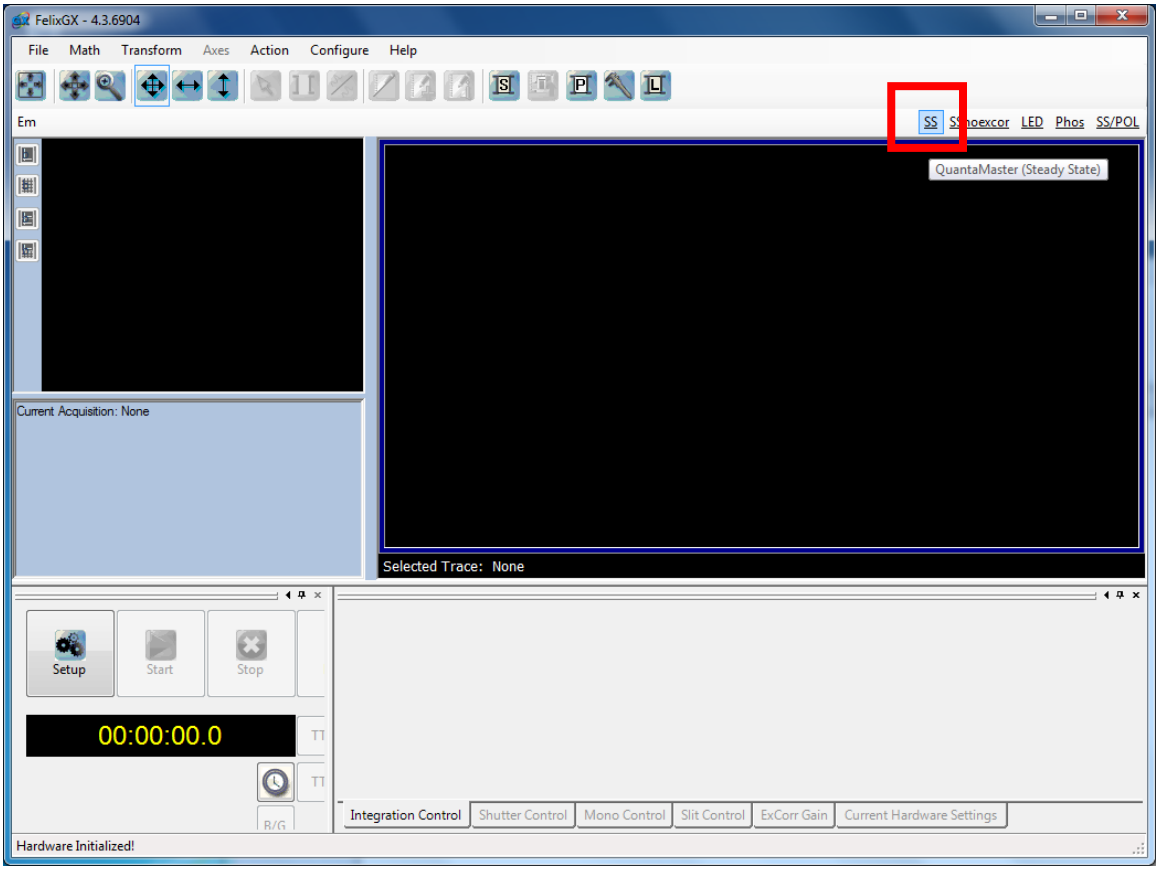
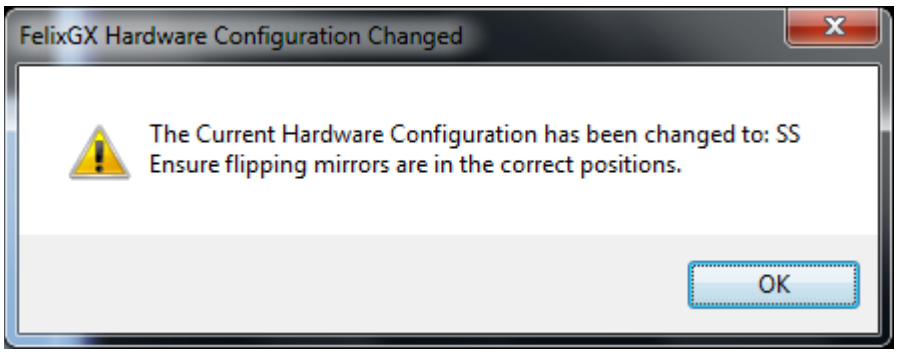
Fluorometer instructions for FelixGX (steady state emission scan)

