Implementation of zirconium ferrocyanide on simulated low level waste

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[en] 137Cs and 90Sr are major fission products which are found in radioactive effluent in abundance. In the present work zirconium ferrocyanide resin has been used for rapid and selective adsorption of Cs(I) and Sr(II) using 137Cs and 90Sr as a tracer from simulated waste. The efficiency of adsorption has been determined and was found to be more than 90% for Cs(I) and greater than 70% for Sr(II). The effect of various parameters such as pH, distribution coefficient(Kd), effect of total dissolved solids (TDS), have been studied for simulated reactor and reprocessing waste with and without carrier. (author)

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