

Department of Chemistry Strategic Plan 2011-2014

Mission

Illinois State University is a multi-purpose university committed to expanding the horizons of knowledge among students, colleagues, and the community. The Department of Chemistry shares this mission. Therefore, we take the primary roles of faculty to be the mutually supportive activities of teaching, research, and service. We seek to engage these activities in a manner that promotes professional development, is characterized by cooperation and collegiality among faculty members, and helps our students achieve the highest possible success.

At the undergraduate level, we seek to provide a high-quality, up-to-date learning experience that emphasizes the acquisition of knowledge and skills necessary for students to work in all careers in the chemical sciences and/or to continue their education in chemistry, biochemistry, and related areas and professions. At the graduate level, we seek to provide advanced training that includes research carried out under the direction of faculty working at the frontiers of their fields. We also seek to provide non-majors with instruction in chemistry that contributes to their understanding of scientific principles and thereby helps produce well-educated citizens. We are committed to having programs of study, approaches to learning, and faculty expertise that meet the needs of our students.

Vision

Guided by the *College of Arts and Sciences Strategic Plan 2010-2015* and the University-wide strategic plan, *Educating Illinois*, our vision is to provide excellent general education in chemistry and the basic principles of physical science, outstanding programs to train chemists and chemical educators for meaningful careers in chemistry, and cutting-edge research experience for undergraduates and graduate students in our programs. We seek to enhance our national and international reputation and visibility so as to insure the highest level of recognition of our degrees and thereby insure the highest level of opportunities for our degree holders.

Our vision is focused on being the state's leading institution for high school chemistry teacher education and on becoming the nation's premier chemistry department in having a unified approach to teaching, learning, and research. At the graduate level, we seek to train teacher-scholars along with research chemists, instilling in both the strongest skills for communicating scientific thinking. At the undergraduate level, we seek to provide students with a solid, thorough understanding of the field of chemistry that offers them the widest range of career and educational pursuits. For non-majors, we seek to provide a knowledge base in physical science that will help each student be an informed member of society on technical issues that may arise in their lifetime.

Values

We share the values of the College of Arts and Sciences as contained in the *College of Arts and Sciences Strategic Plan 2010-2015* and in addition we hold the following values.

- We endorse a strong liberal arts and science tradition that provides a basis for lifelong learning, critical analysis, quantitative reasoning, and professional development.
- We value research and scholarship as the primary means to uncover new fundamental knowledge of the world around us and to insure curricula that are always timely, current, and relevant.
- We value open, collegial dialogue in advancing technical knowledge and in supporting shared governance of the institution.
- We support collaborative efforts, service projects, and other partnerships that combine scientific inquiry with meeting contemporary needs of society.
- We value the diversity of questions, methods, conceptual approaches, and ideas that comprise the central science of chemistry.
- We value the direct mentoring of students by faculty and the learning-by-doing manner of instructing students in a laboratory science.
- We recognize the rapid development of new technology and value the opportunities it presents for research, education, and communication of scientific ideas.

Goals

- Research: Improve and enhance our research infrastructure, our external research funding, our research productivity, and our national and international reputation for research developments
- Education: Update our curriculum on a continuing basis to bring cutting-edge developments to our students; provide new degree programs to reflect changing needs of Illinois residents, advancements in the field of chemistry, and opportunities unique to ISU; and, be a driving force and resource in chemistry teacher education
- Service: Provide an engaged and interested department for the surrounding community and the state, and share technical expertise in support of efforts for the public good
- Resources: Utilize all available resources in the most efficient and most productive ways and to secure available external resources to support our mission

Strategies

We are committed to working toward our goals through the four strategic foci of the *College of Arts and Sciences Strategic Plan 2010-2015*.

Strategic Focus One. Facilitate academic excellence.

- Offer an ACS-certified bachelor's degree in biochemistry for those who wish to pursue a career in the biochemical sciences or the health-related professions
- Enhance advising and placement services for students
- Provide personal attention to our students in lab and research work
- Initiate courses with a new approach to general education
- Strengthen the graduate programs through the acquisition of new resources and the recruitment of highly-qualified students
- Substantially increase graduate assistant summer support

- Leverage scholarship funds to recruit a larger number of academically-gifted freshmen and transfer students
- Actively promote collegiality, cooperation, and collaborations among faculty

Strategic Focus Two. Enhance the systems and infrastructure supporting academic excellence.

- Acquire the highest grade of instrumentation for our laboratories
- Find and redirect cost savings to support student research
- Reduce faculty teaching loads to be closer to loads at institutions with comparable research activity
- Add faculty to meet teaching needs
- Establish a permanent staff position with primary responsibilities in advising, external relations, and safety
- Plan for facilities improvements and expansions that will allow for enhanced research and teaching productivity and also allow for program growth

Strategic Focus Three. Diversify and enhance financial support for academic excellence.

- Increase research and instrumentation grant success and grant submission by the faculty
- Increase interactions with alumni, giving attention to developing both alumni friends and alumni donors
- Explore alternate ways to provide funding for programmatic needs that are not being met by the University
- Develop new interactions (e.g., placement programs) with corporations likely to have an interest in supporting our programs

Strategic Focus Four. Share and promote our academic excellence

- Redesign and reorganize the Department's web presence to make it a more useful tool for our constituents and a more accurate reflection of the Department's character
- Build relationships with high schools and community colleges
- Institute a new seminar program and bring more external scientists to ISU
- Strengthen ties with professional organizations, i.e., Illinois Association of Chemistry Teachers and the American Chemical Society
- Employ social media to connect with prospective students, friends and alumni, and the general public
- Celebrate student and faculty success at an annual awards banquet and through Departmental publicity