8. SCOPE FOR FUTURE WORK

As discussed in chapter-III, chapter-IV, chapter-V and chapter-VI, oxidative and eliminative azide-olefin cycloadditions of electron-deficient olefins at diverse conditions are thoroughly studied. In the light of these findings, intramolecular fashion of OAOC and EAOC strategies will be attempted to build a repertoire of structurally diverse 1,2,3-triazole-fused heterocycles. As the first part of this extension, sequential one pot OAOC and reductive cyclization will be attempted to synthesize various substituted 1,2,3-triazole-fused 1,4-oxazepanes (35) and 1,4-diazepanes (36) from chalcones (34) and sodium azide (Scheme 8.1).

![Scheme 8.1 Synthesis of 1,2,3-triazole-fused 1,4-oxazepane (35) and 1,2,3-triazole-fused 1,4-diazepane (36)](image)

Finally the microbial activity and molecular docking studies of all synthesized 1,2,3-triazoles will be evaluated against various bacterial and fungal pathogens using well diffusion method.