

## *ABSTRACT*

*Textile waste water generally is dirty and dangerous for the environment if it is thrown away of anywhere. Therefore, textile waste water must be purified or degraded before being discharged into the environment. One component of textile waste water is methylene blue. In this study textile waste water was purified with TiO<sub>2</sub> material used as a photocatalyst or using light. TiO<sub>2</sub> used in deposition into transparency plastic using thermal heating method. In this study, 3 variations of methylene blue were used as liquid waste and 40 hours of irradiation. In the first variation, which is 7,8125 mg/l of methylene blue, the results of degradation or decline are 51%, while the other two variations, 31,25 mg/l and 15,625 mg/l, are 9% and 38%.*

*Keyword : TiO<sub>2</sub>, photocatalyst , Degradation , Methylene Blue, Textile Waste Water*