

List of Tables

Table No.	Table Content	Page No.
Table 2.1	Optimization of dimerization of thiobenzamide	55
Table 2.2	Dimerization of thioamides using <i>tert</i> -butyl nitrite	57
Table 2.3	Dimerization of benzoselenoamide using <i>tert</i> -butyl nitrite	61
Table 2.4	Effect of reaction conditions on the yield of model compound 2a.	66
Table 2.5	Synthesis of thiadiazoles derivatives 2a–j	68
Table 3.1	Optimization of solvents, oxidants and temperature	96
Table 3.2	TBHP mediated synthesis of coumarin under solvent free condition	98
Table 3.3	Conversion of toluene derivatives in to corresponding Knoevenagel products	100
Table 4.1	Optimization of reaction condition for imidazo[1,2-a]pyridine	131
Table 4.2	Substrate scope	135
Table 5.1	Optimization of reaction condition	162
Table 5.2	Synthesis of 4 <i>H</i> -pyran	165
Table 5.3	Reaction under solar, thermal and photochemical conditions	172