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
- PdSi/Si
- CoPd multilayers
- etc.

Thin layers
- Amorphous, polycrystalline and single crystal layers

Random polycrystalline layers and bulk samples

4-crystal Bartels monochromator
- Ge (440) or Ge (220)

X-ray tube (point focus)

Channel-cut Ge (220) analyzer

Topography film

X-ray tube (point focus)

Point focus primary optics

Receiving slit

Anti-scatter slit

Detector

X-ray tube (line focus)

Attenuator

Divergence slit

Thin layer(s)

X-ray tube (line focus)

Solier slits

Divergence slit

Polycrystalline sample

Curved graphite monochromator

Receiving slit

Anti-scatter slit