

# Revolver Undulator Beam Line at the Photon Factory:

## Application to Spectroscopy<sup>1),2)</sup>

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The Revolver undulator beamline, BL-19A at the Photon Factory, has been constructed to be dedicated to the solid state research and laid out for photon energy from 20 to 250 eV. To cover wide spectral range by the maximum intensity of a first harmonics of undulator radiation, the simultaneous scanning of the undulator magnet gap and the monochromator has been accomplished in the normal user operation.

The peak intensities of the first harmonics are much larger than those of higher harmonics, and structures around the higher harmonic peaks could be diminished by the simultaneous scanning of the magnet gap and the monochromator.

Recently, the spin polarized photoemission spectroscopy has been accomplished using the simultaneous scanning of the Revolver undulator. New experimental results on the spin polarization of the valence band photoemission of a Ni(110) single crystal will be presented.

1) A. Kakizaki et al; Nucl. Instrum. Methods A311, 620 (1992)

2) T. Kinoshita et al; to be published in phys. rev. B (1993)