Part II: STEM alignment

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Align the TEM in bright field TEM mode, then follow these steps:

1. Lower the screen
2. Navigate to an amorphous region for focusing
3. Turn on **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 **Condenser Aperture (20 µ hat)** and center the aperture by track ball
12. Insert the **S.E. Aperture (650 µ)** and center the aperture by track ball
13. Select Control/ Blanking/CCD Selector= **Post Specimen Blanking**
14. Stop viewing with the camera and **insert HAADF detector**
15. Select Detection/**Dual channels** to active two channels collecting signals
16. Place an anchor on the active window
17. Choose signal for each window (BF, HAADF or DF)
18. Take out camera and click search in **Digiscan** to obtain HAADF and BF
19. 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.