PR-8

INDOLE BASED OXADIAZOLES AND THIADIAZOLES: ANTIMICROBIAL ACTIVITY AND STRUCTURE ACTIVITY RELATIONSHIPS

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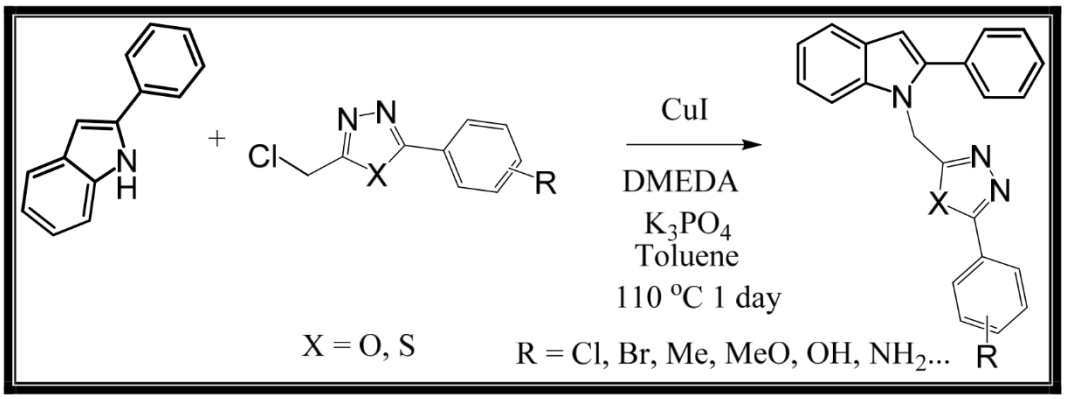

Generally, heterocyclic composites are a noteworthy source of biologically active compounds. Among them, the indole skeleton extensively distributes in natural products and bioactive molecules including anti-cancer agents [1, 2]. The other hetero scaffolds like oxadiazoles and thiadiazoles have deserved the above sentences, because, these derivatives also exhibited many biological activities [3]. Based on this and our continued interest to develop biologically active compounds consisting of two heterocyclic compounds [4, 5], the present investigation indole based oxadiazoles/thiadiazoles has been taken up. All the final compounds were prepared by using cupper iodide, *N*,*N*-dimethylethylenediamine, potassium phosphate in toluene at 100 degrees temperature. Outcome of the products with good yields. On the other hand, most of the compounds delivered prominent antimicrobial activity. The interesting thing concerning the structure activity relationships, it was observed that substitution group may influences the biological activity of the active compounds.

References

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