INFRASTRUCTURE EN RECHERCHE ET DÉVELOPPEMENT DU QUÉBEC

# Scanning Electron Microscope (SEM)

MANUFACTURER : JEOL

MODEL : JSM 6400F

## Analysis

- Resolution: 1.5 nm at 30 kV and at 8mm WD
- Magnification: 10X to 500 000X
- Probe current:: 10-12 to 10-10 A
- Electron gun: Cold-cathode field emission
- Detectors: Scintillator/photomultiplier
- GW Electronic System 47 backscattered detector
- Accelerating Voltage: 500V to 30kV
- Specimen Stage: Type: Fully Eucentric goniometer stage
  Movements: X = 100mm
  Y = 110mm
  Z = 34mm
  Tilt: -5˚to 60˚
  Rotation: 360˚ endless

- Specimen exchange: By airlock: Up to 150mm dia. Specimen holders
By stage drawout: 200mm dia. or larger specimen holders

## Applications

- Surface characterization and elemental chemical analysis

## Characteristics

- EDS Detector: Si(Li) (30mm2) Prism 2000 with Imix acquisition system allowing Be detection
- EBSD detector: Oxford HKL allowing crystallographic orientation

CHARACTERIZATION

# Scanning Electron Microscope (SEM)

MANUFACTURER : JEOL
MODEL : JSM 6400F

## Example

EBSD analysis on a copper VIA into an organic laminated