



ChemTech

International Journal of ChemTech Research
 CODEN(USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
 Vol.10 No.7, pp 394-400,2017

Synthesis, Characterization, In Vitro Antibacterial Activity of Some Novel N-{(6-Substituted-1,3-benzo[d]thiazol-2-yl)carbamothioyl}-2/4-substituted benzamides

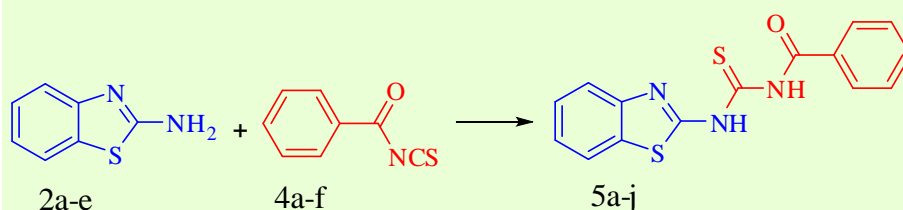
Wanjari, P.M.^{1*}, Bharati, A. V.¹, and Ingle, V. N.²

¹Department of Applied Chemistry, ShriRamdeobaba College of Engineering and Management, Nagpur, 440013, Maharashtra, India

²P. G. Department of Chemistry, Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur, 440033, Maharashtra, India

Abstract: A series of novel N-{(6-substituted-1,3-benzo[d]thiazol-2-yl)carbamothioyl}-2/4-substituted benzamides **5a-j** were synthesized by the reaction of 2-aminobenzothiazoles **2a-e** with appropriate benzoyl isothiocyanates **4a-f**. The structures of all newly synthesized compounds were confirmed by chemical tests, elemental (C, H, N and S) and spectral (IR, ¹H NMR, ¹³C NMR and mass) analysis. All of them were screened for their antibacterial activity against gram positive and gram negative bacteria showing promising results, and have shown moderate to potent antibacterial activity comparable to standard drug.

Keywords: Benzothiazoles, 2-Aminobenzothiazoles, Benzamides, Benzoylisothiocyanates.



Wanjari, P.M. *et al*/International Journal of ChemTech Research, 2017,10(7): 394-400.
