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 : **Schimadzu UV-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.