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SYNTHESIS THE NEW GENERATION OF FLUORESCEINES AND OTHER DERIVATIVES UNDER MICROWAVE IRRADIATION

Shahram Moradi*, Azade Madadi, Marziye Yarigar Ravesh

Department of Chemistry, Azad Islamic University, Tehran North Branch, Tehran, Iran
Fax: +98-21-22962042; E-mail: SHM_MORADI@IAU-TNB.AC.IR

The highest priorities for the chemical industry now are process and product safety and the environmental. New technologies and methods for "Green" and sustainable chemistry are subjects of intense activity. As part of our program to develop green synthesis procedures through the solid phase reaction, we report here an efficient synthesis of some derivatives of fluoreceines dyes in solid phase and solvent – free under microwave irradiation.

We want to achieve the synthesis of new generations of flouresceines dyes. We react the materials with different catalyst (AlCl3, BiI3 and ZnCl2). In this method, anhydride phethalic reacts with resorcinol [1], 3,5-dihydroxytoluene [2], pyrogallol [3], 1,8-dihydroxyanthra quinones [4] and 1,4-dihydroxyanthraquinone [5].

The reaction and product are shown at the below, the result relate to spectra explanation, reaction mechanism, results of reaction's yield and product purification and separation and discussing about using catalysts in this method will be presented and discussed later.