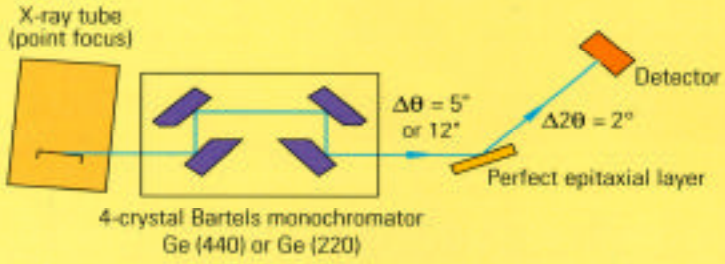
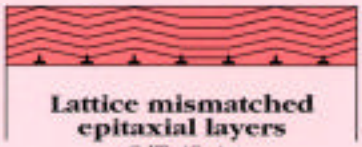
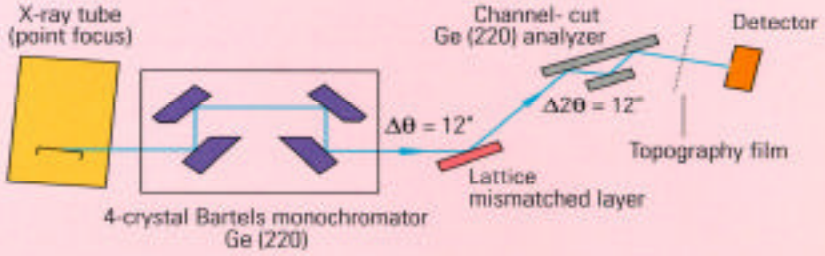
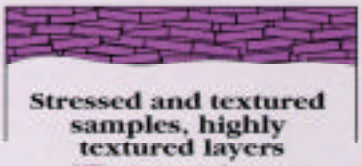
Perfect epitaxial layers
AlGaAs/GaAs
InGaAsP/InP
SiGe/Si
etc.



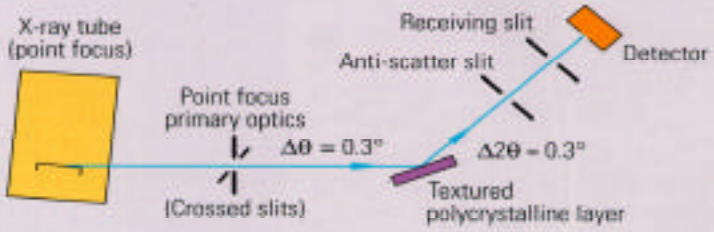


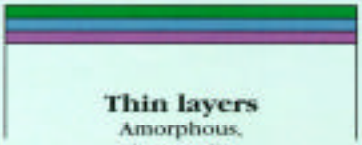
Lattice mismatched epitaxial layers
CdTe/GaAs
ZnSe/GaAs
GaAs/Si
HTc superconductors
etc.



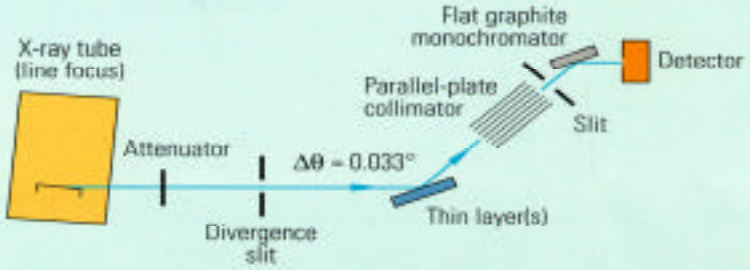


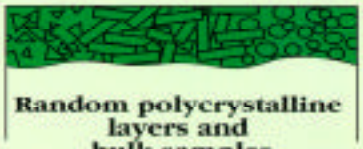
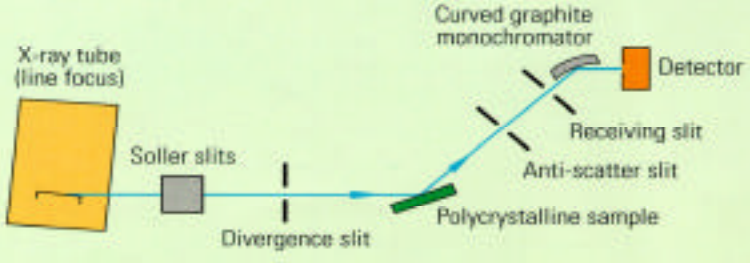
Stressed and textured samples, highly textured layers
HTc superconductors
PtSi/Si
CoPd multilayers
etc.





Thin layers
Amorphous,
polycrystalline
and single crystal layers





Random polycrystalline layers and bulk samples