Adsorption studies of 90Sr(II) employing zirconium ferrocyanide ion exchanger

by Joglekar, Sonal J.; Bagla, Hemlata (Nuclear and Radio Chemistry Laboratory, K.C. College, Churchgate, Mumbai (India))

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[en] 90Sr(II) is one of the major fission product found in the high level waste of radioactive effluent . In the present work zirconium ferrocyanide exchanger has been used for rapid and selective adsorption of Sr(II) using 90Sr as a tracer. The efficiency of adsorption has been determined by G.M Counter and was found to be more than 85%. The Sr(II) uptake of the exchanger has also been evaluated. The effects of various parameters such as pH, time of equilibration, exchanger concentration, salts have been studied. Separation factors and Kd values for a number of elements have been determined using their corresponding tracers. The interfering ions were treated with appropriate reagents prior to the adsorption of Sr(II). (author)

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