The catalyst plays an important role in the synthetic chemistry in this book we have described the synthesis of Polyaniline and Metal doped Polyanilne as a versatile catalyst. The Cobalt Chloride Doped Polyaniline (Co-PANI) composite catalyst was synthesized employing the chemical doping method. Polyaniline was fabricated through the chemical oxidation technique at a low temperature range of 0 to 30°C. As compare to the Polyaniline, the metal doped polyamine has greater catalytic activity. The synthesized catalyst were characterised by the SEM, XRD, FTIR and TGA-DTA analytical Method. The synthesised both Polyaniline (PANI) and Cobalt Chloride Doped Polyaniline (Co-PANI) catalyst used in the synthesis of 3,4-Dihydropyrimidin-2 (1H) ones as the multicomponent reaction (MCRs).



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## Metal Mediated Polyaniline (PANI) Composite catalyst

Applications in Multi-component Reactions (MCRs)



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