GENERAL EXPERIMENTAL PRODUCERS

All solvents and reagents used for the chromatography and chemical transformations are of Laboratory Reagent (LR) grade. Column chromatography was carried out using silica gel (ACME, 100-200 mesh/finer than 200 mesh) and silica gel G (ACME) was used for thin layer chromatography. Visualization of chromatography was affected by the exposure to UV light or by exposing to iodine or by spraying with 10% methanolic sulphuric acid followed by heating at 100°C. All melting points were determined on a Mel –Temp apparatus and are uncorrected. Following instruments were used to record the spectral data.

1. UV Spectra : SchimadzuUV-190 Spectrometer,
Laila Impex R&D center, Vijayawada, A.P. India.

2. IR Spectra : Perkin-Elmer BXF1 FT-IR Spectrometer,
Laila Impex R&D center, Vijayawada, A.P. India.

3. $^1$H NMR : Bruker AMX 400 MHz NMR Spectrometer
Laila Impex R&D center, Vijayawada, A.P. India.

4. $^{13}$C NMR : Bruker AMX 100 MHz NMR Spectrometer
Laila Impex R&D center, Vijayawada, A.P. India.

5. LC-MS : Agilent 1100 series LC-MS,
Laila Impex R&D center, Vijayawada, A.P. India.

6. HPLC : Shimadzu SEL-10A HPLC System
Laila Impex R&D center, Vijayawada, A.P. India.

7. Q Tof : Waters XeVo G2 QTOF
Laila Impex R&D center, Vijayawada, A.P. India.