

Development of a Course on Reprocessing, Recycle Chemistry and Technology

Executive Summary

The objective of this project is to develop a course in the area of Reprocessing, Recycle Chemistry and Technology. A single course will be developed for both undergraduate seniors and graduate students. The challenging nature of the course and our partnership with Polytechnic University of Puerto Rico and the Big 12 Nuclear Engineering Consortium will help us to maintain a healthy enrollment and, thereby, continuation beyond the funding period by the NRC. Various new technologies for reprocessing with an emphasis on advanced and Gen IV reactors, chemical engineering unit operations, green chemistry for recycling, and proliferation/safeguard issues will be addressed in the course. Also, areas such as used fuel disposition and proposed modified open cycle will be addressed. Our dissemination plan through distance education, along with new techniques for teaching using multimedia, will reach a broader audience in a very effective way. The benefits of this approach are to prepare the new generation students to meet the needs of a workforce for the nuclear industry.

Principal Investigator: Tushar K. Ghosh, ghosht@missouri.edu