

# PHOTOCATALYTIC DEGRADATION OF DYES FROM WASTEWATERS OF TEXTILE FINISHING INDUSTRY

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**Abstract:** Textile finishing industry represents one of the biggest polluting industrial sectors. With an estimated water consumption of 160 m<sup>3</sup>/t and the presence of excess dye and heavy metals in the effluent, the textile finishing industry represents a great environmental concern. In order to remove the dyes from waste waters, photocatalytic methods can be applied. The principle is based on using low cost semiconductor material that absorbs solar energy to oxidize the dyes to non-polluting substances. The oxidation process is mainly due to the formation of HO• groups at the surface of the semiconductor that will react with the dye molecules.

**Key words:** photo-catalysis, textile finishing industry, wastewaters.

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