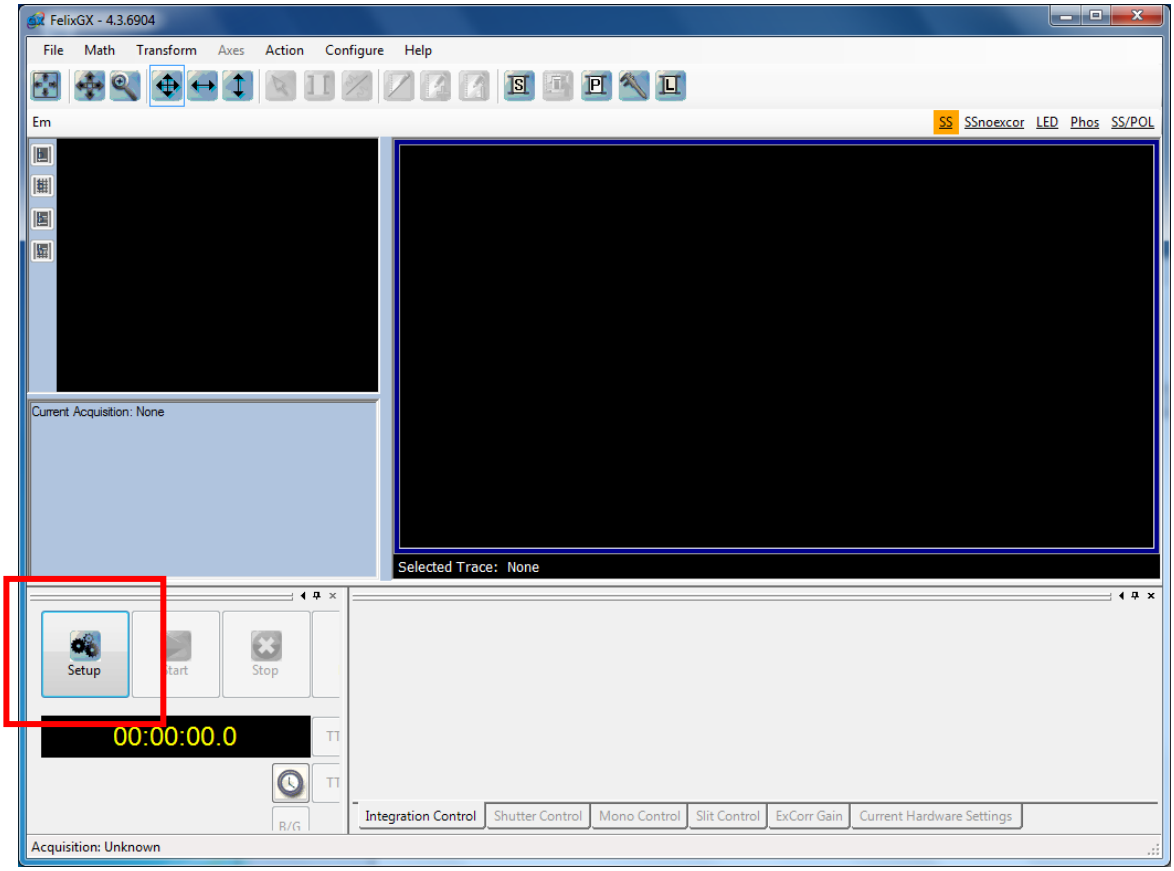
1. Turn on arc lamp
2. Turn on three control boxes stacked on right (ASOC-10, MOTOR DRIVER-4, and MOTOR DRIVER)
3. Wait 10 min for system to power up. You will hear a lot of high pitched pulsing noises
4. Open FelixGX and click "SS" for steady state emission scan in the upper right corner of the window



