

"REMOVAL OF HEAVY METAL BY ADSORPTION USING BUTEA MONOSPERMA"

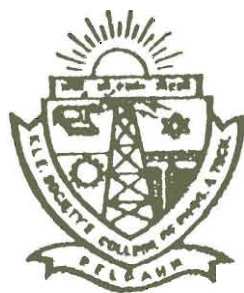
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**A Project Report
submitted in partial fulfillment of the requirements
for the award of the Degree of
Bachelor of Engineering in Chemical Engineering
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ABSTRACT

The waste water containing hexavalent chromium is treated with adsorbent prepared from *Butea monosperma* and was investigated in batch experiments. The project is aimed at finding the efficiency of activated charcoal made from *Butea monosperma* (ACBM), and also to determine how it is affected by the pH value of the chromium solution and hence finding the optimal chromium solution. We have fitted the adsorption data thus obtained in the Freundlich adsorption isotherms. We have generated a comprehensive data to compare the adsorption of the *Butea monosperma* for checking the effects of the various parameters (viz. contact time, adsorbent dose, pH of the sample, initial concentration etc.) on the adsorbent capacity. The adsorptive capacity of the *Butea monosperma* was dependant on the pH of the chromium solution, with pH 2 being optimal.