

PROPOSAL DEADLINE IS EARLY JUNE 2004.

APPLYING FOR BEAMTIME:

The deadline for applications for the next research term 2004B is scheduled for June 2004. Currently some of the beamlines (BL38B1, BL41XU) are accepting applications for the reserved beamtime. Please visit our Web site for details.

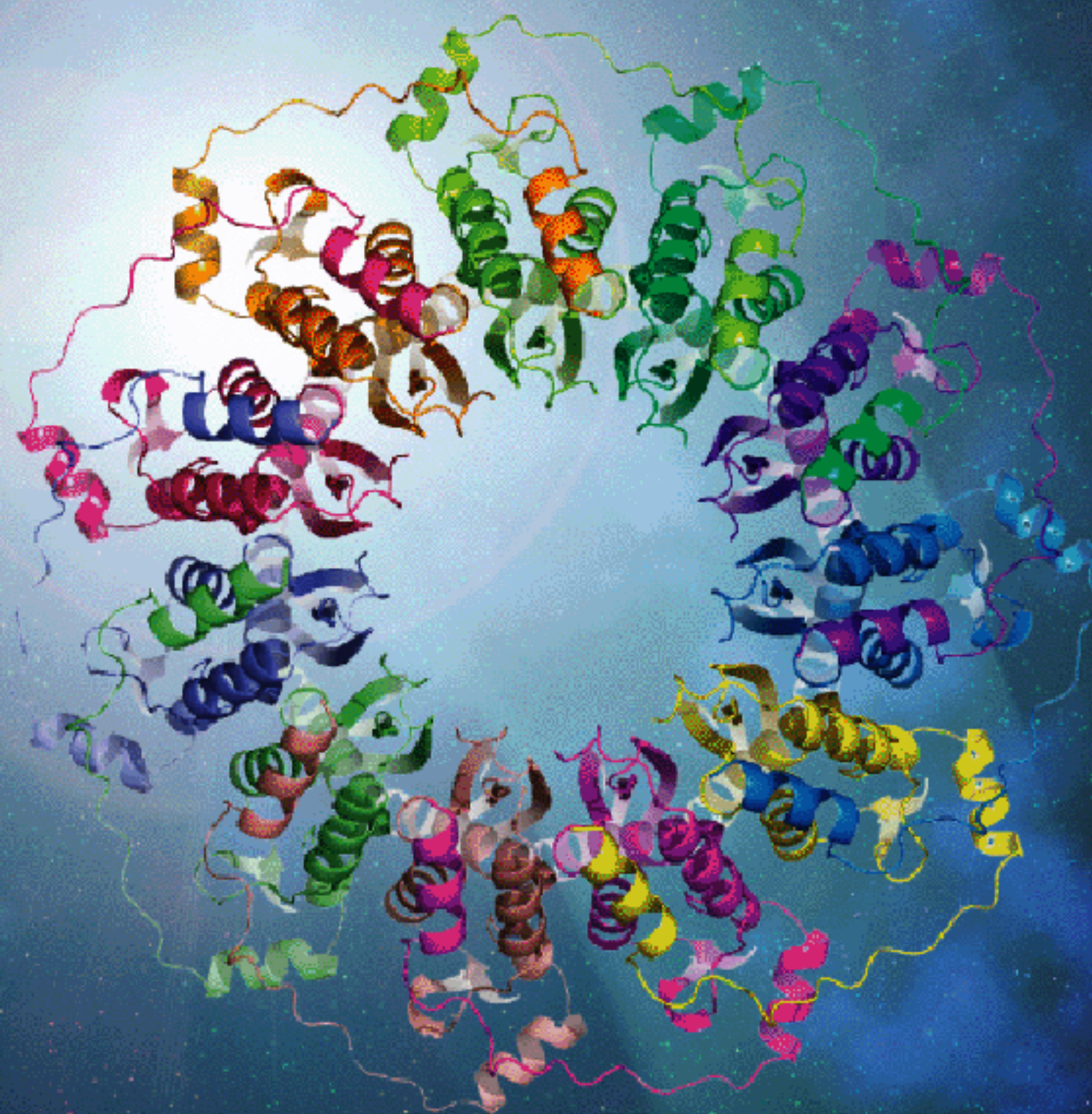
Beamlines at SPring-8

- BL01B1 XAFS
- BL02B1 Single Crystal Structure Analysis
- BL02B2 Powder Diffraction
- BL04B1 High Temperature and High Pressure Research
- BL04B2 High Energy X-ray Diffraction
- BL05SS Accelerator Beam Diagnosis
- BL08W High Energy Inelastic Scattering
- BL09XU Nuclear Resonant Scattering
- BL10XU High Pressure Research
- BL11XU JAERI Materials Science II
- BL12XU NSRRC ID
- BL12B2 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 II
- BL20B2 Medical and Imaging I
