

Synchrotron Beamline

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NEXAFS (Near edge X-ray Absorption Fine Structure) at 10D XAS (X-ray Absorption Spectroscopy) B/L, EXAFS (Extended X-ray Absorption Fine Structure) and HRXRD (High Resolution X-ray Diffraction) at 1D XRS (X-ray Scattering Spectroscopy) B/L allow the user to determine the electronic structure and chemical bonding of materials, short and long range order of texture structures, respectively.

Model

10D XAS KIST B/L / 1D XRS KIST-PAL B/L

Specifications

10D XAS KIST B/L

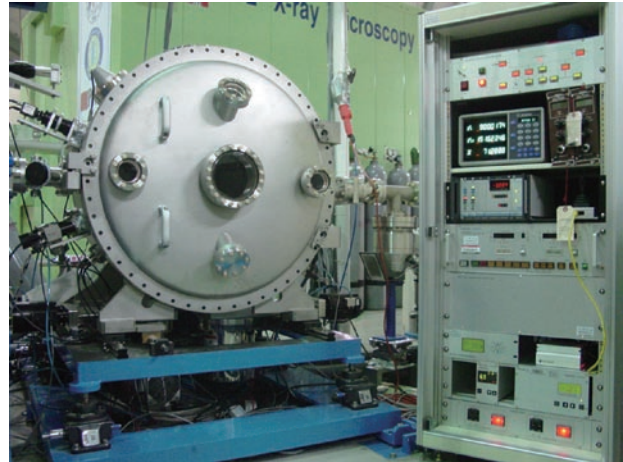
- Light source : Bending magnet
- Energy range : 40 ~ 1200 eV
- Resolution ($E/\Delta E$) : 2000 ~ 5000
- Photon flux : $> 10^{10}$ photons/sec
- Beam size : $< 3 \text{ mm} \times 1 \text{ mm}$

1D XRS KIST-PAL B/L

- Light source : Bending magnet
- Energy range : 3.5 ~ 16 keV
- Resolution ($\Delta E/E$) : 2×10^{-4}
- Photon flux : 8×10^{11} photons/sec
- Beam size : $1.0 \text{ mm} \times 0.5 \text{ mm}$

Applications

- Near edge x-ray absorption fine structure (NEXAFS)
- Soft x-ray reflectivity
- EUV reflectance
- Extended x-ray absorption fine structure (EXAFS)
- High resolution x-ray diffraction (HRXRD)



10D XAS KIST B/L



1D XRS KIST-PAL B/L

X-ray absorption spectroscopy

