University of Cincinnati Nuclear Engineering Program Faculty Development Project

A new program emphasis area is being formed that combines features of the existing academic and research programs in Nuclear and Radiological Engineering with the Occupational Safety and Health Engineering program to create a new comprehensive program in Nuclear and Radiological Occupational and Environmental Safety and Health Engineering. The program is designed as a professional development opportunity for a Research Assistant Professor in Nuclear and Radiological Engineering. He will be mentored and assisted by the PI, the Co-PI and other faculty in the UC College of Engineering and UC Medical Center. In addition, assistance will be provided by Nuclear Engineering faculty at the Air Force Institute of Technology (Department of Systems & Engineering and the Department of Engineering Physics), with whom we collaborate on research projects and academic courses. Combining resources of these three programs provides a broad base of expertise for mentoring in the theoretical and applied aspects of Nuclear and Radiological Safety and Health Engineering. One of the research thrust areas includes developing sensors and methods for detecting a range of radioactive materials and radiation from distributed or concealed sources that may accidentally or intentionally be released to the air, water, or soil. Research will also consider the impact of advanced nuclear energy systems on occupational and environmental exposure pathways.