



Field Emission Scanning Electron Microscope

Sophisticated Analytical Facility, Room No.: 017, Academic Block-2

USER INFORMATION (External Users only)

User Name: _____ **User Designation:** _____

Contact No: _____ **Email ID:** _____

Affiliation: _____

Supervisor (for students & research scholars only): _____

SAMPLE INFORMATION

(Put a tick in the appropriate option)

No. of samples (Restricted to maximum 4 samples per requisition): _____

Specify the expected Chemical Name/Compound Name (if any): _____

Sample Type: Powder/Thin Film/Metallic/Biological/Polymer or Rubber/Composite/Ceramics

Sample Nature: Porous/Soft/moisture sensitive/Toxic/Volatile matter present/Chemically active/
Other _____ (please specify)

Are the sample conducting? YES / NO

Measurements Required: SEM only/EDS only/SEM & EDS

Specify expected elements (for EDS analysis): _____

DECLARATION

- I hereby declare that above information is correct to my knowledge and no further claim shall be made other than the above mentioned.
- I certify that my samples do not present any danger to the personnel or equipment and I have provided the appropriate handling instructions for safety to the operator before analysis.
- I also declare that the samples submitted or their by-products obtained during the measurement are not inflammable/radioactive/ biologically hazardous.
- I agree to acknowledge the facility if the data are used in publications or thesis. I shall also forward the citation details to the In-charge of the facility by email within a month of such publication.
- I am aware that the facility has no liability as to any loss/damage of my samples during storage/transport/imaging at the lab.
- I have read the User Instructions & Sample requirement guidelines

Date

User

Supervisor

(for students & research scholars only)

Date:

Time Slot:

SEM operator/In-charge



User Instructions

1. **Sample Requirement guidelines:** Bring your samples along with this requisition forms in properly sealed cover.
The sample can be sent in the form of
Powder: Amount of the sample: 1mg-5mg.
Thin film: Dimension of the sample: 1.5*1.5cm² to 2.0*2.0cm²
Nanoparticle dispersion in a solvent: Few drops can be deposited on a conducting smooth substrate (e.g.: doped Si, doped Tin Oxide) & dried under vacuum may be provided for FESEM Analysis.
Moisture sensitive samples: please bring them in a desiccator

Note: Height of the sample should be less than 1cm. Small sample height is better. For thin film sample and samples prepared on substrate, the side opposite to the side of interest should be flat to enable sample mounting. The sample should be dry to with stand high vacuum (10⁻⁵ pa).
2. **Imaging of magnetic sample is strongly discouraged.**
3. Samples are liable to be destroyed /disposed of after measurements and if to be returned, they have to be collected in person.
4. User must report at the FESEM lab as per the scheduled appointment (date & time). The users shall be allotted the time slots as per the availability.
5. User should be present during the analysis of his samples. If user has any specific instructions regarding the analysis, he can discuss with the operator.
6. Data will be supplied in the CD provided by the user. Only **new CDs** will be accepted for data copying.