Part II: STEM alignment

After TEM alignment:

1. Lower the viewing screen
2. Navigate to an amorphous region for focusing
3. Activate **STEM mode** in WinTEM.
4. Select **Scanning/Spot mode** to switch scanning mode to spot mode
5. After STEM screen appears, click on **Assign STEM Mag** icon
6. Adjust focus to obtain the Ronchigram on screen
7. Select Control/ Blanking/CCD Selector= **Pre Specimen Blanking**
8. Lift viewing screen and start to view Ronchigram with CCD
9. Adjust **Camera Length (=480)** and use **BF shift** to center the ronchigram
10. Use **Focus** knob to obtain Ronchigram and active **STEM Stig** (x and y knobs) to obtain a round, coherent beam
11. Insert the **S.E. Aperture (650 µm)** and center the aperture by track ball
12. Insert the **Condenser Aperture (20 µm DO not use the drop down menu below the ap selection)** and center the aperture by track ball. If the aperture is not round use Obj Stig to make the aperture image round
13. Select Control/ Blanking/CCD Selector= **Post Specimen Blanking**
14. Stop viewing with the camera retract the camera.
15. Insert **HAADF detector**
16. Select Detection/**Dual channels** to active two channels collecting signals
17. Place an anchor on the active window
18. Choose signal for each window (BF, HAADF or DF)
19. Click search in **Digiscan** to obtain HAADF and BF images
20. Navigate to a crystalline substrate (if applicable) and verify with the BF image that you are still in zone axis. If not, adjust tilt with the alpha and beta tilt.