

## ABSTRACT

The current research project started with the synthesis of parent compound 5-(4-methoxyphenyl)-4-(4-nitrophenyl)-4H-1,2,4-triazole-3-thiol by treating synthesized 4-methoxybenzohydrazide and 4-nitrophenylisothiocyanate. For the derivatization of parent triazole it was treated with precursor 2-bromo-N-(2-ethyl-6-methylphenyl)acetamide to form novel compound (N-(2-ethyl-6-methylphenyl)-2-((5-(4-methoxyphenyl)-4-(4-nitrophenyl)-4H-1,2,4-triazole)yl)thio)acetamide). The structural elucidation of novel compound was done using spectral techniques  $^1\text{H-NMR}$ ,  $^{13}\text{C-NMR}$ . Triazole has gained much pharmacological interest due to extensive and more potent biological activities. The triazole moiety has potential for various biological activities and serve as antimicrobial, antifungal and anti-bacterial antiviral, anti cancer, anti-inflammatory, anticonvulsant, anti-oxidant agent.