INSTRUMENTATION AND METHODOLOGY

1. IR spectra were recorded on a Perkin-Elmer model 577 spectro photometer in KBr and values are in Cm⁻¹.

2. PMR spectra were recorded on a varian FX-80 A FT, Varian 200 MHz instruments in CDCl₃. All chemical shifts are given in ppm relative to TMS as an internal standard.

3. The ^13C NMR spectra were recorded on JOEL JNN FX-100 with the following experimental parameters; Mode : F.T. LOCK, internal deuterium in the solvent, temperature : 25°C, solvent : CDCl₃. All chemical shifts are expressed in ppm using TMS as an internal standard.

4. The Mass spectra were recorded in Perkin-Elmer Hitachi RMV-62 and MS-30 instruments.

5. Melting points were determined using Mettler FP 5 apparatus and were uncorrected. All temperatures in this thesis are given in degree centigrade (°C).

6. Acme silicagel (finer than 200 mesh) was used for column chromatography. TLC plates were coated with silica gel (Acme) and iodine vapour was used as spraying agent.

7. Petroleum ether refers to a fraction at b.p. 60 - 80°C.