



"The biggest lesson I have learned so far, is that it is always better to ask for help and assess an unsure situation earlier than later. If you let things accumulate, it makes it harder for others to help you or point you in the right direction. This is important, not only to your research, but also to your professional and personal success."

—Amani Lee

World-Class Faculty

Our 43 faculty members and 13 affiliate graduate faculty members are excellent teachers, mentors, and advisers. More than a third have received some of the college's and university's highest teaching honors.

We mentor students interested in teaching through the Mentorship Program for Aspiring Chemistry Teachers, offer experiences as teaching assistants and opportunities to mentor undergraduate student researchers, and offer a two-semester "Preparing for Future Faculty" course that includes in-class teaching experiences.

Our Alumni

Our alumni are productive scientists, scholars, and teachers. They serve:

- as university and college faculty members;
- in leadership positions at national laboratories; and
- as scientists at major chemical, pharmaceutical, and biomedical industries such as 3M, Medtronic, Cargill, Ecolab, DowDuPont, Phillips66, and many others.

By the Numbers

Research performed by our **230** graduate students as well as some **69** post-doctoral researchers resulted in more than **\$18.982 million** in research expenditures in 2016-17.

15 of our **43** faculty members have received some of the university's highest teaching honors and are members of the University's Academy of Distinguished Teachers.

We have **eight** multi-disciplinary, highly collaborative research centers that are funded by the National Science Foundation, National Institutes of Health, and Department of Energy.

Our researchers publish more than **300** papers annually. In the past five years, those papers have been cited more than **25,000** times. Most of the papers are co-written by graduate students.

14 faculty members serve as editors-in-chief or associate editors of **17** top chemistry journals.

Information:

- check us out on Twitter, Facebook, LinkedIn and YouTube (UMNChemistry), www.chem.umn.edu
- visit our academics web pages, <https://chem.umn.edu/academics/graduate/prospective-students>
- application info: chmapply@umn.edu, (612) 624-8008

The Department of Chemistry is dedicated to excellence in education, research, and public service. We strive towards these goals through world-class teaching in the classroom and laboratory, research aimed at solving some of society's most important human health, energy, and environmental problems, fostering an environment of safety, and embracing diversity of communities and ideas to benefit Minnesota, the nation, and the world.



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Department of Chemistry
COLLEGE OF Science & Engineering
UNIVERSITY OF MINNESOTA

Chemistry at Minnesota

RECEIVE a world-class education

ENGAGE in research aimed at solving important health, energy & environmental problems

BE EMPOWERED to lead and be involved

"So far in my graduate education, I have been involved in many collaborative research projects and led a very active student group. These

experiences have allowed me develop valuable communication and networking skills that I believe will be instrumental in developing an academic career of my own."

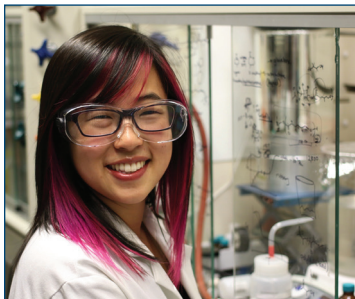
—Evan Anderson



Research Opportunities

Working with some of the top chemists in their fields, you will be actively engaged in research aimed at solving some of society's most important environmental, health, and energy issues.

Research in our department is collaborative and interdisciplinary. Overarching goals of some of our ongoing research projects include improving human health and the environment, developing nanotechnology and novel advanced materials for a myriad of applications, and unraveling problems associated with devising new alternative sources of energy. This research covers the range of chemistry, from chemical biology to physical chemistry and polymer chemistry. Many of our students are co-advised by professors in other departments and are involved in collaborative research across the university and beyond.



I have been empowered to make a difference and get involved outside of research. Working with many of my peers, I have lead safety initiatives across the department. With other students and a faculty member, we were able to start a student chapter that was welcomed by the graduate community with loads of support. I have been continuously encouraged by faculty, staff, and my peers and I wouldn't be the leader that I am today without this wealth of opportunities available."

—Annabelle Watts

There are opportunities to participate in multi-disciplinary, collaborative research centers and initiatives, including the Center for Metals in Biocatalysis, Center for Sustainable Nanotechnology, Center for Sustainable Polymers, Chemical Biology Initiative, Chemical Biology Interface Training Grant, Chemical Theory Center, Inorganometallic Catalyst Design Center, Industrial Partnership for Research in Interfacial & Materials Engineering, Masonic Cancer Center, Mass Cytometry Initiative, Materials Research Science & Engineering Center, Medical Devices Center, and Nanoporous Materials Genome Center.

As a researcher, you will:

- conduct biomedical, medical, pharmaceutical, and materials research in collaboration with Minnesota's world-class medical school, which is located across the street, and with the university's top-ranked science and engineering programs. There are opportunities to work with hundreds of Minneapolis-area healthcare organizations and medical device companies, including several Fortune 500 companies.
- have access to state-of-the-art equipment and technology needed for leading-edge chemistry research such as the department's nuclear magnetic resonance, mass spectrometry, and X-ray crystallographic laboratories, the University's Characterization Facility, Institute of Therapeutics Discovery and Development, Minnesota Nano Center, Minnesota NMR Center, and the topnotch Minnesota Supercomputing Institute, to name a few.
- share your research as authors of papers published in prestigious scientific journals and at conferences and poster sessions.



"My adviser has been completely supportive of my passion for science communication and community engagement. This has allowed me to learn how to communicate science across collaborations in the department and with industry as well as with those that have non-science backgrounds."

—Rebeca Rodriguez

Empowerment

Our students gain experiences that extend beyond the classroom and the laboratory. We empower our students to create an environment where they can prosper and contribute to their own learning, and participate in a variety of leadership and outreach activities:

- **Joint Safety Team**, a national award-winning group led by graduate students and post-doctoral associates, including Laboratory Safety Officers and others who are interested in improving the culture of safety in chemical laboratories;
- **Community of Chemistry Graduate Students**, promoting a healthy academic environment, and fostering graduate students working together to support each other by offering workshops, programs, and social and athletic events;
- **Graduate Student Workshop Committee**, organizing workshops on a variety of topics important to graduate students such as preparing for oral exams, writing fellowship proposals, and applying for jobs;
- **Graduate Student Seminar Committee**, selecting, inviting, and hosting speakers for the Student Seminar Series;
- **Chemistry Women in Science & Engineering (WISE)**, a networking resource for women graduate students and post-doctoral researchers, working to increase the recruitment and retention of women, and improving the climate for all chemists; and
- **Outreach Activities**, engaging future scientists via Cool Chemistry, Energy and U, Chemists-in-the-Library, Chemists-in-the-Classroom, Minnesota State Fair, SciMentors, Science for All, University on the Prairie, and more.



"Being involved with the Student Seminar Series has been a great way for me to get to know graduate students in our department and to talk chemistry with faculty from across the country."

—Peter Clement