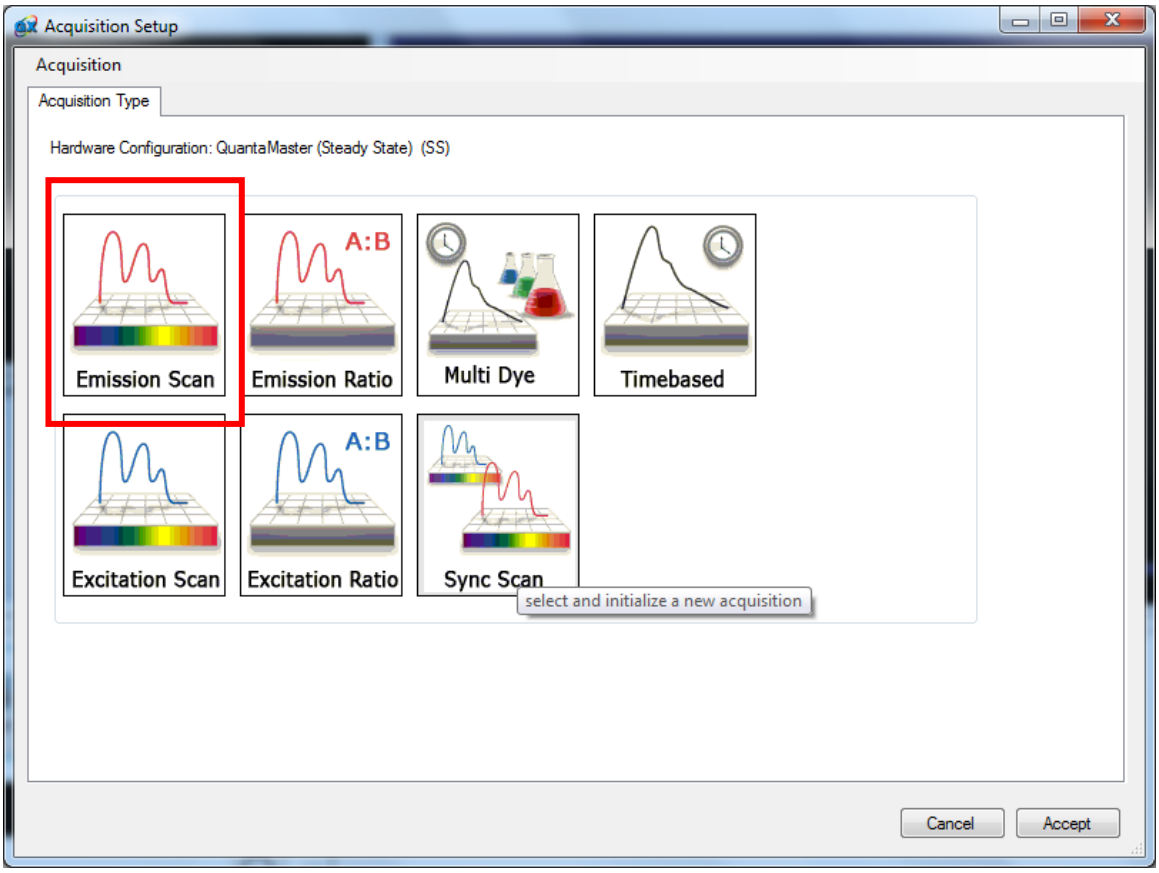
5. Wait 5 min while it loads the steady state hardware configuration settings. You will hear more beeps, pulses, and clicks.
6. A warning window will pop up reminding you to adjust the "flipper mirrors" (should point at steady state detector and at arc lamp)



