biology and Brain & Cognitive

Sciences departments, worked as a tour guide, Student Alumni Ambassador, and member of the 2020 Class Council. Within the Chemistry Department, I was a teaching assistant for general and organic chemistry. I would like to thank Dr. Benjamin Hafensteiner for his unwavering support, optimism and encouragement over the past four years when I was his student and workshop leader. It was studying and teaching chemistry where I learned how to think critically and I discovered my love for the mechanistic underpinnings of science. Next year, I will be researching computational neuroscience and cognitive pathologies at the Indian Institute of Science as a Fulbright student before applying to graduate school.

"I had the pleasure of having Jacob in class, either as a student or workshop leader every year since he arrived on campus. His expertise in the classroom was paralleled by his teaching skills as a workshop leader. Having worked with him each year, it has been a pleasure to watch him develop as a critical thinker. Jacob's enthusiasm, energy, and experience helped to motivate new workshop leaders in both general and organic chemistry. I value his honesty and perspective. I am thankful for the opportunity to have worked closely with him and am excited to see where his future in medicine will take him."

~ Dr. Benjamin Hafensteiner



William Schlageter

Chemistry B.A. with High Distinction
Other Majors: Environmental Science & Biology
Take Five Scholar

I will be graduating with two B.A.'s in Biology and Chemistry as well as a B.S. in Environmental Science. I spent my last year pursuing a Take 5 in astronomy and mathematics. I have had an amazing time at Rochester and would like to especially thank Professors Ellen Matson and James Farrar, who's classes I TA'ed for. I learned a lot through them and am very grateful for their guidance. I'd also like to thank my family and friends for their unwavering support and love. My next step is to move back home to Lancaster, PA and look for a job.

"William is certainly a fun student to have in class since he brings a lot of energy and enthusiasm for science with him wherever he goes. It's amazing that he was able to complete degrees in Biology, Chemistry and Environmental Science and then continue on to do a Take-5 program in Astronomy and Math! Go, STEM Kids! He may be one of the last great renaissance men in the sciences and I'm sure he'll put that broad foundation of training into good use in his future career."

~ Prof. David McCamant





Annabel Selino

Chemistry B.S. with Highest Distinction
Cum Laude

My undergraduate years at the University of Rochester have been incredibly rewarding and educational, and I am honored to be receiving a B.S. in Chemistry. I did my senior research with Prof. Kathryn Knowles

and graduate student Brittney Beidelman on nanocrystal synthesis. During my time here, I have been on the Dean's list all semesters, and I received an award for best research presentation at Roswell Cancer Research Institute last summer. I was a teacher's assistant for an undergraduate chemistry lab and am on the executive board for the Undergraduate Chemistry Council. After graduation, I plan on pursuing a career in chemistry and applying to graduate school in the future. I would like to thank my professors, fellow students, friends, and family for their support and encouragement.

"I met Annabel in CHM 232: Molecular Spectroscopy in the spring of 2019. She was part of an outgoing group of students that were particularly fun for me to teach. I was very pleased when she asked to complete her senior thesis research in my group! Annabel's research focused on investigating mechanisms by which vanadium oxide nanocrystals form under solvothermal reaction conditions. Her work will be included in a co-authored publication that will be submitted later this summer. I am very proud of what she has accomplished under less than ideal circumstances. Congratulations Annabel!"

~ Prof. Kathryn Knowles



Paul Sinclair

Chemistry B.S. with Highest Distinction
Magna Cum Laude
Phi Beta Kappa

Here at the University of Rochester, I was fortunate to spend a full three years in the lab of Prof. Alison Frontier, working on two different cationic cyclization methodologies. I also

spent a summer as a Medicinal Chemistry Intern in the immunoncology department at GlaxoSmithKline. Outside of research, I was a workshop leader for Freshman Organic Chemistry under Prof. Goodman, and for Quantum Chemistry under Prof. Franco. I received an NSF-REU fellowship, a University of Rochester Discover Grant, as well as the Chemistry Department Junior Scholars Award. I would like to thank Prof. Frontier and the entire Frontier lab, especially Dr. Dylan Parsons, for all of their support and for all that they have taught me. I would also like to thank my fellow chemistry majors, whose friendship has been one of the most important parts of my time at University of Rochester. I will be going on to pursue a Ph.D. in chemistry at the UC Berkeley.

