

XRD (X-ray diffractometer)

X선 회절기

Sol-X (solid state energy dispersive detector)

Model

D8 ADVANCE (Sol-X)

Specifications

- Operational range: 2 keV up to 30 keV
- Energy resolution < 350 eV at 50.000cps
- Linearity up to 75.000 cps integral events
- Lithium drifted high quality silicon detector for highest peak-to-background ratio and highest sensitivity
- Unique 4x15 mm² active area perfectly suited for XRD as well GID investigations

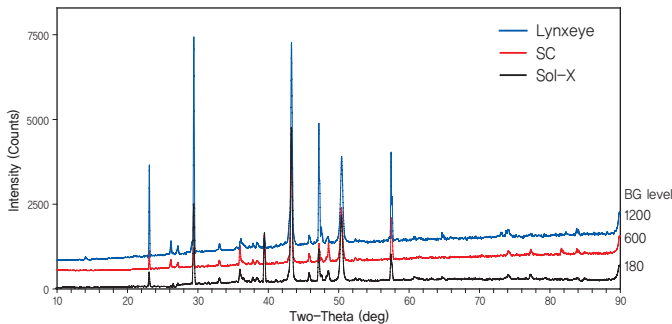
Applications

- X-ray powder diffraction
 - Lattice parameter
 - Degree of crystallinity
 - Crystallite size and strain
 - Fast phase ID
 - Quantification



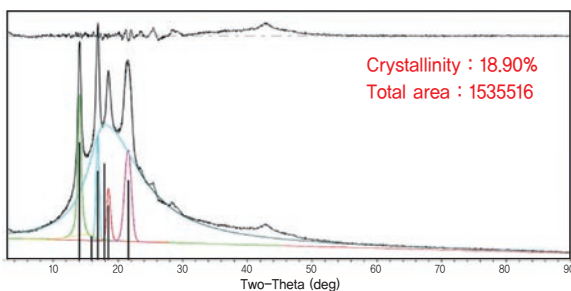
Location L1134 Tel.02-958-5958/5427

Advantage of energy dispersive detector

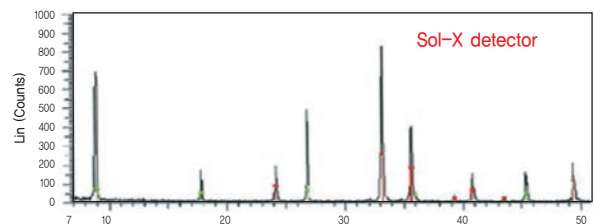
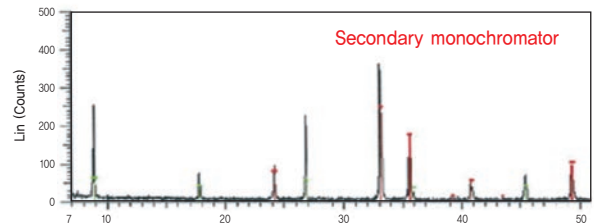
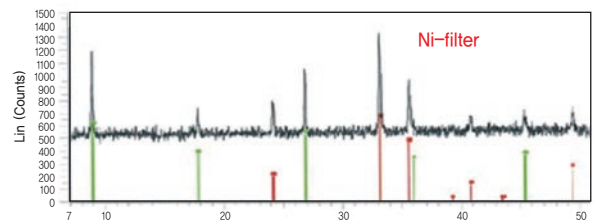


Extremely low background (Iron oxide)
 Lynxeye : Energy dispersive detector
 Scintillation counter(SC) : secondary monochromator
 Sol-X : Energy dispersive detector

Calculation of crystallinity



Degree of crystallinity (polymer)



Extremely low background (cement)