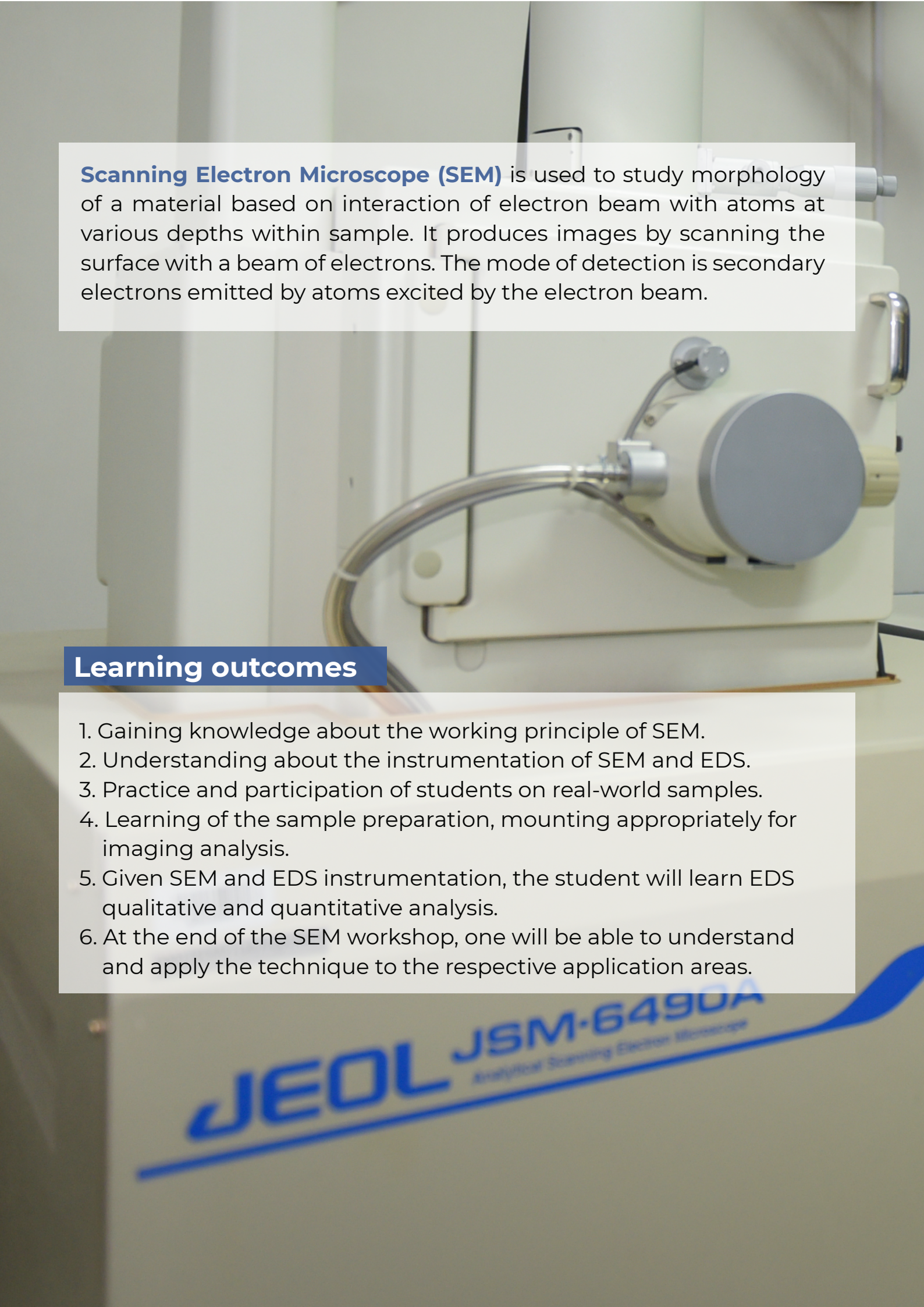
NUST
Defining futures

Scanning Electron Microscopy (SEM)

February 7-8, 2022 | 10 AM – 1PM | SCME



Scanning Electron Microscope (SEM) is used to study morphology of a material based on interaction of electron beam with atoms at various depths within sample. It produces images by scanning the surface with a beam of electrons. The mode of detection is secondary electrons emitted by atoms excited by the electron beam.

Learning outcomes

1. Gaining knowledge about the working principle of SEM.
2. Understanding about the instrumentation of SEM and EDS.
3. Practice and participation of students on real-world samples.
4. Learning of the sample preparation, mounting appropriately for imaging analysis.
5. Given SEM and EDS instrumentation, the student will learn EDS qualitative and quantitative analysis.
6. At the end of the SEM workshop, one will be able to understand and apply the technique to the respective application areas.

Specifications

Make	JEOL Japan
Model	JASM-6490A
Resolution	3nm
Magnification	5x to 300000x
Secondary Electron Detector	E.T detector
Filament	Tungsten

SEM

Who should attend?

Faculty, MS and PhD students of SCME

Trainers

1. Dr Khurram Yaqoob
Associate Professor, SCME

2. Muhammad Zafar Khan
Lab Engineer, SCME

3. Mr Amjad Khan
Lab Technologist, SCME

For Registration/Queries

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