



**Syntheses, Characterization And Spectroscopic Properties of Azo Dyes
Using Diethylamine Functionalized Polyethylene Glycol As A Mild,
Efficient And Reusable Catalyst**

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ABSTRACT

A variety of azo dyes were synthesized in the presence of diethylamine functionalized polyethylene glycol. There are many reports for the synthesis of these dyes in the presence of sodium hydroxide. But few researches concerned with the application of another catalyst in the synthesis of these significant organic colorants. We report their immediate synthesis in the presence of modified polyethylene glycol with tertiary amine moiety in good to high yields. Investigations of solvent and pH effects on the products were performed using UV-visible spectra. The applied catalyst is non-toxic, mild and reusable without significant decrease in productivity.

Keywords: Azo dyes, Diethylamine functionalized polyethylene glycol 600, UV-visible spectra, medium effects.