- 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
- BL43IR 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, BSR2004, will be held at the Egret Himeji, Himeji, Hyogo, Japan from 7th to 11th September 2004. For more information, please visit <http://bsr2004.spring8.or.jp>

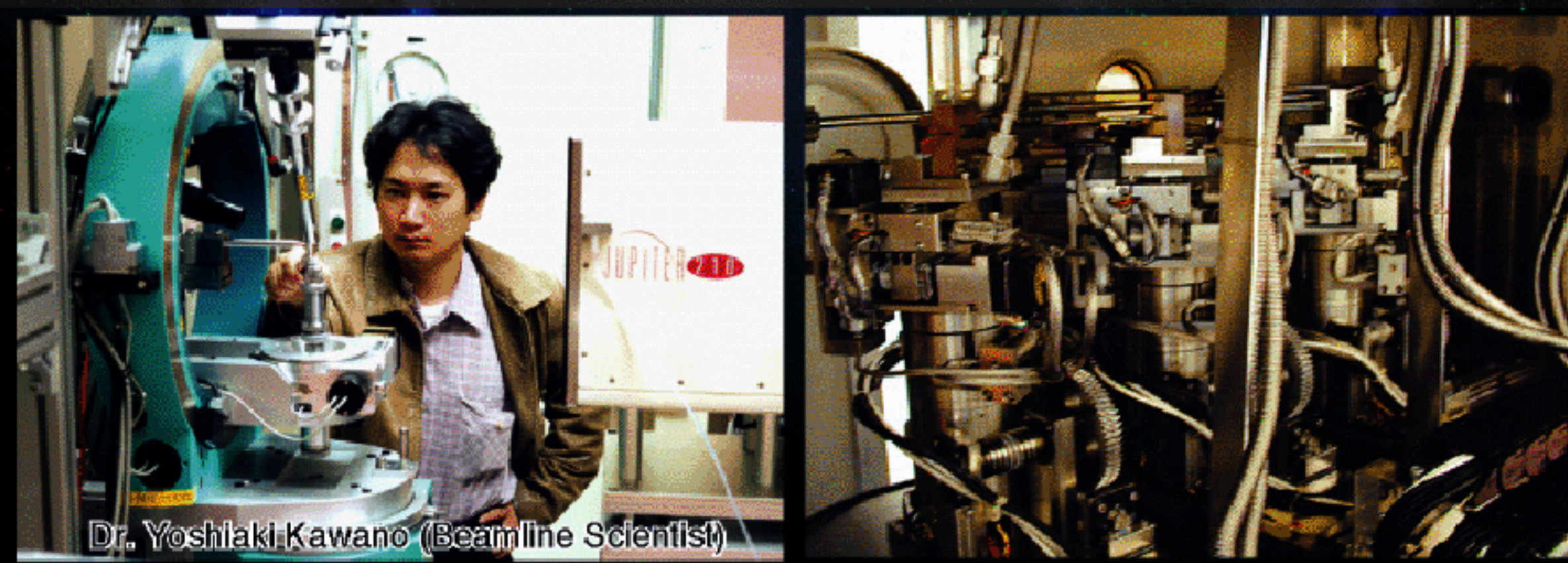
The RIKEN Structural Biology I Beamline BL45XU is designed for the research on structural biology. The beamline has two experimental stations: one for protein crystallography (PX) and the other for small-angle X-ray scattering (SAXS) and both stations can be operated simultaneously with two serially 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 RAD52₁₋₂₁₂ 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 Rad52₁₋₂₁₂ 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**



Dr. Yoshitaki Kawano (Beamline Scientist)

