

# High Energy Inelastic Scattering (BL08W)

## 1. Insertion Device

Type: Elliptical Multipole Wiggler  
Period 120mm  
Number of periods, 37  
 $B_{\max} = 1$  T (vertical), 0.18 T (horiz.)  
Minimum gap=20 mm  
Critical energy 42.6 keV at  $K_y=11.2$   
Total power 17.9 kW at  $K_y=11.2$   
Peak power density 160 kW/mrad<sup>2</sup> at  $K_y=11.2$   
Circular polarization  
On-axis degree of 0.76 at 300 keV,  $K_y=11.2$ ,  $K_x=0.6$

## 2. X-ray at Samples

Station A: Asymmetric Johann monochromator, Si771

Energy range 300 keV  
Energy resolution  $\Delta E/E \sim 5 \times 10^{-3}$   
Photon flux  $5 \times 10^{12}$  ph/s at 300 keV  
Beam size 3mm(H) $\times$ 1mm(W)

Station B: Doubly bent monochromator, Si400

Energy range 100~150 keV  
Energy resolution  $\Delta E/E < 1 \times 10^{-3}$   
Photon flux  $3.3 \times 10^{13}$  ph/s at 100 keV  
Beam size 0.5 mm(H) $\times$ 0.5 mm(W)

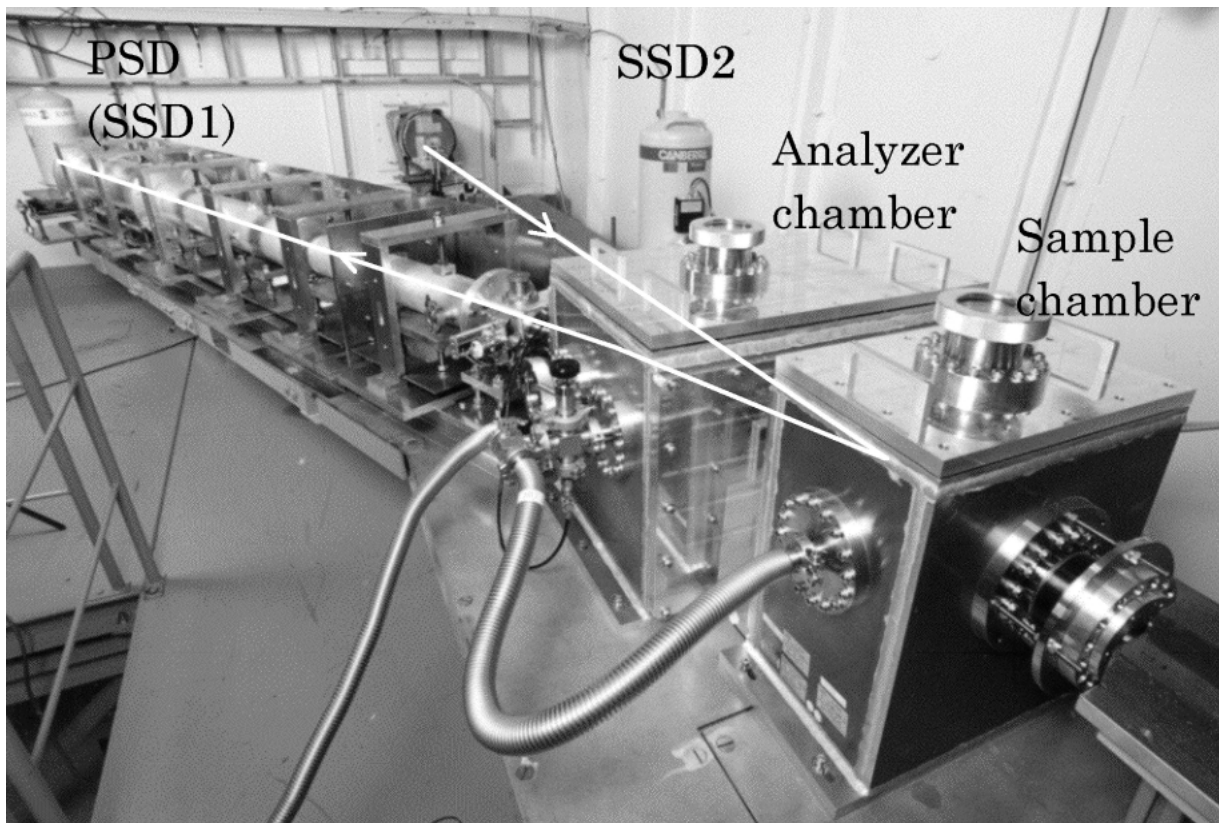


Fig.1. The photograph of high resolution Compton Spectrometer.