

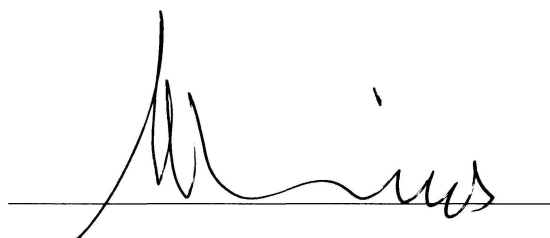
**REMOVAL OF REACTIVE RED 2 AND REACTIVE RED 120 DYES  
BY USING  $\text{ZnAl}(\text{NO}_3)_2$  LAYERED DOUBLE HYDROXIDE**

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**Final Year Project Report Submitted in  
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## **ABSTRACT**

### **REMOVAL OF REACTIVE RED 2 AND REACTIVE RED 120 DYES BY USING $\text{ZnAl}(\text{NO}_3)_2$ LAYERED DOUBLE HYDROXIDE**

Using Layered Double Hydroxides (LDHs) as adsorbent for removal of Reactive red 2 and Reactive Red 120 from aqueous at various parameters. These include concentration, contact time, pH, size of particles and adsorbent dosages. The adsorption isotherms can be defined with Langmuir model instead of Freundlich model. Characterization of Layered Double Hydroxides are made possible using X-Ray diffractometer . Result of this study reveal that to maximize the adsorption on dye solution of Reactive Red 2 and Reactive Red 120, the temperature must be high, low pH, smaller particle size and the dosage of LDH must be high.