DR-90

SYNTHESIS AND SPECTRAL CHARACTERIZATION OF 1,2,4-TRIAZOLE DERIVATIVES

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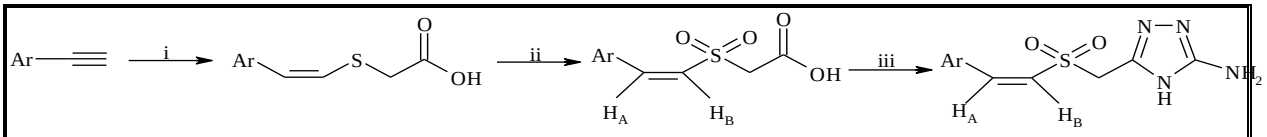
Abstract. The azole derivatives are the prominent players in the pharmaceutical research as they possess several biological properties. In particular, triazoles represent a class of heterocyclic compounds with a wide variety of biological activities. Furthermore, heterocyclic compounds containing a 1,2,4-triazole nucleus have a broad spectrum of pharmacological activities, including anti-inflammatory, antimicrobial, anticancer, antiproliferative and apoptotic properties. Hence biological importance of heterocyclic compounds containing 1, 2, 4-triazole with their pharmacological potential has thereby made them extremely attractive research targets. Based on the above essential information, we have designed and synthesized different 1,2,4-triazole derivatives.



1 **2** **3** **4**

(i) $HSCH_2CO_2H$ / NaOH / MeOH
(ii) H_2O_2 /AcOH
(iii) $NH_2NHCNHNH_2$ / $POCl_3$

Ar = a) Ph
b) 4-Me.Ph
c) 4-OMe.Ph
d) 4-F.Ph
e) 4-Cl.Ph
f) 4-Br.Ph
g) 4-NO_2.Ph