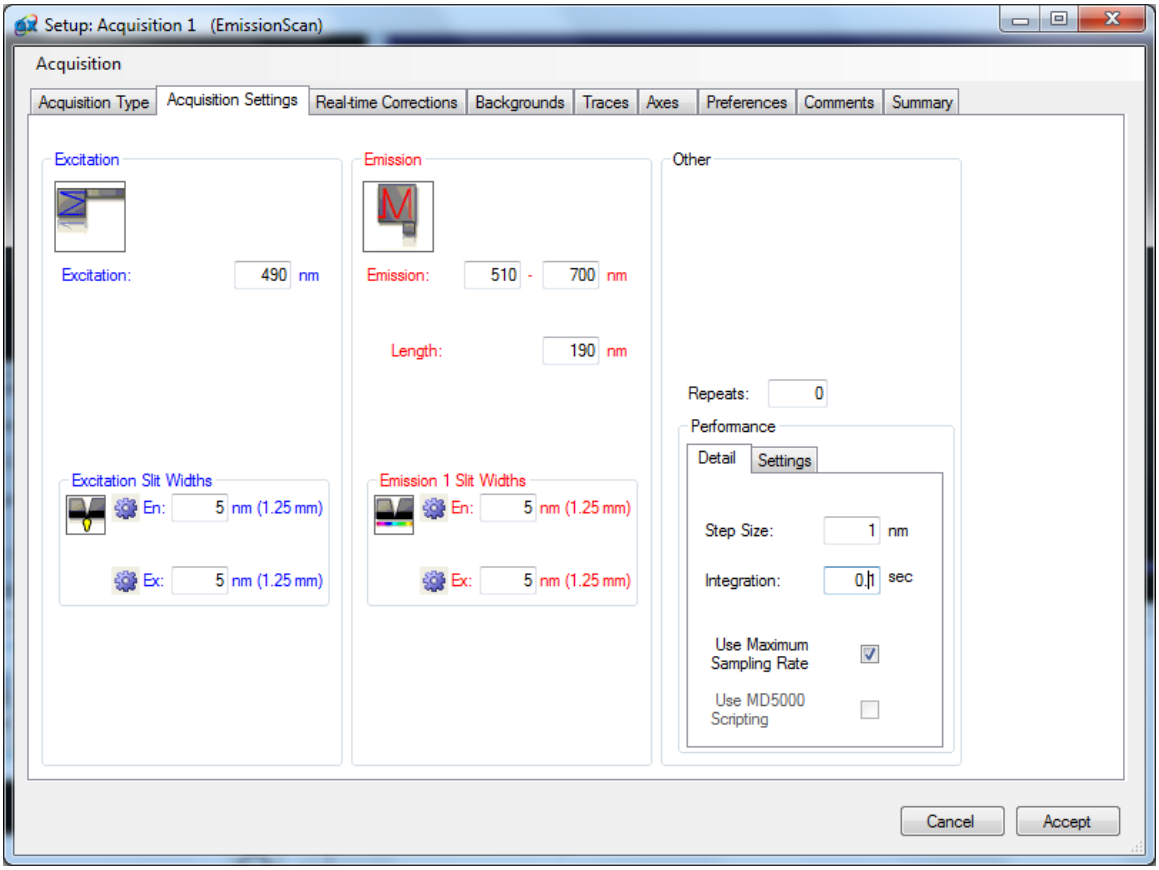
7. Click on the "Setup" icon at the bottom left of the window to access the acquisition parameters.



