

New chemical education degree for future high school teachers to be offered at UCSD

February 13, 1992

Media Contact: Warren R. Froelich, (619) 534-8564

CHEMICAL EDUCATION DEGREE TO BE OFFERED AT UCSD

A new undergraduate program leading to a degree in chemical education for future high school teachers will be offered beginning next fall at the University of California, San Diego.

The new program represents the first teacher education program established by a science department at UCSD. Students majoring in chemistry/chemical education will be given intensive studies in earth sciences, physics and mathematics, in addition to chemistry and biochemistry.

"Science education in American high schools has not had the same professional standing as in Europe and Japan," said Donald W. Anderson, dean of UCSD's Division of Natural Sciences.

"Programs such as this are important for bringing our educational system up to international levels," he added.

Essentially, chemical education students would follow the same curriculum as other UCSD chemistry majors, with earth science and biochemistry as electives together with three courses in the university's Teaching Education Program.

The program is expected to meet certification requirements established by the American Chemical Society (ACS) for chemical education majors. A similar undergraduate program at Utah State University is the only other in the nation to have received ACS certification.

"Teaching good science in our high schools is an important priority in understanding the modern world and its highly competitive businesses involved in high technology," said Stanley Miller, a professor of chemistry at UCSD and one of the program organizers.

"Science education is important to our children's understanding of current society," he added, "and this program will help teachers give our future generation a firm foundation not only in chemistry, but in other aspects of physical and biological sciences."

According to a recent nationwide survey of 7,000 high school chemistry and physics teachers conducted by the ACS and the American Institute of Physics, less than one-third of all high school chemistry teachers majored in chemistry during their undergraduate education.

"Traditionally, a high school chemistry teacher does not have to be a chemistry major in college," said Barbara Sawrey, academic coordinator in UCSD's chemistry department. "A teacher may become a chemistry teacher if he or she were a biology major, a physics major, or something else."

As a result, she added, many teachers do not have an adequate familiarity with the subject matter.

Miller and Sawrey envision that when chemical education majors graduate from UCSD within a few years, they will represent a substantial portion of all chemistry majors now graduating from the university.

(February 13, 1992)