TCR advanced offers in-house SEM and EDS analysis service.

TCR advanced has procured state of the art Scanning Electron Microscope (SEM) attached with Energy Dispersive Spectrometer (EDS) system. SEM is a great diagnostic tool for:

- Failure investigation
- Fractography
- Quality control
- Morphology and identification of localized defects
- Identifying corrosion products at microscopic levels
- Identifying surface coating or plating
- Particle size & shape analysis
- Characterizing creep in microstructure
- Identifying submicron features in microstructure
- Identification of inclusions in metals.

It requires absolutely no start-up time. The EDS Analyzer X-Max 20 is a versatile X-Ray spectrometer system which does not require liquid nitrogen for its operation. This greatly reduces the start-up time of EDS analyser as compared to conventional system.

The large detector area of 20 mm² gives better count rate at lower accelerating voltages and lower spot sizes resulting in improved accuracy and quantification of elements which is sometimes is a limitation of the conventional EDS detectors with 10 mm² area. Typical applications of SEM are:

- Material characterization/testing
- Metal manufacturers
- Pharmaceutical industries
- Corrosion inspection department
- Cement industries
- Dyes & Pigments industries
- Applied research in material science

Contact us for further details -
Email: testing@tcradvanced.com
Ph: +91-265-2657233