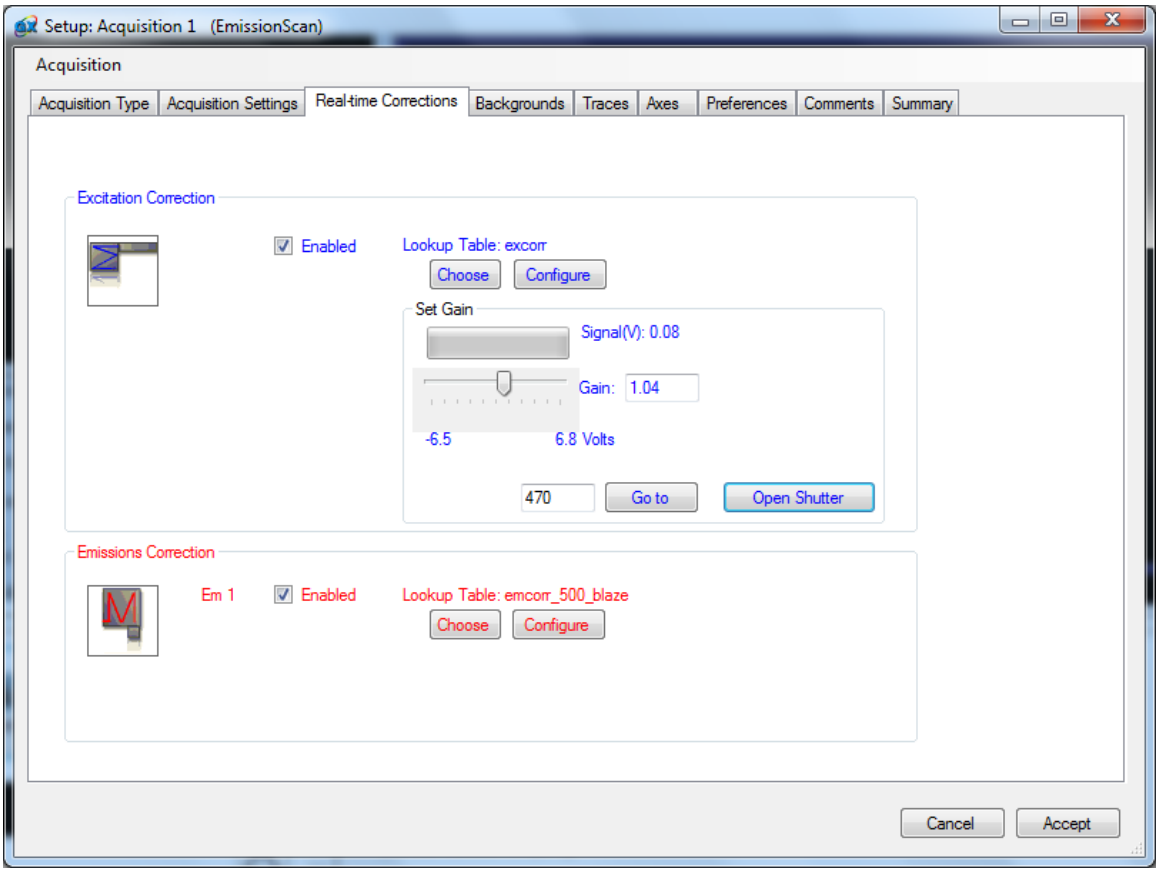
Choose "Emission Scan"

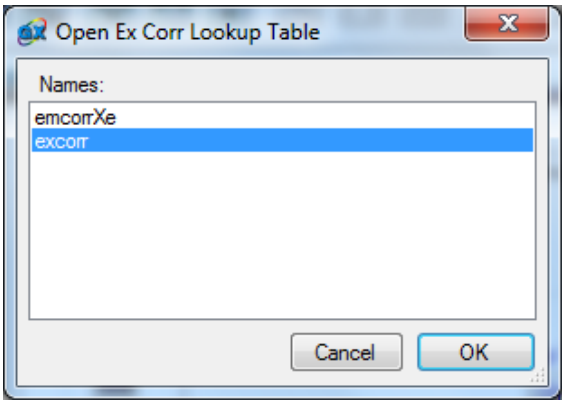


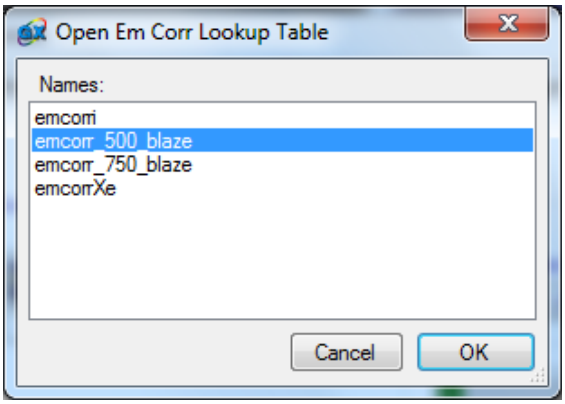
In the "Acquisition Settings" tab, input the desired scan range, slits widths, and integration time.



