

Shut Down Procedures

When you are finished for the day, you will need to do the following things. This will require 5-10 minutes, so plan accordingly.

- 1) Make certain that you know whether someone is scheduled to use the 3200 after you finish. You will need to check the calendar and/or to check with the staff.
- 2) [Close the beam valve](#).
- 3) If you have done anything during your session that has changed the normal settings of the 3200, the camera, any other software and even objects in the actual EM room, [please return everything to the state in which you found it](#). This includes but is not limited to things like the alpha setting and beam blank on the 3200; shuttering, exposure times and the setup of trial, focus and record images in DigitalMicrograph; the position of various windows in all of the software and the locations of commonly used tools in the EM area.
- 4) [Fill out the log book](#).
- 5) Leave the microscope at a magnification of [30k-50k](#).
- 6) [Retract](#) the CCD camera and [lower](#) the large viewing screen.
- 7) [Cover the viewing port](#) and [replace the eyepiece caps](#) on the binoculars.
- 8) [Turn off the TV camera](#) if you have used it.
- 9) [Insert the specimen holder that was originally in the microscope](#): there is always a holder containing a standard specimen in the microscope when the instrument is not in use.
- 10) Make certain that the [column vacuum recovers](#) before leaving the microscope room.
- 11) Close the valve on the [nitrogen tank](#) (to the right of the double doors as you leave the microscope room).
- 12) Unless there are other instructions from the staff, if you are the last user of the day, [do not change the accelerating voltage to "Stand By"](#)

(260 kV) from “Normal (300 kV). If this action is ever requested by the staff, it will take less than 1 minute.

- 13) If you are the last user of the day, start the [ACD bake out](#) cycle: insert the heating coil into the anti-contaminator (ACD) and push the “On” button below “ACD Heat” on the “Bake Out/ACD Heat” window. If there is a holder in the column, a dialog box will appear asking whether you really want to start the bake out. If the grid in the holder can withstand the heating cycle (and all the standard grids we routinely leave in the 3200 can), answer “yes” and proceed. You will next see a dialog box that asks you to remove all manual apertures. There are no manual apertures on the 3200FS, so simply click “OK” and continue. The column ion pump will shut off and you will hear a series of valves opening or closing. This is all normal.