

Abstract

The objectives of this work were to investigate the degradation of methylene blue (MB) by titanium dioxide (TiO_2) photocatalyst in dark or no lighting area (NL), the common fluorescent lighting area (FL), and direct sun lighting area (SL). The experimental sections were carried on sol gel method of TiO_2 synthesis, the 100 mg of photocatalytic sample was put in 2.0 ppm methylene blue (MB) dye solution, hold in the dark area for 30 minutes to equilibrium state, after that the sample solution can be divided into three area holder that are NL, FL and SL. The degradation rates were studied with UV-Vis spectrophotometric method. The solution hold in the NL area has lower percent degradation than the other, while the solution hold in FL area has higher percent degradation than the others.