GENERAL REMARKS

1. The figure numbers, table numbers, chart numbers and reference numbers etc. given in each chapter refer to that particular chapter only. The references and figures are given at the end of each chapter.

2. AR solvents were used.

3. Organic layers were dried over anhydrous sodium sulphate.

4. Thin layer chromatography plates used were prepared by spreading organic solvent suspension of silica gel (TLC silica gel G, procured from ACME Synthetic Chemicals, Mumbai, India) uniformly over glass plates and precoated aluminium sheets with silica gel 60 F254 procured from Merck KGaA, Darmstdt, Germany. The spots on TLC were visualized by exposing them to UV radiation or iodine vapors.

5. IR spectra were recorded on FTIR – 8300 SHIMADZU.

6. NMR spectra were recorded on Brucker FT AC-200, Brucker MSL-300, Brucker-400, Brucker DRX-500 and Varian Mercury Plus instrument operating at 24°C using residual signal of non-deuterated solvents as internal reference. The following abbreviations were used–

7. singlet = s, doublet = d, triplet = t, quartet = q, multiplete = m, doublet of doublet = dd, broad singlet = bs, etc.

8. Mass spectra, EIMS, were taken on a Finnigan-Mat 1020 C mass spectrometer using ionization energy of 70 eV and LC-MS were taken on LC-MS-MS Perkin Elmer Applied Biosystems SCIEX-2000.

9. Elemental analysis was recorded on Varian Vista Pro instrument

10. Surface Area were recorded on Micromeritics surface area instrument

11. SEM photographs were taken at external laboratory

12. TEM photographs were taken at external laboratory

13. LC-MS spectra of compounds were recorded on LCMS-MS Perkin Elmer Applied Biosystems SCIEX- 2000.

14. Chemicals used during experimental protocol were of analytical grade.