Kinetics and Thermodynamic Studies of Disperse Dyes Derived from 4-Amino-3-Nitrobenzaldehyde on Polyester fabrics.

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***Abstract*-Adsorption kinetics and thermodynamic studies of disperse dyes derived from 4-Amino-3-Nitrobenzaldehyde on polyester fabrics was carried out at various temperatures, pH, liquor ratios, time and carrier concentrations. The results showed the equilibrium adsorption isotherms of disperse dyes on polyester fabrics. The values of the thermodynamic parameters recorded and the adsorption isotherms deduced from the experiment suggests that the adsorption kinetics of the disperse dyes on polyester fabric is in agreement with a pseudo second-order kinetic model [11]. Van der Wa'als forces are thought to have played significant role in dye – fibre attraction and the adsorption of disperse dyes on polyester was an exothermic process. It was found that on application, the dyes had very good fastness to both wash and light and moderate fastness to perspiration.**

***Key words*: Kinetics, Thermodynamic, 4-Amino-3-Nitrobenzaldehyde, Disperse dyes, fastness, Polyester.**

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