Ph.D. in Chemistry and Biochemistry

DUQUESNE UNIVERSITY
Baylor School of Natural and Environmental Sciences
Achieve more.

Take your science background to the next level with a Duquesne Ph.D. in Chemistry and Biochemistry.

Our graduate program in chemistry and biochemistry combines chemistry's traditional technical applications with strengths in biomolecular and environmental chemistry to provide you with an unparalleled education that will help set you apart from others in your field.

Special features of our Ph.D. in Chemistry and Biochemistry program include:

- Two semester-long research experiences to help you start your graduate education
- A three-semester course in scientific communication in which you'll learn to draft scientific manuscripts, prepare fellowship proposals—and write a full NSF/NIH proposal
- A three-semester course in scientific ethics during which you'll mentor Duquesne undergraduate students on ethics assignments
- Knowledge courses determined by your advisor and dissertation committee

Go to duq.edu/chemistry-PhD for additional details about coursework and our assistantship program.
Collaborate with some of chemistry’s best.

You’ll learn from award-winning scientists who are experts in their fields.

Duquesne’s chemistry faculty members are bright scholars and researchers, frequently honored for teaching, scholarship and service. Our instructors are ready to serve as mentors as you conduct your own groundbreaking research:

**Dr. Jennifer Aitken**
Professor
*Research area:* 
*Elucidation of new crystal structures, synthesis and study of novel solid state materials*

**Dr. Michael Cascio**
Associate Professor
*Research area:* 
*Chemical modification of metal oxide surfaces used in biomaterials*

**Dr. Bruce Beaver**
Professor
*Research area:* 
*Reactions of molecular oxygen with indole and carbazole derivatives*

**Dr. Aaron Bloomfield**
Associate Professor
*Research area:* 
*Homogeneous catalysis and green chemistry*

**Dr. Ellen Gawalt**
Department Chair and Hillman Distinguished Professor
*Research area:* 
*Chemical modification of metal oxide surfaces used in biomaterials*

**Dr. Paul Johnson**
Assistant Professor
*Research area:* 
*Chemical education*

**Dr. Shahed Khan**
Associate Professor
*Research area:* 
*Electrochemistry*

**Dr. H.M. (Skip) Kingston**
Professor
*Lambert F. Minucci Endowed Chair in Engineering and Computational Sciences*
*Research area:* 
*Environmental analysis using ICP-MS*

**Dr. Thomas Montgomery**
Associate Professor
*Research area:* 
*Novel methods for synthesis of bio-relevant compounds*

**Dr. Rita Mihaiescu**
Professor
*Research area:* 
*Protein-nucleic acid interactions; NMR spectroscopy*

**Dr. Michael Paterno Parsi**
Assistant Professor
*Research area:* 
*Inorganic, organometallic and polymer chemistry*

**Dr. Tomislav Pintauer**
Professor
*Research area:* 
*Regulation of enzymes involved in steroid hormone biosynthesis*

**Dr. David Seybert**
Professor
*Research area:* 
*Mass spectrometry and gas-phase ion chemistry*

**Dr. Stephanie Wetzel**
Assistant Professor
*Research area:* 
*Analytical and forensic chemistry*

**Dr. Omar Steward**
Professor Emeritus

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**Specialized Science Centers**
Collaborate on a variety of projects with faculty from other Duquesne departments, as well as outside scholars and scientists from different industries, in the Bayer School’s **Agilent Center of Excellence in Mass Spectrometry** and **Center for Computational Sciences**

[duq.edu/science/centers](http://duq.edu/science/centers)
Access to top-notch resources that help you excel.

Conduct your chemistry work in Duquesne’s 30,000 square feet of modern work space and labs.

Stay at the forefront of innovative scientific research with the best instrumentation, all housed right here on campus. From **multinuclear NMR spectrometers** to **X-ray crystallography tools** to new **mass spectrometers**, our sophisticated technology will help make your ideas and experiments come alive.

Check out more details about our chemistry instrumentation: [duq.edu/chemistry/instruments](http://duq.edu/chemistry/instruments)

Holly Castellano
Ph.D. Chemistry '18

“The diverse research areas of Bayer School faculty are huge benefits. And the instructors are always available to help because they truly care about your success in the program and in your future.”

Federal agencies and private foundations including the National Science Foundation, U.S. Department of Energy, H.J. Heinz Endowments and R.K. Mellon Foundation have invested in updating and expanding the Bayer School's research facilities in recent years.
Explore opportunities outside the classroom.

Share your passion for science through the Bayer School’s active seminar series.

Attend seminars and symposiums hosted by the department throughout the year, and learn about emerging technology and new breakthroughs in chemistry from guest speakers who are world leaders in science.

And as a Ph.D. student, you may qualify for travel expense reimbursement as you present research results at major national scientific conferences and meetings, such as PittCon, ACS National Meeting and the Biophysical Society Meeting.

Each year the graduate student organization Phi Lambda Upsilon sponsors a conference where students present their work and host speakers. Annual graduate student awards are presented at this conference.

Visit duq.edu/bayerschool/opportunities for more details.
A city where science and innovation thrive.

With an abundance of leading technology, research and medical companies, Duquesne’s hometown of Pittsburgh is the perfect place to pursue a chemistry degree—and after graduation, your career.

Whether you aspire to conduct lab work at a world-renowned institution or teach at the college level, you’ll have a distinct advantage while completing your degree. As a Duquesne graduate, you’ll have access to established businesses, agencies, top universities and new science-related businesses eager for the talent and fresh ideas that you’ll bring.

Check out more about what Pittsburgh offers at duq.edu/graduate-pittsburgh

Best Big City
Pittsburgh was recently named the Best Big City in the Northeast on Money Magazine’s annual “Best Places” list.

Invest in your future.
A Ph.D. from Duquesne is more affordable than you might think.

Independent sources such as U.S. News & World Report consistently rank Duquesne high as a great college value. With financial aid options such as tuition waivers, fellowships, and scholarships, our high-quality education is in reach. Visit duq.edu/financial-aid

All admitted Duquesne Ph.D. in Chemistry and Biochemistry students will receive a $25,000 assistantship stipend. And each year, applicants are automatically considered for one of four special Bayer Fellowships. As a Bayer Fellow, you’ll receive a $2,500 supplement per year for two years, in addition to the annual graduate student stipend.

WalletHub ranked Pittsburgh among the 10 best U.S. markets for STEM professionals, based on job growth and salary expectations.

Our chemistry and biochemistry graduates work in private industry, government-funded research labs, and academic institutions, such as the National Energy Technology Laboratory, PPG Industries, Alcoa, Center for Disease Control, Marshall University, Auburn University and Carnegie Mellon University.
About Duquesne

A nationally ranked Catholic university, Duquesne is recognized for its outstanding academic and research programs. The University has earned accolades from *U.S. News & World Report*, Princeton Review, *Bloomberg Businessweek* and *Washington Monthly Magazine*. Situated in the heart of downtown Pittsburgh, Duquesne is home to nearly 10,000 students in 80 undergraduate and more than 85 graduate programs across nine schools of study.

[duq.edu/chemistry](http://duq.edu/chemistry)

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Write us: chemistry@duq.edu

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