CHEMISTRY & PHYSICAL SCIENCES

PLV

The Department of Chemistry and Physical Sciences on Pace University's Westchester campus offers **Bachelor of Science (BS)** degrees in **Physics**, **Chemistry**, and **Biochemistry**. The degrees in chemistry and biochemistry are certified by the American Chemical Society. A prestigious seal of approval by the world's chemists, this accreditation establishes Pace University as one of the nation's foremost universities and colleges in the field of chemical and physical sciences.

We are committed to excellent teaching, scholarly growth and service, while providing a nurturing environment for our students. Pace University's motto of *Opportunitas* is central to our teaching philosophy. We take it to mean that our students, upon graduation, will possess the critical and analytical thinking skills, the creative minds, scientific and instrumentation competency, and the specialized abilities to perform proficiently and confidently in the world of science. We not only aim to ensure students learn what they need to be successful scientists and citizens of the world of today, but also to instill in them the ability *to learn how to learn*, so that they can continue to grow with the ever expanding knowledge of the 21st century.

BS IN CHEMISTRY

The study of chemistry is both challenging and rewarding. It is a central science offering a wide range of career options. By prudent selection of elective courses, in consultation with faculty advisors, chemistry majors may choose a specialization in pre-medical, pre-dental or pre-veterinary studies. They may also elect to specialize in such areas as analytical, experimental, environmental, forensics, theoretical, industrial chemistry or management science.

BS IN BIOCHEMISTRY

The degree in biochemistry requires the same core studies as the chemistry degree, including fundamental chemistry, biology, physics and math courses, as well as courses in biology and upper division work in biochemistry, advanced biochemistry and advanced biochemistry laboratory work. Students will pursue research with department faculty members. Biochemistry majors often have a desire to continue their study to obtain a PhD, MD or a DDS degree.

BS IN PHYSICS

The study of physics at Pace University is a well-balanced program of theory and experimentation. The student is given a complete foundation in the main theoretical lines of physical thought and a solid grounding in laboratory practice. This program provides students with the technological skill to successfully compete for positions in industry and government. It also provides a solid basis for graduate study.

PROFESSIONAL PREPARATION

Our graduates have an excellent rate of success whether they continue on to complete advanced degrees such as an MD; DMD; DDS; DO; or PhD; or if they proceed to work in industry. Chemistry and biochemistry degree majors are always in great demand and have higher than average admittance rates in medical and other health-related schools.

COMBINED DEGREE PROGRAMS

Pace University, in conjunction with Rensselaer Polytechnic Institute (RPI) and Manhattan College, offers combined programs in chemistry and engineering. These are 3+2 programs in which the student takes three years of instruction at Pace University and two years of instruction at RPI or Manhattan College. The chemistry bachelor's degree is awarded by Pace University. An additional bachelor's degree in chemical engineering is awarded by Manhattan College, and additional bachelor's degrees are awarded by RPI in chemical engineering, biochemical engineering, environmental engineering, industrial and management engineering, or material engineering. These unique programs combine a solid education in the basic sciences with a highly pragmatic understanding of the application of science to industry and business. They are programs suited to the Westchester area, a region with a large technical work force and an ongoing need for trained professionals.

FACULTY AND FACILITIES

Our professors are actively involved in research in the areas of nanotechnology, environmental science, and physical chemistry. The Dyson Hall of Science, a state-of-the-art multidisciplinary science research and education facility, recently underwent a $7.5 million renovation which included the creation of more integrated research and teaching spaces, updated experimentation equipment, as well as architectural updates.