

Photochemical Formation of Red-Colored Aminoquinones by Direct Irradiation of Quinones in Amines

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The photochemistry of carbonyl compounds with amines is of particular interest since it is an efficient process for the synthesis of various kinds of functional Direct irradiation of some quinones, such as 1,4-benzoquinone, 1,2-naphthoquinone and 1,4-naphthoquinone, in N,N-dimethylaniline with 300 nm UV light afforded red-colored aminoquinones. In the case of 2,5-dibromo-1,4-benzoquinone, heterocyclic compound was found to be produced in one pot. The quinones were also irradiated in diethylamine to give the similar types of aminoquinones. The photochemical reactivity of aminoquinones were investigated in benzene.

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