

Usy-Cui Zeolite: An Efficient and Reusable Catalyst for Derivatives Indole Synthesis

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Abstract : Indole and its derivatives have attracted great interest because of their importance in the synthetic organic and medicinal chemistry. They are widely used as anti hypertension, anti tubercular, anticancer activity, antiviral, Alzheimer's disease, antioxidant properties, and free radical induced lipid peroxidation. Many drugs and natural products contain indole moiety, such as the vinca alkaloids, fungal metabolites and marine natural products. Generally applicable synthetic methods for indole moiety involve ring closure to form the pyrrole. Indole derivatives can also be accessed by further functionalization of the indole nucleus. Therefore we report a mild and efficient protocol for the synthesis of analogues of indole catalyzed via zeolithe USY doped with CuI under solvent-free conditions.

Keywords : indole, zeolithe, USY-CuI, heterogeneous catalysis

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