



RSXS Reflectivity Alignment

For X-ray reflectivity measurements, use photodiode and appropriate slit as detector. Do alignment of θ and χ at several 2θ and θ angles, such as 20/10, 60/30 and 120/60. Accurate χ and θ alignment is critical for a wide-range reflectivity measurement.

Use of a smaller slit will improve the reflectivity measurement but generally it requires more accurate alignment.

Use following steps to prepare the instrument for reflectivity scans

1. Perform the sample alignment as described in "RSXS Sample Alignment" procedure.
2. Move 2θ and θ to 20° and 10° respectively. (using **uan 20 10**)
3. Align χ . The profile shall be a flat top peak. Move χ to CEN.
4. Align θ . Move θ to CEN. Set θ 10° .
5. Move 2θ and θ to 60° and 30° respectively. (using **uan 60 30**)
6. Align χ . Move χ to CEN.
7. Verify θ alignment is good.
8. Move 2θ and θ to 120° and 60° respectively. (using **uan 120 60**)
9. Align χ . Move χ to CEN.
10. Verify θ alignment is good.

Now the instrument and sample are ready for reflectivity scans.