



An overview of the department and its offerings. For further information, visit the website at www.moravian.edu/chemistry.

Chemistry, sometimes called the “central science,” is the study of how atoms arrange themselves in space, how those arrangements interact and change, and how the properties of materials are determined by those arrangements. Because everything that we touch, see, smell, and feel is made up from atoms, chemistry is essentially the study of our world.

The Chemistry Department at Moravian College provides students with a fundamental understanding of chemical concepts and their application to current problems. As a result, the Moravian chemistry major provides a firm foundation for graduate study in chemistry, biochemistry, or medicine, and for careers in the chemical and pharmaceutical industries. In conjunction with the teacher certification program of the Education Department, chemistry majors can qualify for secondary school teaching certificates in chemistry and general science.

Strong, Personalized Academic Majors

Approved by the American Chemical Society, the department’s chemistry program provides its students with the intellectual, experimental, and communication skills to become effective scientific professionals. Beginning in the general chemistry course and throughout the curriculum, Moravian students explore chemical principles by carrying out experiments using modern chemical instruments.



The department provides a wide variety of courses for students majoring in chemistry. The courses available are General Chemistry, Environmental Chemistry, Organic Chemistry, Methods in Chemical Research, Quantitative Analysis, Physical Chemistry, Instrumental Analysis, Inorganic Chemistry, Synthetic Organic Chemistry, Advanced Physical Chemistry, Physical Organic Chemistry, and Senior Seminar.

The department offers a standard major in chemistry and the more rigorous American Chemical Society-certified chemistry major, which is excellent preparation for graduate school in chemistry. In conjunction with the Department of Biological Sciences, the department also offers a major in biochemistry, which includes coursework in both chemistry and biology and a two-semester sequence of courses in biochemistry. For all three majors, the department recommends a sequence of classes that chemistry or biochemistry majors should take each term to ensure they receive the required courses over the four years at Moravian.

Students benefit from the College’s small laboratories, which allow faculty members to maintain close interaction as they work and learn together. There are three main laboratories for chemical instrumentation, and six research labs for undergraduate students involved in special projects. In addition, the department has more than 40 tablet computers that are used for both lecture and lab courses.





Hands-On Learning

The Chemistry Department is led by faculty who are committed to helping students “learn how to learn.” A significant part of this educational process is allowing students to conduct research with their own two hands. There are numerous hands-on learning experiences for students dealing with analytical techniques such as optical and infrared spectroscopy, gas chromatography and NMR. The department strongly encourages students to take advantage of these opportunities.

Students can experience original research with faculty through the Honors program, independent study course work, or summer research projects funded by external grants. Many students participate in research with faculty through the SOAR program, which pays students to conduct research, even in the summer. Potential on-campus projects include chemical and enzyme kinetic studies, organic or inorganic syntheses, molecular orbital calculations, or spectroscopic or electrochemical studies of reaction intermediates and mechanisms. Students have also been involved in field study projects at AT&T and Baker Instruments laboratories.

Cross-registration with institutions in the Lehigh Valley Association of Independent Colleges enables students to take courses in polymer chemistry, engineering, and other specialties. In addition, Moravian College offers formal cooperative bachelor's degree programs with Lafayette College, the University of Pennsylvania, and Washington University (St. Louis) that can lead to degrees in chemical or biochemical engineering.

The department also sponsors an American Chemical Society student affiliate chapter that is active in sponsoring guest lectures, receptions, and field trips to local industrial and government laboratories.

Alumni Careers in Chemistry

Moravian chemistry majors enjoy a wide range of career options upon graduation. Many go directly into professional chemistry as employees of private industry, governmental agencies or educational institutions. Others continue on to graduate school, with Moravian graduates gaining acceptance to some of the most recognized institutions in the country, including Cornell University, Pennsylvania State University, and the University of Pittsburgh.

- Ryan Mehl '96 completed his Ph.D. in chemistry at Cornell University and is now on the faculty at Oregon State University.
- Kevin Range '98 completed his graduate work at the University of Minnesota and is now on the faculty at Lock Haven University.
- Lisa Tarricone Schultz '95 worked for Air Products after graduation and now works for Xigo Nanotools.
- Mark Schlegel '04 completed his graduate work at the University of Pennsylvania, post-doctoral work at the Max Planck Institute in Berlin, and is currently teaching at Boston College.
- Julie Jones Shilane '02 completed her her Ph.D. at Princeton University and is currently working for Light Management Consulting.
- Ryan Hinrichs '96 completed his Ph.D. at Cornell University and is now on the faculty at Drew University.
- Erica Landes Sinclair '00 graduated from Temple University School of Pharmacy and is employed at Target as a pharmacist.
- Jill Brinckman Palmer '06 teaches in the science department at Methacton High School in Norristown.
- Nicole Savino '06 is a chemistry teacher and head coach of the girls basketball team at Phillipsburg High School in Phillipsburg, N.J.
- Kristen Labert '11 teaches at Hackettstown High School in Hackettstown, N.J.

Long before 1776,
Moravian College stood for
life, liberty, and the pursuit of happiness.
As the sixth-oldest college in America,
we believe everyone is born with an innate love of learning.

Our mission is to set it free.

To every student of every circumstance,
we promise the power of the liberal arts,
a whole wide world of experience,
and a deeper enjoyment of life.

Pursue them all with passion.