

Study material for the training:

Contents:

SEM:

1. Resolving Power & Magnification
2. Application of Electron Microscopes
3. Types of Analysis in Electron Microscopes
4. Advantages of SEM over OM
5. Electron Solid Interactions
6. Specimen Interaction volume
7. Image formation
8. Capabilities of EM to provide
9. Specimen preparation
10. Steps involved in SEM Specimen Preparation

EDS:

1. Basic EDS Overview
2. Electron Beam & Sample interaction
3. Analysis Considerations

AFM:

1. Working principles of scanning probe microscopes
2. Devices for precise control of tip and sample positions
3. Protection of SPM against external influences
4. Acquisition and processing of SPM images
5. Operating modes in scanning probe microscopy
6. Basic stages of SPM development