Chemical synthesis and evaluation of antimicrobial potential of 1, 2, 3-triazole.

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Stability of 1,2,3-Triazole against metabolic degradation, oxidation, reduction, acidic and basic conditions , capability of hydrogen bonding and solubility in biological system facilitates these moieties for effective binding with biomolecular targets [1],[2].
This features possessed make theme pharmaceutically important molecule, they fine successful application in medicine and as agrochemical: agents anti-inflammatory [3], anti-microbial [4], Anti-bacterial [5], anti-tubercular [6], anti-cancer [7], anti-viral [8], anti-malarial [9], anti-HIV [10].

The synthesis of 1,2,3-triazole derivatives is developed in the presence of mesoporous catalysts such as MCM-41 and FSM-16, which have the advantage of being non-toxic, non-corrosive and causing no environmental pollution and easily separated from the reaction medium.

A complete study was carried out to develop the reaction conditions of the dipolar-1.3 cycloaddition between azide aryls and alkynes.

The synthesized molecules were analyzed by: IR , HPLC, LCMS, and ^{1}H and ^{13}C NMR, and evaluated for their in vitro antimicrobial potential against bacterial strains *staphylococcus aureus* and *Escherichia coli* , and two fungal strains *candida albicana* and *Aspergillus niger* .

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