FTIR SPECTROPHOTOMETER



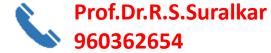


FT-IR spectrometer from JASCO (Year of purchase 4500)

The department has an FTIR spectrometer consisting of a standard optical system with KBr windows over a spectral range of 7800–350 cm-1 and a maximum resolution of 0.4 cm-1 equipped with Peltier DLATGS detector. This spectrometer is regularly used for solid organic, organometallic, liquid and polymer samples. It has separate liquid cell for concentration-based studies.

UV-VISIBLE SPECTROPHOTOMETER





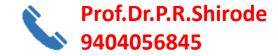
UV-Vis-NIR Spectrometer: JASCO V-670 (Year of Purcha Line)

The UV-Vis-NIR double-beam spectrometer from JASCO measures with its single monochromator designed for different types of sample over a range of wavelength from 190 to 2700 nm having deuterium and halogen lamp as a light source equipped with a PMT detector and a Peltier-cooled PbS detector for the NIR region. It has a facility to acquire data at variable temperature condition.

ELEMENTAL ANALYSER





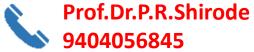


CHNS/O Elemental analyzer from PerkinElmer Pvt Ltd, USA (Year of purchase -2018)

EA is consisting of analyzer, autosampler (60 capsules) and the microbalance. With the extremely sensitive microbalance and extremely pure gases (He, O2, Ar) solid (organic, organometallic, soil) or liquid samples are recorded routinely with combustion furnace temperature 925 °C and reduction furnace temperature 637 °C with the help of recommended oxidizing and reducing agent.

CYCLIC VOLTAMETRY

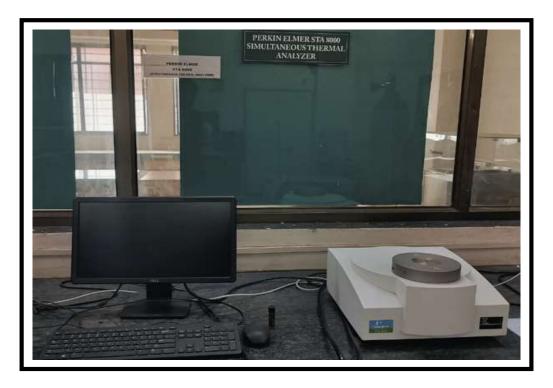


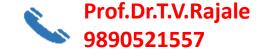


full-featured potentiostat capable of performing all techniques, including electrochemical impedance spectroscopy, for applications such as physical electrochemistry, electrochemical corrosion, battery testing, fuel cell testing, dye solar cell testing, and sensor development

SIMULTANEOUS THERMAL ANALYSER







Simultaneous analysis of TG with DTA mode (T) and DSC (mW) mode for fast enhanced result interpretation. Wide temperature range allow measurements from below room temperature to 1600 °C. Superior accuracy and sensitivity. Superior weight, heat flow and temperature accuracy. Top loading balance for ease of sample loading. Balance below furnace for optimum isolation from contamination. Vertical displacement balance sensor (not rotational) provides weight insensitivity to sample position.

MAGNETIC SUSCEPTIBILITY