"Paul joined our lab the summer after his first year, and played an important role in two different projects. For two years, he worked on cationic cascade cyclizations, helping to elucidate reaction pathways leading to various interesting polycyclic products. At the start of the summer after his junior year, he took the lead on a new project, conducting the first successful experiments that enabled us to get the project off the ground. We will miss Paul, wish him good luck at UC Berkeley and look forward to following up on the discoveries he has made at the U of R."

~ Prof. Alison Frontier



Meliora 



Gilbert Smolyak

Chemistry B.A. with Highest Distinction
Cum Laude
Other Major: Computational Biology

My time at the University of Rochester has been a great one. I have made many great friends and memories that I will keep with me for the rest of my life. I also enjoyed the amazing academics the school has to offer and thank all the professors who have put in countless hours into teaching me and my peers and making sure we receive the highest quality education possible. I enjoyed my time as a teaching assistant for organic chemistry lab and would like to thank Prof. Dinnocenzo and Dr. Olsen for giving me the opportunity and guiding me through the experience. I also enjoyed my time working with students as part of the Undergraduate Chemistry Council executive board and would like to thank Prof. Matson and Dr. Hafensteiner for being great faculty mentors and helping out with the various events the club puts on. Finally I would like to thank my family and the amazing friends I have made along this college journey as I can say with confidence that I would not have been able to do it without their unwavering support. I will be graduating with a B.S. in Computational Biology and a B.A. in Chemistry, and plan to pursue medical school in the coming year.

"I first met Gil when he was enrolled in my undergraduate inorganic class. If you've had the opportunity to know Gil, you know that he totally sparkles – he was always engaged in the content and asked excellent questions. I got to work more closely with Gil in his role as a member of the undergraduate chemistry council executive committee. He led a tremendous effort toward restructuring our major outreach event called "Chemistry in Action". Gil has been one of the most fun students I've had the opportunity to work with at UR, and will make an incredible doctor one day!"



~ Prof. Ellen Matson



Andrew E Sopchak

Chemistry B.A. with Highest Distinction
Magna Cum Laude
Phi Beta Kappa

During my time at the University of Rochester, I've been a workshop leader for CHM 131 and 203 for Professors Krugh and Nilsson. Since fall 2018, I've electrochemically studied cobalt-containing hydrogen-evolving catalysts in the Bren Lab. I would like to thank the group members, especially Jose and Prof. Bren. Learning some statistical mechanics and thermodynamics in CHM 252 was the most enjoyable part of my time studying chemistry. Apart from chemistry, I have enjoyed taking German classes, and membership in U of R club Tennis. After graduation I'll be pursuing a career in medicine.

"Andrew impressed me as one of the top students in Chemistry 132, so when he approached me about doing research in my lab, I enthusiastically said yes. Andrew has been doing very challenging mechanistic studies of hydrogen-producing catalysts using electrochemistry. After two years of hard work, he is a coauthor on two papers that we are planning to publish. His excellent technique and thoughtful analysis have made a big difference in our work and we will miss having him as a coworker."

~ Prof. Kara Bren





Jisoo Woo

Chemistry B.S. with Highest Distinction
Cum Laude

I was born and raised in Busan, South Korea until I moved to the United States when I was 15. I was a National Science Foundation REU fellow at the Nilsson Group during the summer of 2018 and worked on co-

assembly of amyloid-beta fragments under acidic conditions. In 2018, I joined the Paradine Research Group as an undergraduate researcher and completed a senior thesis on photocatalytic carboxydifunctionalization of olefins. Also, I visited Ulm, Germany, as a DAAD-RISE fellow in summer 2019 to study Co-based catalysts for hydrogen evolution reaction. While pursuing a B.S. in Chemistry, I served as a publicity chair of Undergraduate Chemistry Council, co-outreach coordinator of Young Chemists Committee, teaching assistant, workshop leader, CETL chemistry tutor, and chemistry peer advisor. After graduation, I will be pursuing a Ph.D. in Chemistry at the University of Chicago under the guidance of Prof. Mark Levin, who is also a U of R alumnus!



