FOCUSED ION BEAM SYSTEM: HITACHI FB-2100

IMPORTANT THINGS TO REMEMBER

1. The right-panel **Beam** will default to the most recently used fabrication beam. So for example if you are using 40-1-520 to rough cut a region, be sure to select a viewing beam (40-0-30) before clicking **play** in the right-side panel.

2. There is not enough room in the sample chamber for both the TEM holder and SEM holder assembly.

3. The **Accum** (accumulator) setting averages N frames together to get an image. It can be used both on **Play** and for **Single-Frame-Grab**. When using the **Get-Image** icon in the **Fabrication** sub-program, it is recommended that you set **Accum** to 1 so that any sample drift will be easily seen.

4. On the microsampler control panel, **+Z** is **UP** and **–Z** is **DOWN**.

5. On the SEM stage controls in the software interface, Z of 15 mm is the home position. Z decreases as you go up closer to the pole piece.

6. Use 1000x magnification for deposition.

7. Use 2000x magnification for sputtering.

8. When removing TEM or microsampler holder from their respective stages, as you twist the holder 45^{o} counter-clockwise, be sure NOT to pull the holder out. You need to maintain pulling force on the stage as you begin the 45^{o} twist, but you can release this tension immediately when the twist begins. If you are still pulling as the pin becomes visible, you will pull the holder out of the stage.

9. Attach samples to the edge of the probe, so that when probe is cut from the sample, probe length is retained.

10. Press the **stop** button whenever possible to reduce charge-up and damage effects. Use the **single-scan** button whenever possible.

11. Ensure the top of the sample is just barely under the height gauge, to avoid colliding sample with pole piece.

12. Do not touch sample or sample holder with your hands. Use gloves.