APPLYING FOR BEAMTIME:
The deadline for applications for the next research term 2004B is scheduled for June 2004. Currently some of the beamlines (BL38B1, BL45XU) are accepting applications for the reserved beamtime. Please visit our Web site for details.

Beamlines at SPring-8
BL01B1 XAFS
BL02B1 Single Crystal Structure Analysis
BL02B2 Powder Diffraction
BL04B1 High Temperature and High Pressure Research
BL04B2 High Energy X-ray Diffraction
BL05S Accelerator Beam Diagnosis
BL08W High Energy Inelastic Scattering
BL09XU Nuclear Resonant Scattering
BL10XU High Pressure Research
BL11XU JAERI Materials Science II
BL12XU NSRRC ID
BL13B2 NSRRC BM
BL13XU Surface and Interface Structures
BL14B1 JAERI Materials Science I
BL15XU WEBRAM
BL16XU Industrial Consortium ID (SUNBEAM-ID)
BL16B2 Industrial Consortium BM (SUNBEAM-BM)
BL17SU RIKEN Coherent Soft X-ray Spectroscopy
BL19LXU RIKEN SR Physics
BL19B2 Engineering Science Research
BL20XU Medical and Imaging I
BL20B2 Medical and Imaging II
BL22XU JAERI Actinide Science II
BL23SU JAERI Actinide Science I
BL24XU Hyogo
BL25SU Soft X-ray Spectroscopy of Solid
BL26B1 RIKEN Structural Genomics I
BL26B2 RIKEN Structural Genomics II
BL27SU Soft X-ray Photochemistry
BL28B2 White Beam X-ray Diffraction
BL29XU RIKEN Coherent X-ray Optics
BL32B2 Pharmaceutical Industry
BL33LEP Laser-Electron Photon
BL35XU High Resolution Inelastic Scattering
BL37XU Trace Element Analysis
BL38B1 R&D (3)
BL38B2 Accelerator Beam Diagnosis
BL39XU Magnetic Materials
BL40XU High Flux
BL40B2 Structural Biology II
BL41XU Structural Biology I
BL43R Infrared Materials Science
BL44XU Macromolecular Assemblies
BL44B2 RIKEN Structural Biology II
BL45XU RIKEN Structural Biology I
BL46XU R&D (2)
BL47XU R&D (1)

BSR 2004:
The 8th International Conference on Biology and Synchrotron Radiation. BSR 2004 will be held at the Egret Hotel, Himeji, Hyogo, Japan from 7th to 11th September 2004. For more information, please visit http://bsr2004.spring8.or.jp

The RIKEN Structural Biology I Beamline BL45XU is designed for the research on structural biology. The beamline has two experimental stations: one for protein crystallography (PX) and the other for small-angle x-ray scattering (SAXS) and both stations can be operated simultaneously with two serially arranged vertical undulators and a beam splitter (transparent diamond monochromator). In the protein crystallography station, the trichromatic concept has been developed and applied in order to optimize the multiwavelength anomalous diffraction (MAD) method. A coaxial three-colored beam can be introduced to a specimen by the tandem undulators and the trichromator (triad monochromator).

Crystal structure of the human Rad52-1,2,2 protein
Dr. Shigeyuki Yokoyama, chief scientist of the RIKEN Harima Institute at SPring-8, and his collaborative research group determined the crystal structure of the human Rad52-1,2,2 protein, which plays a central role in DNA recombinational repair, using the RIKEN Structural Biology I Beamline BL45XU at SPring-8. They analyzed the structure and obtained important insights into the molecular mechanism of DNA recombinational repair.

Trichromator (Triad monochromator) installed at the RIKEN Structural Biology I Beamline BL45XU

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