

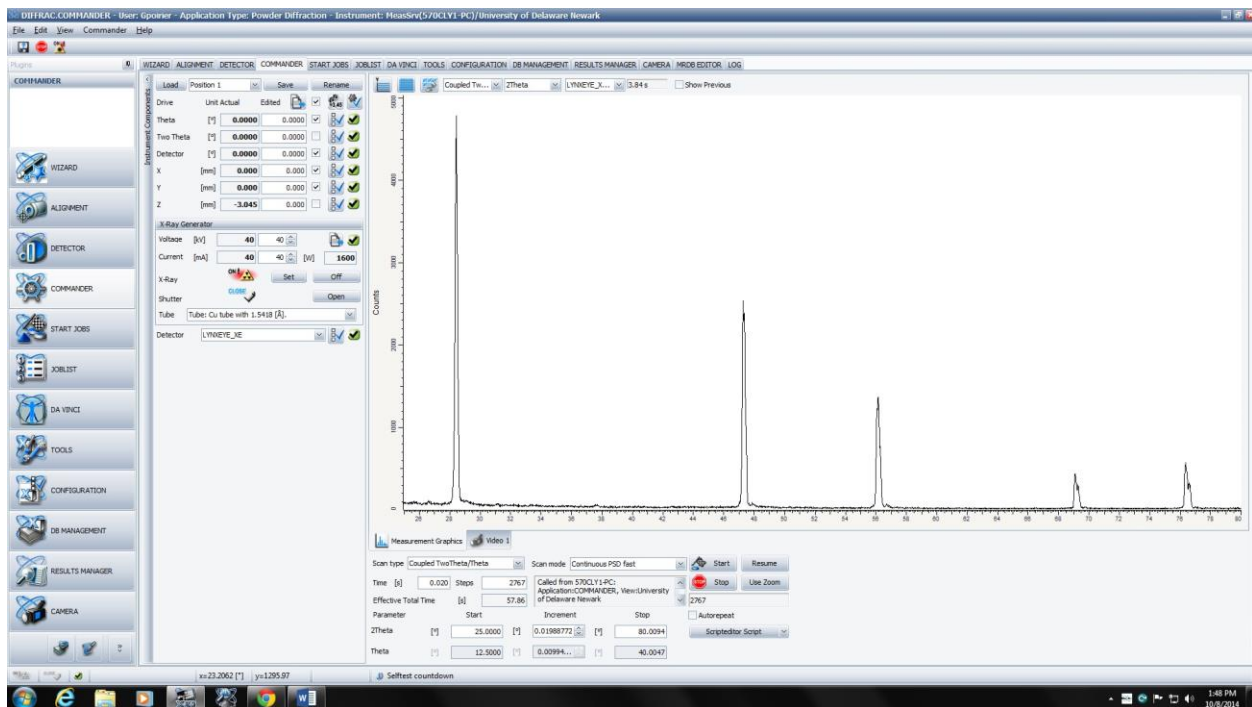
## Bruker D8 XRD Instructions with the UMCXYZ stage.

**Always wear your X-ray badge when operating this equipment!**

Prepare your sample using the low background holder or another method.

The XRD instrument software is always open and on the desktop, never close the XRD control software.

The Commander software will look like the image below.



1. Position all of the drives to Zero in the edited box located next to the Actual box. Place a checkmark next to each of the drives and press the 3,45 button. All of the drives will return to their zero position. (The cabinet doors must be closed for the drive to move)

2. Set the power level to maximum 40Kv and 40Ma then press the set button below.
3. Set scan type to “coupled 2theta/theta”.
4. Enter the scan parameters including beginning and ending 2theta values. Increments and time can now be set.
5. The increment and time values may be set to whatever you want however if you are not sure you can begin with an increment of .02 degrees and a time of 0.02 seconds.
6. It is very important to set the Z value of the sample, to do this click on the Video 1 button just below the data plot.
7. An image will appear on the screen showing your sample relative to the red laser spot on the sample. Using the slider bar below the screen adjust the Z slider to locate the red laser on the crosshairs.
8. Press the start button and begin your scan.
9. Once the scan has been completed go to file and select  
“Save Result File”. The file extension should be .brml and the file should be placed into the Documents/Bruker data/ make a folder for your directory.
10. Remove you sample and make sure you sign the logbook on the bench.