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# Comparison of Back Propagation Network and Fuzzy Logic for Electrocoagulation Process to Treat Dye Waste Water

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**Abstract:** Wastewater discharged from textile industries becomes a major environmental problem because of the presence of high level of chemicals. Hence Wastewater treatment processes are introduced to achieve improvements in the quality of the wastewater. Though Conventional wastewater treatment methods provide good efficiency, they are time-consuming and utilize many chemicals. In the proposed work, Electrocoagulation process, an effective wastewater treatment method is used in treating dye waste water because of providing high efficiency, less consumption of time and chemicals. Soft computing techniques like Back Propagation Network and Fuzzy logic are used to provide optimum current, optimum reaction time and color removal efficiency based on pH and conductivity measurements. The results obtained for test inputs are then compared to see their effectiveness in providing high color removal efficiency.

**Keywords:** Back Propagation Network; Electrocoagulation; Fuzzy logic; Wastewater.

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