



Scanning Electron Microscope (SEM)

Facility Details

Model: EVO 10
Make: ZEISS, Germany

Instrument Specifications

- Magnification Range: Up to 500,000x
- Resolution: 0.3 nm @ 30 kV, 0.8 nm @ 3 kV
- EDS System: Xplore 30 EDS detector (Oxford Instruments)
- Detectors Available:
 - Secondary Electron (SE) Detector
 - Backscattered Electron (BSE) Detector

Key Features of NPTCS

- Working Hours: 9:30 AM to 6:00 PM
- Fast and accurate analysis
- Expertise in failure analysis and result interpretation
- Reliable support from experienced technical professionals

Capabilities

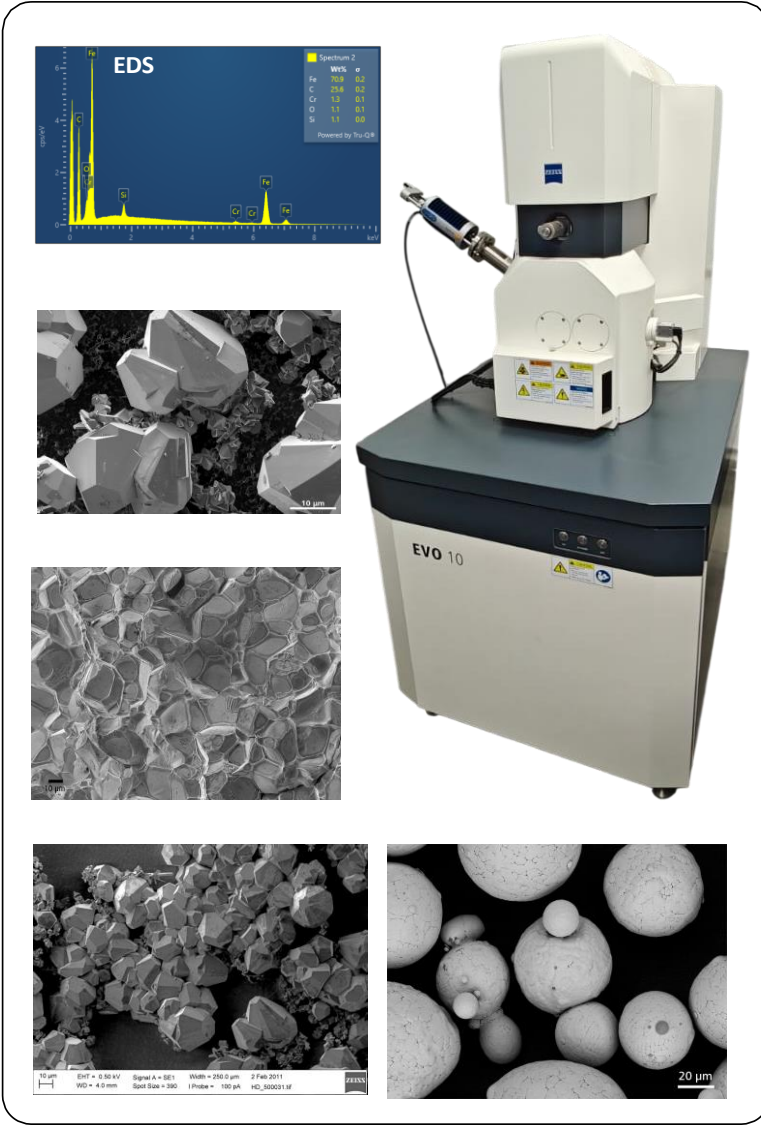
- High-resolution surface morphology imaging
- Elemental and chemical composition analysis at pinpoint locations
- Suitable for both conductive and non-conductive materials

Typical Uses

- Fractography and failure analysis
- Particle analysis
- Milipore Test Paper Scan for Particle size and particle identification
- Micro-level chemical composition analysis
- Defect and surface evaluation

Applications / Suitable Industries

- Metal and non-metal industries
- Ceramic industries
- Polymer, plastic, and rubber industries
- Biomedical applications (dental materials and implants)
- Electronic and semiconductor industries
- General material characterization and research



NABL ACCREDITED LABORATORY



DIGITAL UNIVERSAL HARDNESS TESTER



PROFILE PROJECTOR



CORROSION TESTING SALT SPRAY TEST (Make ASCOTT , UK)



Optical Emission Spectrometer



SAMPLE MARKING MACHINE



MICROHARDNESS TESTER



DIGITAL BRINELL HARDNESS TESTER



Digital Universal Testing Machine



JOMINY HARDENABILITY TEST



AUTOMATIC ABRASIVE CUT OFF MACHINE



SURFACE ROUGHNESS TESTER



BROACH MACHINE



ERICHSEN CUPPING TEST

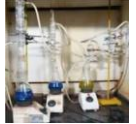
We offer services

- **Mechanical testing** (Tensile, Impact, compression All types of hardness and bend test, tube related all testing).
- **Chemical testing** (Spectrometer with six types of material testing, Fe, Al, Cu, Ni, Ti and Co).
- **Chemical Testing** (By wet of ferrous, Non-ferrous, minerals, ores, refractories, slag and ferroalloys).
- **Metallurgical testing** (Micro. Macro, grain flows, NMI, grain size, graphite analysis, multiphase analysis, coating analysis, Technical cleanliness(Milipore)).
- **Corrosion testing** (SST, CCT and humidity)
- **Corrosion testing** (All IGC test, Pitting corrosion test , crevice corrosion test and other as per ASTM and ISO)
- **Weld analysis** (WPS, WPQR and WPQ):- As per ASME , AWS, ISO
- **Fastner testing**
- **Expertise in failure analysis** (Till date more than 300 failure analysis assignment done for OEMs)

For all above test we follow national and international standard



PMI TESTING



INTERGRANULAR CORROSION AND OTHER CORROSION TEST



IMPACT TESTING MACHINE



HOT MOULDING MACHINE