MARQUETTE UNIVERSITY
GRADUATE PROGRAMS IN CHEMISTRY

DOCTORAL PROGRAM

At Marquette, you will have the opportunity to participate in cutting-edge research, working with renowned faculty who are at the fore-front of their fields. You will present at seminars, hear top researchers speak at colloquia and advance your teaching and leadership skills. With dedicated faculty and rigorous training, Marquette's graduate chemistry program will help you develop the skills you need to succeed.

Your Opportunities

- You will conduct world-class scientific research and experiments, submit articles to journals and present your work at conferences.
- We'll help you grow as an independent scientist by honing your research, oral and written communication skills.
- You will work with advanced instruments, including NMR, powder and single-crystal X-ray diffractometers, MALDI mass spectrometer, GC-MS, HPLC, capillary electrophoresis, fluorometer, FTIR, uv/vis, and the Marquette computing cluster.
- Thanks to a ratio of one full-time faculty member for every four students, you're never just a face in the crowd.

Stipend and Benefits

All students in the doctoral program are financially supported through teaching or research assistantships, which include a competitive stipend and full tuition waiver. Students are also eligible for fellowships offered by the Marquette Graduate School.

Where Our Graduates Go

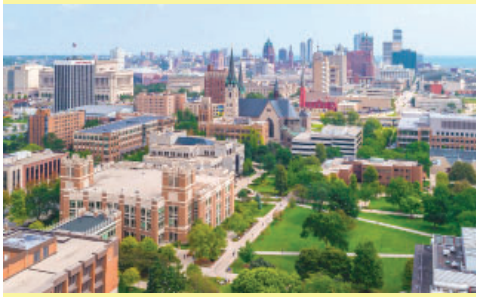
Our recent PhD graduates have proceeded to work in industry (e.g., Du-Pont, Samsung, Neurocrine Biosciences, Kingchem Labs, Materion, MPP Group), government labs (Lawrence Berkeley, NOAA, Los Alamos, Army Research Lab, National Renewable Energy Lab), and in universities, as postdoctoral fellows (Yale, UW-Madison, U Michigan, Einstein College of Medicine) or professors (Saint Louis U, East Carolina U).

About Marquette University

Marquette University is a private, Jesuit research university, established in 1881. In 1909, Marquette was the first Catholic university in the world to admit female students. Marquette continues its welcoming tradition, and is home to scholars of differing faiths, ethnicities, origins, genders, and sexual orientations.

About Milwaukee

Milwaukee is Wisconsin's largest city, home to 600k residents, and sits in a metro area of over 1.5 million. Known as Brew City for its historical and modern beer industry, Milwaukee has a wide range of bars and restaurants. The city is situated on Lake Michigan, and is less than an hour away from beautiful state parks, forests and lakes.



SPECIALIZATIONS

Analytical,bioanaly tical, biophysical, inorganic, organic and physical chemistry and chemical physics

RESEARCH AREAS

Synthesis, catalysis, photo-chemistry, ultrafast spec-troscopy, bond activation, organometallic, RNA-protein interactions, bioinorganic, Raman spectroscopy, nano-materials, solar conversion, theoretical chemistry, quantum dynamics and more

MARQUETTE UNIVERSITY
CHEMISTRY DEPARTMENT

YOUR FACULTY MENTORS

Marquette's Chemistry Department consists of faculty members who are actively engaged in cutting-edge research, publications, teaching and service. Committed to the teacher-scholar model, our faculty members regularly teach courses at all levels in addition to conducting research.

Dr. Dmitri A. Babikov
Theoretical/Computational chemistry and quantum dynamics

Dr. Joseph Clark
Transition metal catalysis and organic synthesis

Dr. Adam T. Fiedler
Bioinorganic chemistry and spectroscopy

Dr. James R. Gardinier
Inorganic chemistry

Dr. Jier Huang
Physical and materials chemistry, solar conversion

Dr. Ofer Kedem
Dynamic functional nanomaterials

Dr. James R. Kincaid
Raman and Time-resolved Raman spectroscopy

Dr. Scott A. Reid, Chair
Laser spectroscopy, gas and condensed phase dynamics

Dr. Nick Reiter
Biochemistry, RNA-protein interactions

Dr. Qadir Timerghazin
Theoretical physical chemistry

Dr. Dian Wang
Organic chemistry, catalysis

Dr. Chae S. Yi
Organometallic chemistry and homogeneous catalysis

GRANTS AND PUBLICATIONS

Faculty members in the department fund their research groups mainly using external funding from agencies such as the National Science Foundation, National Institutes of Health, Department of Energy, National Aeronautics and Space Administration, and the ACS Petroleum Research Fund.

In recent years, our students and faculty have published in journals such as J Am Chem Soc, Nature Comm, Angew Chem, J Org Chem, Proc Natl Acad Sci, ACS Energy Letters, Org Lett, J Chem Phys, Chem Comm, J Phys Chem A/B/C/Lett, Chem Eur J, Organometallics, Biochem, Inorg Chem, and ACS Catalysis.

Visit marquette.edu/chemistry to learn more

By the numbers

- 40-45 graduate students in total, with an average entering class of 10 students per year
- The average student graduates in 5 years
- 4:1 student to faculty ratio
- 100,000 square feet of research space

MARQUETTE UNIVERSITY
READY TO APPLY

What the program looks like

- New students arrive in August, and take proficiency exams in different sub-fields. Students either pass 3 of 4 exams or take courses to fulfill the requirement by the end of the 1st year
- In September, students start courses and teaching assistantships
- At the start of the Fall semester, faculty present their research and meet with students to discuss opportunities
- Students combine research and 24 credits of coursework during their first two years, drawing from a variety of advanced courses
- In their 2nd year, students present a literature-based seminar
- Following a successful 3rd year research-based seminar, students advance to Ph.D. candidacy
- Students then continue their research, until they write and successfully defend a dissertation on detailing their original contribution to science. Most students graduate in 5 years

YOUR FIRST STEP - Application Requirement Checklist

- A completed online application
- Transcripts from all current and previous colleges/universities except Marquette
- Three letters of recommendation from individuals familiar with your academic work
- GRE scores (General Test is required; Subject Test is strongly encouraged)
- An up-to-date resume or Curriculum Vitae (CV)
- Statement of purpose – tell us about your interests, research, work or other relevant experiences, and anything else you think will help us evaluate your application
- For international applicants: TOEFL score or other acceptable proof of English proficiency
- In your application, you may select a specialization (e.g., organic) to indicate your interests, or leave it open. Either option does not limit your future choices

NEXT STEPS

Apply now at marquette.edu/grad

Contact us for more information:

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