Photocatalytic Degradation of Methylene Blue over Ti-Containing MFI Zeolite in Aqueous Solution

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Photocatalytic degradation of methylene blue in aqueous solution was studied with UV irradiation by using nanofabricated titanium silicalite-1 and alumino titanium silicalite-1 as catalysts which prepared via microwave.
To estimate its decoloration efficiency over photodegradation, methylene blue was introduced to estimate its decolorization efficiency and photodegradation rate on various parameters such as catalyst, pH, H2O2 etc. Power XRD, UV-VIS, and SEM analysis were used to characterize these catalysts. The photocatalytic activity was compared with nanofabricated and non-nanofabricated MFI zeolites.