

DEVELOPING ETHICAL AND RESPONSIBLE SCIENTISTS

The Saint Anselm College Chemistry Department provides students with the knowledge and skills necessary to excel in chemistry within the context of a liberal arts education. Consistent with the Catholic Benedictine mission of the college, the department seeks to develop ethical and responsible scientists, who are active in their local, national, and global communities. The department engages students in a variety of learning experiences that integrate the teaching and research laboratories with the classroom.

Chemistry, as the central science, is by its nature interdisciplinary, drawing on both the mathematics and physics to understand basic principles and helping to inform the structure and reactivity in biological systems. As such, in addition to chemistry, students demonstrate competency in calculus, physics, and biochemistry.

MAJORS AND MINORS

B.S. Chemistry (ACS Certified)

• Broad base of fundamental knowledge and additional focused coursework, 400+ hours of laboratory experience, and research

B.A. Chemistry

 Broad base of fundamental knowledge including laboratory work and research with more opportunities to take additional electives

B.A. Chemistry with Secondary Education

• Broad base of fundamental knowledge and training in secondary education

Minor in Chemistry

Minor in Forensic Science - track for science students and non-science students

INTEGRATED, MODERN CURRICULUM

Much of the work in chemistry today crosses the boundaries of traditional chemistry subfields. Technology is used in ways that would have been unimaginable 40 years ago. Our curriculum has been reimagined to include these modern realities. Student - centered coursework and laboratories are integral to the development of fundamental knowledge. Upper division 2-credit courses allow for a focus on specialty topics. Integration of hands on experience with instrumentation begins as early as freshmen year and ends with a capstone Integrated Laboratory course.



THE DEPARTMENT

The Chemistry Department consists of seven faculty members and one full time lab supervisor with experience in academic, government, and industrial research. Faculty teach laboratory sections, in addition to lecture sections. Additional support is provided by lab instructors.

DR. MARY KATE DONAIS PH.D. 1995

University of Massachusetts, Amherst Analytical Chemistry

DR. NICOLE EYET PH.D. 2009

University of Colorado, Boulder Physical Chemistry

DR. MATTHEW HURLEY PH.D. 2012

University of Maryland, College Park Organic Chemistry

DR. JENNIFER PACE '14, PH.D. 2018

University of Connecticut Medicinal Chemistry

DR. BRITNEY PRIVETT, PH.D. 2017

Dartmouth College Biophysical Chemistry

MR. JOHN TIPPING '08 M.S. 2010

Indiana University Organic Chemistry

DR. CAROLYN WEINREB PH.D. 1994

Department Chair Pennsylvania State University Organic Chemistry

DR. DERK WIERDA PH.D. 1990

Harvard University Inorganic Chemistry

RESEARCH

All chemistry majors undertake a research project in collaboration with a faculty member. Research projects completed in recent years include:

- Elemental Analysis of Archaeological Artifacts from an Ancient Roman Villa
- Synthesis and Characterization of Catanionic Vesicles
- Reactions by Microwave Irradiation
- Nitrogen Fixation using Vanadium Complexes
- Influence of Metals on Plant Circadian Rhythm
- An Analysis of Paint Thinner as an Accelerant
- Identification of Medicinally Relevant Compounds

The College currently receives funding from the NH-INBRE grant through which paid research fellowships are available. Additionally the Father Michael Summer Research Grant is awarded for a summer research position in collaboration with Chemistry faculty. Many of our students also obtained summer industry positions or have participated in summer programs at major research universities. The College also supports research through Undergraduate Research Fellowships and Honors Summer Program Research Fellowships open to students in all disciplines.

CAREER PATHS

A chemistry degree from Saint Anselm College can be the beginning to many career paths. Recent alumni have successfully pursued a graduate or professional degree at:

- · University of Cincinnati
- · Colorado School of Mines
- Clemson University
- · College of William & Mary
- Tufts University
- · Dartmouth College
- · Arizona State University
- University of Rhode Island
- Indiana University
- Rensselaer Polytechnic Institute
- · University of Oregon
- University of Massachusetts
- · University of Notre Dame

Alumni have found employment in industry and government agencies, and teach at colleges and high schools.

- Raytheon
- Johnson Matthey Pharma Services
- Boston PD Crime Lab
- Northern Analytical Laboratories
- Teledyne Leeman Laboratories
- Bedford High School
- Malden Catholic High School
- Western New England University
- Pacific Northwest National Laboratories

CHEMISTRY CLUB

Chemistry Club provides outreach and social activities – from study sessions and working with high school students to pizza parties and brewery tours.



TO LEARN MORE ABOUT THE CHEMISTRY MAJOR:

www.anselm.edu/chemistry (603) 641-7155

chemistry@anselm.edu





COLLEGE