

Synthesis, Characterization of Mesostructured Al-SBA-15 Zeolite : Efficient & Heterogeneous Catalyst for One Pot Synthesis of tetrahydrobenzo [c] Acridine Derivatives

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ABSTRACT

Mesostructured Al-SBA-15 zeolite was synthesized by direct hydrothermal method under autogenous pressure. The prepared Al-SBA-15 zeolite was characterized by Powder-X ray diffraction, Scanning electron microscopy, Energy dispersive spectroscopy, Fourier transform infrared spectroscopy. Brunauer-Emmer-Teller surface area analysis. The catalytic activity of Al-SBA-15 zeolite was tested for one pot synthesis of tetrahydrobenzo[c]acridine derivatives. Present method offers significant advantages over the reported methods like easy separation of catalyst, simple work-up procedure, non chromatographic isolation and purification of desired product and excellent yield. Furthermore catalyst could be reused without loose in activity.