GENERAL REMARKS

1. The structures are indicated by a double number, the first part of which indicates the chapter number in which it occurs and second part indicates the serial number of the structure, Scheme (2.1) i.e. scheme 1 in chapter 2, Fig. 3.1 i.e. figure 1 in chapter 3.

2. All melting points and boiling points temperature are in centigrade scale.

3. All solvents were distilled prior to use. Petroleum ether refers to the fraction collected in boiling range 60-80 °C.

4. Organic layers were dried over anhydrous sodium sulfate.

5. TLC analyses were carried out on glass plate using silica gel and the plates were developed in iodine stain.

6. In case where chromatographic separations were done, SiO₂ was used as the stationary phase.

7. The IR spectra were recorded on Perkin-Elmer one FTIR spectrometer. The samples were examined as KBr discs~5% w/w.

8. The ¹H and ¹³C NMR spectra were recorded on Brucker Avon 300 MHz spectrometer using tetramethylsilane (TMS) as the internal standard. The following abbreviations were used. s = singlet, d = doublet, t = triplet, q = quartet, p = pentate, m = multiplet, bs = broad singlet.

9. GCMS were recorded on Shimadzu QP 2010 with an ion source temperature of 200°C.

10. X-ray analysis experiment carried out on PW-3710 X-ray diffractometer.

11. SEM analysis on JEOL JSM.

12. TGA DTA analysis on SDT Q 600 V20.9 Build 20.

13. LCMS analysis on Thermo, LCQ Tune spectrometer.