Research Experiences for Undergraduates (REU) Site at Cal Poly, San Luis Obispo

Sustainable Management and Beneficial Reuse of Residual Wastes and Byproducts

Well-qualified undergraduate students are invited to apply for a summer research experience at California Polytechnic State University (Cal Poly), San Luis Obispo sponsored by the National Science Foundation (NSF). The ten-week long program will be held from June 17 to August 23, 2013 for ten selected undergraduate students. A stipend of $4,800, up to $500 for travel, in addition to room and board at Cal Poly will be provided.

Fundamental research to be undertaken as part of the REU program involves waste management, pollution prevention, waste to energy conversion, and beneficial reuse of wastes and byproducts. The REU program will engage students on research supported by the Global Waste Research Institute (GWRI), an interdisciplinary organization at Cal Poly focused on promoting collaborative and cutting-edge research and educational activities. Institute goals are to advance current practices in resource management and to conduct research on and provide anticipatory solutions to the entire lifecycle of large quantities and wide varieties of wastes and byproducts. The GWRI fosters collaboration between the colleges of Engineering, Science, Agriculture, and Business, where experts from complementary disciplines work together to develop innovative and sustainable solutions to existing and emerging challenges.

The REU program at Cal Poly will engage undergraduates on research leading to the discovery of new knowledge, provide mentoring for a diverse research team, promote graduate study as a future professional goal, and provide instructive and appealing learning components. As part of the research experience, the participants will formulate a hypothesis, develop a research plan, carry out a research investigation, prepare progress reports using multiple technology-enriched approaches, present findings to a group of peers and research mentors through a variety of presentation modes, and reflect on achievements. In addition, specific periods will be set aside for structured learning and professional development activities designed to provide the participants with skills, tools, and training essential for success in research.

Cal Poly is a nationally ranked (e.g., U.S. News and World Reports rankings) primarily undergraduate institution located on the coast between Los Angeles and San Francisco. The university has nearly 19,000 students and embraces a Learn by Doing educational philosophy.

Students interested in applying to the program should indicate such interest by email as soon as possible to Dr. Gregg Fiegel (gfiegel@calpoly.edu), Professor of Civil and Environmental Engineering at Cal Poly. Dr. Fiegel will send interested persons a formal application package directly. Applications will be reviewed starting April 15 and will continue until all ten research positions are filled. Students who have earned their bachelor's degree prior to the start of the program are ineligible. Program participants must be U.S. citizens, U.S. nationals, or permanent residents of the United States, per NSF requirements.