



Department of Chemistry

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Majors Offered: Chemistry, B.A., B.S. Professional Chemistry, B.S.

Links to Web sites: [Catalogs](#) [Department of Chemistry](#) (department maintained)

VALPO CHEMISTRY MAJORS explore the fundamental nature of matter, investigate changes in energy, and identify properties accompanying compositional changes in matter. They gain a solid base of knowledge that prepares them for a variety of careers.

What Is Distinctive About Valpo's Program?

Valpo's Department of Chemistry is one of only 24 chemistry departments nationwide that receive student scholarship and research funding from the Dow Chemical Company Foundation. Valpo was chosen for this honor based upon the record of alumni success in obtaining Ph.D.'s in Chemistry. Almost two-thirds of Valpo's Chemistry majors attend graduate or professional schools.

What Can You Do With This Major?

Degree, Skills, or Experience Needed for Beginning A Job In This Field: A Bachelor of Science Degree in Chemistry is adequate for many jobs. A Ph.D. in Chemistry will broaden the opportunities.

Kinds of Work Available to Graduates in This Major: Over 9,000 companies offer career opportunities for students with training in the field of chemistry. These are a few of the industrial options and other possibilities for people with a background in chemistry.

Analytical chemist Dentist Enzyme
production chemist Medical chemist
Patent attorney Pharmacist Product

Technical writer Forensic Criminology
chemist Environmental scientist Materials
scientist Petroleum chemist Polymer

College of Arts & Sciences - Valparaiso University
Development chemist Sanitation chemist chemist Production superintendent
Synthetic chemist Quality control supervisor Technical
salesman

In addition to the private sector, careers in teaching at the secondary level and a great variety of jobs with governmental agencies (such as EPA, OSHA, or the various national laboratories) are possibilities. Obtaining the Ph.D. degree in Chemistry opens up additional opportunities for work in basic research and development and also careers in teaching at the college level.

Potential Hiring Institutions: A wide variety of industrial concerns require the Chemistry major. Valpo Chemistry graduates have gone on to work for companies including Abbott Laboratories, Bethlehem Steel, Dow Chemical, Du Pont, Eli Lilly, Monsanto, NASA, Proctor & Gamble, and Standard Oil.

Graduate Schools: Each year about two-thirds of Valpo Chemistry graduates go on to some of the best graduate schools, such as California Institute of Technology, University of California-Berkeley, University of Illinois, University of Chicago, Northwestern, Massachusetts Institute of Technology, and Stanford. Almost all graduate students in Chemistry or Biochemistry are fully supported through teaching assistantships or fellowships, including the National Science Foundation and Woodrow Wilson Fellowships.

What Beyond-the-Classroom Opportunities Does Valpo Offer in This Field?

Extracurricular Groups: In addition to participating in Chemistry Club and Phi Lambda Upsilon - Chemistry Honorary Society, students may find working as a Chemistry lab assistant after their freshman year to be especially rewarding.

Laboratory Instruments: Silicon Graphics O2 work station for molecular modeling; superconducting Fourier transform nuclear magnetic spectrometer; Fourier transform infrared spectrometer; visible and ultraviolet spectrometers (one with diode array); gas chromatographs; high performance liquid chromatograph cone with mass spectrometer; protein sequencer; x-ray diffraction equipment; calorimeter; Raman laser spectrometer; protein sequencer; atomic absorption spectrometer; inductively coupled plasma spectrometer; gel electrophoresis

Notable Alumni

Frederic M. Bernthal, former Deputy Director of the National Science Foundation
Robert Bryant, research scientist at NASA and winner of the "Top 100 Inventions"
two years in a row John Fackler, Dean of the Science Division at Texas A
& M University Grant Krafft, Chairman and Chief Scientific Officer, Acumen
Pharmaceuticals, Inc. Lowell P. Hager professor, University of Illinois and a
National Academy of Sciences inductee Heather (Mitchell) Johnson, obstetrician
and gynecologist, Columbia Women's Hospital, Washington, D.C.