

Executive Summary

The Enhancement of the Educational and Research Nuclear Science Programs at
Florida Memorial University

Period: October 1, 2011-September 30, 2015

Florida Memorial investigators

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Objectives:

Florida Memorial University, an HBCU in south Florida, is the only institution with comprehensive undergraduate radiochemistry and radiobiology programs. We propose to enhance both the educational and research components of these programs with training of students in Health Physics and the radioactive characterization of samples from the vicinity of local nuclear power plants (environmental monitoring). The second objective will result in the improvement of the laboratory courses in the two aforementioned programs, in the development of a robust research nuclear program on campus, the training of qualified students who will enter the nuclear workforce and collaboration with nuclear power plants, academic institutions, and national laboratories. All of the listed objectives are aligned with IAEA and NRC stated objectives. The acquisition of a radioactive license and training of the PI (Dr. Dimitri Tamalis) as the Radiation Safety Officer, and collaborations (University of Texas at Austin, University of Nevada at Las Vegas, the Los Alamos National Laboratory, Florida Power and Light) will enable the FMU nuclear programs to achieve these objectives. Currently, our Nuclear Science Laboratory is equipped with hand held Geiger counters, sealed radioactive sources, dedicated radiochemistry fume hood, radiation monitors, a NaI detector, a mechanically cooled germanium detector and an alpha spectrometer.