



ChemTech

International Journal of ChemTech Research

CODEN(USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555

Vol.10 No.7, pp 18-22,2017

A Green Synthesis of Benzimidazole Derivatives & Antibacterial Activity

KiranGajula*, Thirumala charyMaringanti, RavinderManchal

¹Chaithanya PG College, Kishanpura, Warangal, India. 506001

²Department of Chemistry, College of Engineering, Jawaherlal Nehru Technical University, Hyderabad, India. 500085

Abstract: A simple catalyst free synthetic method has been developed by the synthesis of Benzimidazole derivatives from 2-chloro benzimidazole and different types of amine derivatives using PEG-400 green solvent at room temperature. This method is simple, ecofriendly, rapid and generates 2-amino benzimidazole derivatives and good yield without use any catalysts. Newly synthesized compounds were screened for their antibacterial activity against E.Coli, Bacillus, Pseudomonas, S.aureus. The structure of benzimidazole derivatives were confirmed by using IR, ¹H NMR, Mass spectroscopy.

Keywords: 2-(chloromethyl)-1H-benzo[d]imidazole, catalyst free, PEG-400, Green synthesis.

KiranGajula *et al*/International Journal of ChemTech Research, 2017,10(7):18-22.
