

## **BEAMLINES**

SPring-8 decided to accept an additional beamline proposal for infrared studies, so the total number of available beamlines is 62 instead of 61 as initially planned.

Beamlines at the SPring-8 Facility are categorized into four types:

- · Public beamlines constructed by SPring-8 and open to public use
- · JAERI/RIKEN beamlines constructed by JAERI/RIKEN for their exclusive use
- · contract beamlines constructed by the proposers for their exclusive use
- · R&D beamlines constructed by SPring-8

At the end of 1998, ten public beamlines were operated for public use as:

BL01B1	XAFS
BL02B1	Crystal Structure Analysis
BL04B1	High-Temperature Research
BL08W	High-Energy Inelastic Scattering
BL09XU	Nuclear Resonant Scattering
BL10XU	Extremely Dense State Research
BL25SU	Soft X-ray Spectroscopy of Solid
BL27SU	Soft X-ray Photochemistry
BL39XU	Physicochemical Analysis
BL41XU	Bio-Crystallography

A Biomedical Imaging beamline, BL20B2, which extends over 200 meters from the X-ray source point, was completed in the autumn of 1998. In 1998, construction began for several more public beamlines:

BL02B2	Powder Diffraction
BL04B2	High-Energy Scattering/Diffraction
BL20XU	Medical Use
BL20B2	Medical and Imaging Application R&D
BL28B2	White Radiation Topography
BL35XU	High-Energy Resolution Inelastic Scattering
BL40XU	High-Flux Undulator
BL40B2	Structural Biology
BL43IR	Infrared Studies

Of these, the bending magnet beamlines, BL02B2, BL04B2, BL20B2, BL28B2 and BL40B2, were scheduled to be finished by the end of FY1998 and will be available for trial use in 1999.



An R&D beamline, BL47XU, was completed and partly made available for public use mainly in the fields of imaging and detector development. The second R&D beamline, BL46XU, will be completed with an experimental hutch.

```
BL46XU R&D (1) (RIKEN)
BL47XU R&D (2) (RIKEN)
```

Six beamlines of JAERI and RIKEN have been constructed for exclusive use by JAERI/RIKEN scientists:

BL11XU	Materials Science (JAERI)
BL24B1	Materials Science (JAERI)
BL23SU	Actinide Studies by Soft X-ray (JAERI)
BL29XU	Coherent X-ray Studies (1 km beamline) (RIKEN)
BL44B2	Structural Biology II (RIKEN)
BL45XU	Structural Biology I (RIKEN)

Of these, the BL29XU undulator beamline will be extended out of the Experimental Hall to an experimental station 1 km from the source. RIKEN started construction of a 30-m-long straight section beamline, BL19IS, from FY1998 and will complete it in FY 2000. Several units of undulators are to be installed for coherent hard X-ray studies.

```
BL19IS RIKEN(4) (30 m beamline)(RIKEN)
```

Six contract beamlines exist at SPring-8, either under construction or in operation:

BL15IN	Materials Science (Nat. Inst. for Res. in Inorg. Mat.)
BL16XU	Materials Science (Industrial Consortium)
BL16B2	Material Science (Industrial Consortium)
BL24XU	Multi-purpose (Hyogo Prefecture)
BL33LEP	Laser Electron Photon Studies (Osaka University)
BL44XU	Macromolecular Assemblies (Osaka University)

All of the beamlines are shown in the Beamline Map, including those that are still in the design stage.

