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KEY WORD: WASTEWATER/DYE/TEXTILE

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OF CLAY-MINERALS AND CHEMICALS ON DYE STUFFS IN WASTEWATER
FROM TEXTILE INDUSTRY. THESIS ADVISOR ASSO. PROF.
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This research is intended to investigate the adsorption property of clay-minerals available in Thailand ie, bentonite and kaolinite, and the mixture of clay-minerals and chemical coagulants, on removal of dyestuffs from 6 dye solutions prepared in the laboratory and 5 samples of textile effluent collected from sites. In this study three kinds of dyestuffs ie, disperse, direct and reactive, and two tones ie, red and blue were used. Factors such as an impact of pH on dye-solutions, chemical coagulants and clay-minerals were studied. Optimum dose of chemical-coagulants, clay-minerals and clay-minerals together with chemical-coagulants were determined. It was found that bentonite clay is the best adsorbent and alums are more effective coagulant than the others when they reach the optimum pH. But pH has no effect on bentonite adsorption.