Logan Worley

Chemistry B.A. with Highest Distinction
Cum Laude

I'm a first-generation college student, and officially completed my degree a semester early. I enjoy spending time outdoors, participating in activities such as bike rides, hikes, and boating. Additionally, I would describe the perfect day as being at the beach. I will be attending the University of Rochester School of Medicine this fall to continue my studies.

"I had the pleasure of working with Logan in two courses as he blazed quickly through the Chemistry curriculum. He made quick work of my General Chemistry and then came back to excel in my junior-level laboratory course. Logan showed excellent scientific intuition and was a pleasure to teach in each of those courses. Good luck in the next phase, Logan!"

~ Prof. David McCamant

"Jisoo was one of the first undergraduates to join my lab in Fall 2018, and I was fortunate that he did! He took on the challenge of an independent research project without hesitation, and has learned and grown so much as a scientist over the last two years. He is enthusiastic, driven, and passionate about chemistry, and I'm confident that those traits will take him far in his future career. Wishing you all the best in graduate school and beyond, from me and the rest of the Paradine lab!"

~ Prof. Shauna Paradine



CONGRATULATIONS

Class of 2020 !



Please

KEEP IN TOUCH!

Department Chair

Todd D. Krauss

krauss@chem.rochester.edu

(585) 275-5093

Undergraduate Studies Committee Chair

David McCamant

mccamant@chem.rochester.edu

(585) 276-3122

Undergraduate Program Coordinator

Deborah Contestabile

ugradadm@chem.rochester.edu

(585) 276-3663

Graduate Coordinator

Robin Clark

gradrec@chem.rochester.edu

(585) 275-0635

Development Administrator & Alumni Relations

Lynda McGarry

mcgarry@chem.rochester.edu

(585) 275-2915

Department Website

www.sas.rochester.edu/chm

 facebook.com/UofRChemistry



FACULTY

Robert K. Boeckman, Jr.
Kara L. Bren
Joseph P. Dinnocenzo
Richard Eisenberg
James M. Farrar
Rudi Fasan
Ignacio Franco
Alison J. Frontier
Benjamin Hafensteiner
Pengfei Huo
William D. Jones, Jr.
Rose Kennedy
Kathryn Knowles
Todd D. Krauss

Robert W. Kreilick
Thomas R. Krugh
Ellen Matson
David W. McCamant
John S. Muenter
Michael L. Neidig
Bradley L. Nilsson
John-Carl Olsen
Shauna Paradine
Lewis J. Rothberg
W. Udo Schröder
Ching Tang
Bruce Toder
Douglas H. Turner

ADJUNCT/RESEARCH/
CLUSTER FACULTY &
SENIOR SCIENTISTS

Susan Cardinal, Librarian
Lisa DeLouise
Paul Dunman
Frank Ebetino
Dmitri Ermolenko
Samir Farid
Sina Ghaemmaghami
Alan Grossfield
Clara Kielkopf
Al Marchetti
David Mathews

Benjamin Miller
Brendan Mort
Astrid Müller
Eric Phizicky
Marc Porosoff
Dennis Savage
Alexander Shestopalov
Francesca Vitali
Andrew White
Ralph Young

STAFF

Tessa Baker
Linda Boyle
William Brennessel
Deborah Contestabile
Robin Clark
Donna J. Dolan
Valerie Drake
Joseph Hickey
Anna Kuitems
Paul Liberatore

Eric Lobenstine
Lynda McGarry
Terry O'Connell
Pete Serrino
Jalil Shojaie
Ken Simolo
Barbara Smith
Barbara Snaith
Ray Teng
Doris Wheeler
Elly York



Video/Slideshow Assistance

Yimin Talia Chen

Commencement Program

Deb Contestabile,
Chemistry Undergraduate Program Coordinator

Alejandro Ramirez ('22) & Melissa A. Vicente Pejay ('22)
Office Assistants, Chemistry Department

Photos Courtesy of UR Creative Services



UNIVERSITY of
ROCHESTER

University of Rochester
Department of Chemistry
404 Hutchison Hall
RC Box 270216
Rochester, NY 14627-0216
(585) 275-4231

www.sas.rochester.edu/chm

 facebook.com/UofRChemistry