



Department of Chemistry
Five-Year Strategic Plan: 2019-2024



Vision

We strive to be internationally recognized as the premier Chemistry Department for education, innovation, and cross-disciplinary research in the Nation's Capital.

Mission

We advance world-class research and education in the chemical sciences to improve global well-being.

Values

Accelerate discovery to improve global well-being

We are committed to harnessing the chemical sciences to advance the discovery of new and innovative ways to have a positive impact on the planet. Our research is at the forefront of our disciplines and is shaping important scientific developments now and for years to come.

Guide students in their pursuit of knowledge and innovation

We believe in education for the common good. We are committed to providing students with a firm foundation in the chemical sciences supporting evidence-based critical thinking, as well as personal and professional development.

Foster an open culture of diversity and inclusion

We are a department that cultivates and includes diverse people and ideas. We recognize that science is best furthered only when we acknowledge and consider contributions from a variety of backgrounds and lived experiences.

Promote a collaborative community dedicated to excellence

We believe that the key to our success as a community of GW faculty, staff, and students is a focused commitment to excellence in research, education, and service. This is realized through teamwork, collaboration, and shared responsibilities.

Develop effective professionals in interdisciplinary sciences

We are a community of intellectual leaders with recognized expertise in our fields, who collaborate across diverse disciplines. We encourage leadership and professionalism through ethics, respectful discourse, and mutual support.



Executive Summary

Chemistry's role as the *Central Science* is defined by its pivotal function connecting the Physical Sciences with Life and Applied Sciences (and thus to Medicine and Engineering). Our department recognizes this explicit role in our Teaching Mission, our Service to the University and Professional Communities, and through our pioneering Research and Scholarship. Our instructional mission is to serve the myriad of academic programs that depend on our lower division courses, but also to foster active-learning through an intensive, research-based curriculum for both our majors and graduate populations. Our role as University citizens is measured not only by our leadership in college governance, but also through collaboration with researchers in our University and around the world and our professional service to our discipline as editors and peer reviewers.

Strategic research areas in the department reflect major challenges of our time: the need for new means of harvesting energy and creating new materials, the drive toward sustainable synthetic processes and design, and the necessity of understanding and curing human disease. Our faculty approach these important issues from multiple angles. We enlist emerging tools, interdisciplinary collaborations, and innovative ideas to produce discoveries that will benefit humanity in a variety of ways for years to come.

To advance in these areas, the GW Department of Chemistry developed a strategic plan for 2019-2024. In alignment with the University's Strategic Initiatives and with input from faculty, staff, and students, the Department agreed to five Top Priorities:

1. Enhance the Departmental Culture, Operations, and Reputation
2. Increase the Graduate Student Population
3. Implement a Comprehensive Hiring Plan
4. Enrich the Student Experience
5. Advance our Masters Programs with a Comprehensive Strategy

These interrelated priorities will help us achieve our vision. This plan outlines the specific goals of each priority.



Top Priorities

1. Enhance the Departmental Culture, Operations, and Reputation

The Department will focus on internal actions required to build a top ranked chemistry program. We aim to serve as the hub in the Nation's Capital for combining diverse fields across geographic and disciplinary borders.

Goals:

- Build a culture of shared responsibility and increased student, staff, and faculty engagement
- Optimize operational efficiencies and organizational structure
- Strengthen relationships with university partners and leverage centralized resources
- Advance our standing to be in the top ranked chemistry programs
- Increase research funding

2. Increase the Graduate Student Population

Graduate Teaching Assistants (GAs) support both the teaching and research needs of the department. We are committed to recruiting a diverse and talented group of scholars, ready to push the boundaries of discovery.

Goals:

- Increase the number of GAs over the next 5 years
- Identify and develop new funding options for additional GAs and Graduate Research Assistants
- Develop and implement a strategy for recruiting and retaining exceptional scholars

3. Implement a Comprehensive Hiring Plan

The GW Chemistry Department is committed to achieving a faculty and staff size and composition to meet current and aspirational teaching, research, and operational needs.

Goals:

- Conduct an organizational assessment to determine the needs of the department and develop a comprehensive hiring plan
- Increase faculty size (18 tenure track, 2 non-tenure track) to represent key areas of research from atomistic to macro-level synthesis and analysis within focused areas of research.



4. Enrich the Student Experience

We believe in education for the common good. Our commitment is to provide students with a firm foundation in the chemical sciences by supporting evidence-based critical thinking, as well as personal and professional development.

Goals:

- Advise and mentor students for their future career and professional endeavors
- Partner with local government and industry labs for internships and service-learning opportunities
- Ensure a curriculum at all levels that meets student needs and interests
- Encourage students to play an active role in the Department

5. Advance our Masters Programs with a Comprehensive Strategy

The MS program in Environmental and Green Chemistry aims to educate students to inform decisions that impact sustainable development and protect human and environmental health. Our curriculum emphasizes the fundamental underlying science, explores the environmental and societal impacts of our development and empowers students to design and evaluate sustainable technologies.

Goals:

- Ensure the program continues to align with the Departmental mission so that we remain a unique leader of green chemical sciences in the region
- Explore a variety of educational platforms (e.g., online and accelerated BS/MS degree) to increase the reach of the programs
- Link students to partnering businesses, NGOs, and government institutions for the Capstone course and employment opportunities

Definitions

We have adopted the following terms and definitions for use in this strategic plan.

VISION Expresses the desired future state when the Department has achieved its mission. Our vision is concise, inspiring, motivating, energizing, core values-oriented, and futuristic.

MISSION Asserts the Department's purpose and reason for existing.

VALUES Fundamental beliefs of the Department that define our culture and identity, and guide how all faculty, students, and staff conduct their work to fulfill our mission and vision.

TOP PRIORITIES Broad themes that require dedicated focus in order to advance the Department's vision and mission.



GOALS Outcome statements of the Top Priorities that serve as shared end-results that will guide the Department's development of specific initiatives and actions.