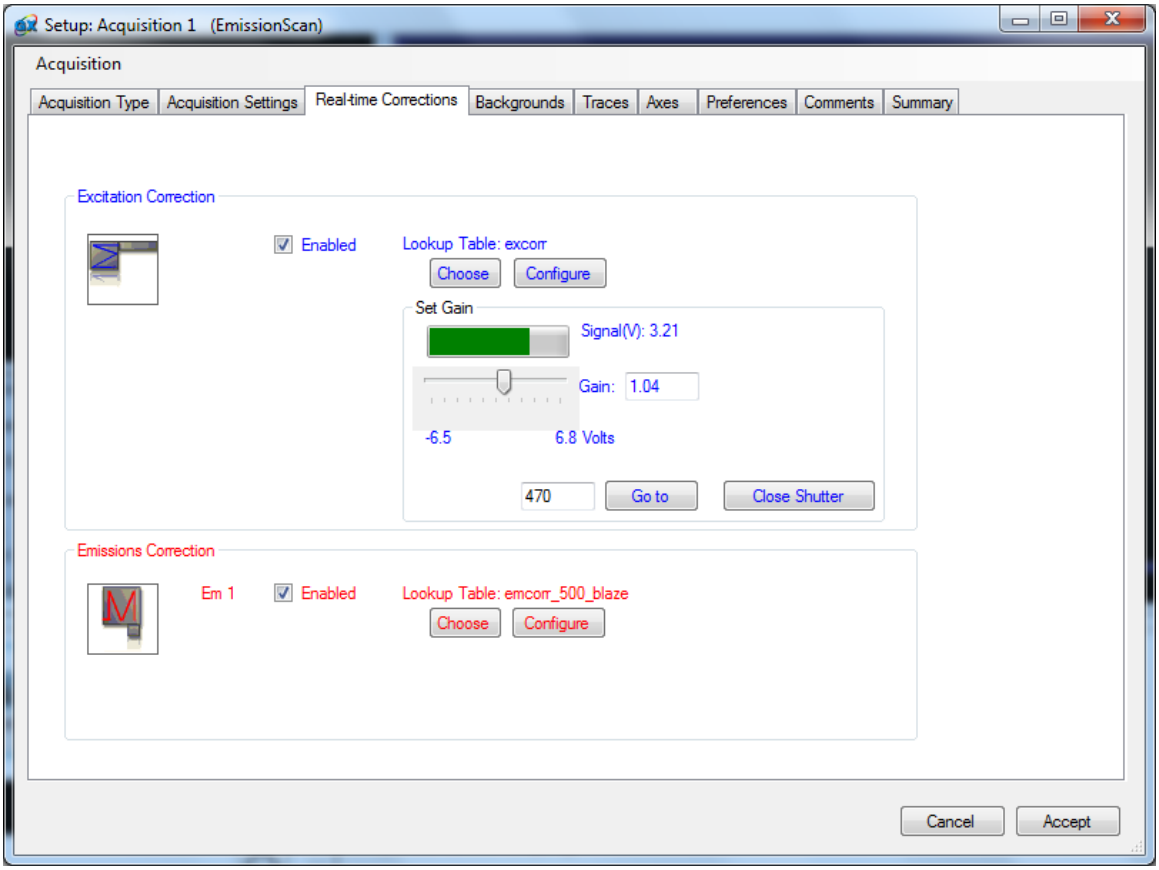
In the "Real-time Corrections" tab, click both the "enable" boxes. For the Excitation, choose "excorr". For the Emission, choose "emcorr_500_blaze".







