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(57) Abstract :

The invention relates to a method for removing and controlling cadmium which has very high toxicity in water, and discloses a water treatment method for removing cadmium by nanoparticles impregnated with palm kernel shell, which can be used for drinking water treatment, industrial cadmium-containing wastewater treatment, sewage deep treatment and integrated small-scale water treatment systems. The water treatment method specifically comprises the following steps of:Â Preparing nano zero valent iron particles impregnated with palm kernel shell activated carbon and process parameters includes initial cadmium concentration, pH, Temperature, Reaction time and nanoparticles dosage.Â The results revealed that sorbent prepared from agriculture waste, palm kernel shell impregnated with nanoscale size zero valent iron (PKSAC-nZVI) can be an exceptionally encouraging adsorbent for evacuating cadmium (Cd (II)) from aqueous solution

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