

1) Microscopes : o Microscopes are useful to investigate morphology, size, structure and even composition of solids depending upon the type of microscope .o The impression left behind in the material is investigated using a suitable microscope .4) Electric And Magnetic Measurements: o Two or four probe measurements, Magneto resistivity, Vibrating Sample Magnetometer (VSM), Superconducting Quantum Interference Device (SQUID), Magneto–Optical Measurements (Kerr and Faraday rotation). Spectroscopies are useful for chemical state analysis (bonding or charge transfer amongst the atoms), electronic structure (energy gaps, impurity levels, band formation and transition probabilities) and other properties of materials . 3) Spectroscopies : o UV– Vis –IR, FTIR, AAS, ESR or EPR, NMR, ESCA, XPS, AES.o SEM, TEM, STM, AFM, SNOM, and some of the powerful microscopes are able to resolve structures up to atomic resolution .o It has a pyramid shape.