INSTRUMENTATION AND METHODOLOGY

❖ Melting Points

Melting points are in degree Celsius. These were determined in open capillary tubes and are uncorrected.

❖ Ultraviolet Spectra

UV spectra were recorded on Schimadzu Pharma spec 1700.

❖ Infrared Spectra

The IR spectra were recorded on Perkin-Elmer KBr on Unicam FTIR and Perkin-Elmer FT-IR Spectrum 1000 Spectrophotometers. Wave numbers are expressed in cm⁻¹.

❖ ¹H NMR Spectra

The NMR Spectra were recorded on JOEL MODEL AMX 400 FT NMR Spectrophotometer using DMSO-d₆ as solvent and TMS as internal standard reference. Chemical shifts are expressed as δ values [ppm].

❖ Mass Spectra

The mass spectra was recorded on Triple Quadrupole LC-MSMS with ESI source. Mfg. SCIEX.

❖ Purity

Purity of compounds was checked by TLC.
Microwave

Microwave synthesis of some compounds is carried out using LG Health wave MS-192W Domestic Model.

Magnetic Susceptibility

The Gouy magnetic balance consisting of type NP – 53 electromagnet with an MP – 1053 type DC power supply unit and semi micro electronic balance supplied by AND electronics Japan was used.

TGA/DTA

Thermoanalytical curves of all the complexes were obtained on Perkin Elmer Thermal Analyser in nitrogen atmosphere. (STIC Cochin).