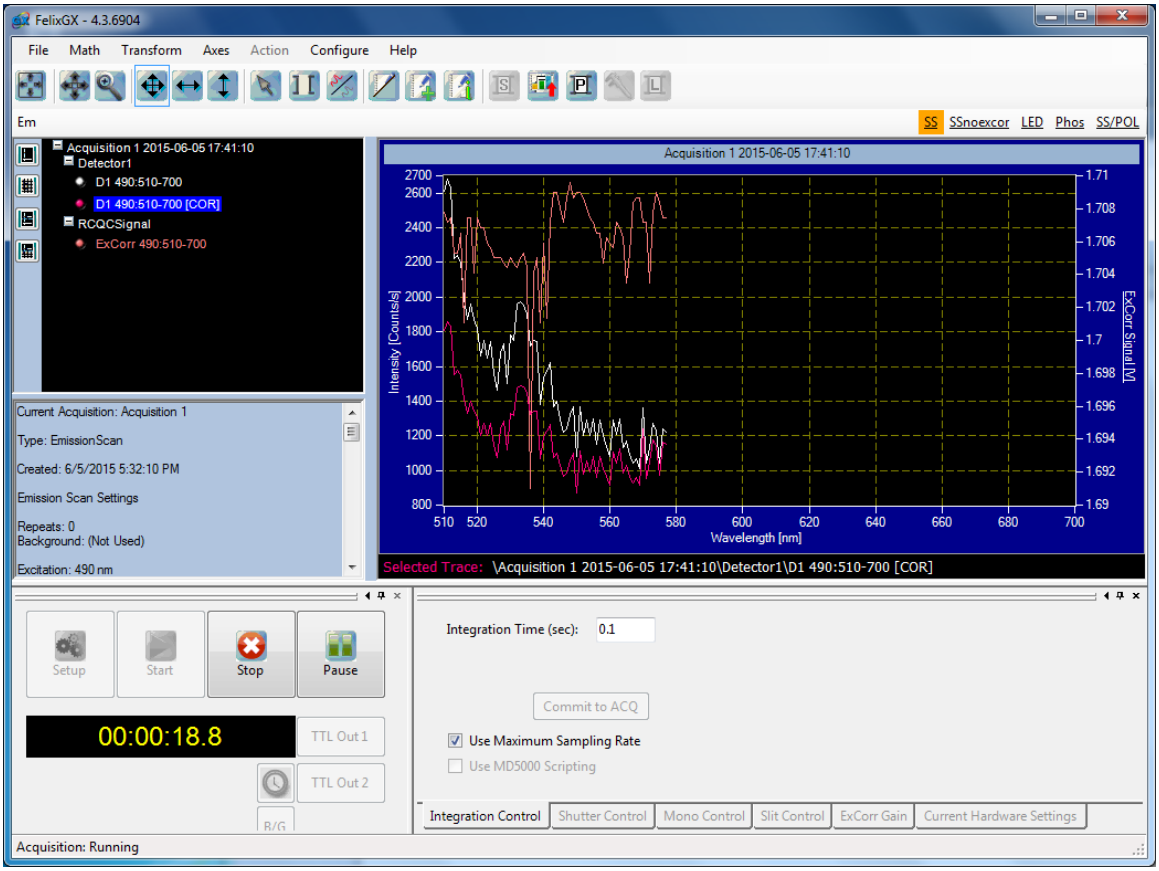
For the excitation correction, type in 470 for the wavelength, press "go to" and then press "open shutter." Then adjust the gain slider so that gain=1.



There is no need to change the settings in any remaining tabs. Press "accept" to load these settings.

If you changed the slits from the 5 nm default, you should click "accept" to load the new settings in order to sync the hardware/software before adjusting the gain. In the Felix32 software, you pressed Acquire and then Abort. In Felix GX,you press Start and then as soon as you hear the monochromator start clicking, press Stop. This is important to do quickly to avoid saturation of the detector! Then go back to Setup and click the Real-time Correction tab to adjust the gain.*

Press "Start" to begin your scan. You will see the three plots (raw, correction function, and corrected) on the screen and see them listed in the column on the side (similar to Felix32)



To save, right click on "Detector1" and choose "export group". You can export as a .txt file.

To shut down, close the program and turn off control boxes in reverse order.