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ADCHAREE KARNJANAPIBOONWONG : REMOVAL OF SOME HEAVY METALS IN SYNTHETIC WASTEWATER BY LATERITIC SOIL. THESIS ADVISOR : ASSOC.PROF. SOMCHAI PENGPRECHA, Ph.D. 92 pp. ISBN 974-17-0412-7.

The removal of lead, copper and zinc in synthetic wastewater by using lateritic soil was examined in a batch experiment at room temperature. The results indicated that type and concentration of heavy metal, pH of wastewater, amount of lateritic soil and contacting time affected the heavy metal removal efficiency. The findings of this study showed that 1.00 gram of lateritic soil had the capability to remove more than 99% of lead and copper, and up to 98% of zinc in synthetic wastewaters at the concentrations of lead, copper and zinc of 25, 10 and 5 ppm, respectively, and the order of removing time was Pb(II) < Cu(II) < Zn(II). In the case of wastewater from a battery factory at 5.44 ppm of lead concentration, more than 70% of lead could be removed by lateritic soil.