



Removal of $^{60}\text{Co}(\text{II})$ from simulated low level waste by an eco-friendly biosorbent

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Abstract

[en] Nuclear industry is rising as an environmentally benign producer of reliable energy on a large scale. However, use of radioactive materials is bound to generate radioactive waste. In order to satisfy the demand for a safe and healthy environment, radioactive waste water must be treated prior to further disposal into nature, so as to meet national standards. Cobalt is present in the wastewater of nuclear power plants and many other industries such as mining, metallurgical, electroplating, paints, pigments and electronic industries. The treatment of this waste must be managed such that it is in accordance with the principles of Green Chemistry. Biosorption refers to the passive process of adsorption of metal ions by metabolically inactive biomass. It is one of the possible innovative techniques involved in the remediation of heavy metals and radionuclides from wastewaters and the subsurface environment

Primary Subject

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