

SEM Practical Exam

You will have approximately 3/4 hour to complete these steps. You may use your notes and the SEM Operators Handbook.

1. Load specimen into the SEM chamber.
2. Establish and optimize the beam.
3. At 39 mm working distance, locate some feature at 100 X, focus and photograph.
4. At 15 mm working distance, locate some feature at 5000 X, focus, stigmatize and photograph.
5. Return to 39 mm working distance, prepare microscope for EDS analysis of some feature and carry out a qualitative analysis, i.e. identify the element present in the excited volume.
6. Shut down microscope and EDS system.
7. Unload specimen from SEM chamber.