

### **Long-term Proposal**

Separately from General Proposals, SPring-8 has created a system for the long-term use of beamlines, where beam access is guaranteed for up to three years. This system aims to further promote research that is expected to produce outstanding results in science and technology, to pave the way for new research areas and research methodology and to help significantly improve the technology for industry by making the best use of SPring-8 characteristics. In 2003B, two of three proposals were selected; in 2004A, one of three proposals was selected. Seven proposals were being carried out at the end of 2004A.

#### **Industrial Research**

As well as the promotion of research activities in basic science, the contribution to the reinforcement of the technological base in industry has been one of the main pillars of the SPring-8 Project. The coordination system introduced in FY2000 to support industrial use mainly through consultation is a case in point. Equally important is the Trial Use Program. This program is aimed at revitalizing local industries and creating and promoting new industries. Public beamline BL19B2, the Engineering Science Research Beamline, built to promote SR use by industries, is the main beamline used in the Trial Use Program. There are three contract beamlines, which were constructed by Industrial Consortium and Pharmaceutical Consortium, for use by the consortium members. In addition to the above, workshops and training courses are also provided. These courses are intended for a variety of research fields and SR instrumentation and were attended by a total of 1,150 industrial users from FY2000 through FY2002.

## **Proprietary Research**

Users conducting proprietary research are charged beamtime fees. Proprietary research is essential when users have commercially confidential information in their experiment or sample and do not wish to disclose their research results. In 2003B, 15 proprietary experiments were performed at public beamlines and 27 at contract beamlines (26 at BL32B2 and 1 at BL16XU); in 2004A, 10 experiments were conducted at public beamlines and 26 experiments at contract beamlines (24 at BL32B2 and 2 at BL24XU). During the period from 1999B, when the system was introduced, to 2004A, a total of 220 proprietary experiments were carried out at both public and contract beamlines. The Pharmaceutical Consortium spent about 79% of their beamtime on proprietary research at their contract beamline BL32B2, in 2004A.

#### **Research Results**

SPring-8 users are not charged for non-proprietary research as long as they submit an experiment report within sixty days after their experiments. When their results are disclosed in scientific journals or any other form of publication, the project leaders are required to inform and register it to JASRI. As of September 30, 2004, the number of refereed publications (journals, proceedings and dissertations) is 1,706 (1,313 for public use, 158 for contract beamlines and 287 for JAERI and RIKEN beamlines; the results obtained using two or more beamlines are counted for each beamline.)

## **Budget and Manpower**

SPring-8 consisting of accelerators, beamlines and facilities for users, was constructed by the JAERI/RIKEN Project Team during the period from 1991 through 1997 at a total cost of about 110 billion yen. In 1994, JASRI was designated, under the Law Regarding Promotion of Common Use of the Synchrotron Radiation Facility (SPring-8), as the Organization for the Promotion of Synchrotron Radiation Research

responsible for managing SPring-8. As a result, the SPring-8 research complex comprises JAERI Kansai Research Establishment, RIKEN Harima Institute and JASRI. JASRI has been entrusted by JAERI and RIKEN with the operation, maintenance, improvement, upgrading, R&D and safety management of SPring-8, as well as the technical support for new beamline construction after the construction of the main



facilities and buildings at SPring-8 was completed and public use started in 1997.

About 87% of the total budget of JASRI comes from the Government through JAERI and RIKEN and is appropriated for the above-mentioned missions of JASRI. The remaining 13% comes directly from the Government in the form of grants for user support. Figure 6 illustrates the budget at SPring-8. It shows that the total budget for JASRI for FY2004 was 10 billion 556 million yen and the total budgets for JAERI and RIKEN

were 888 million yen and 2 billion 587 million yen, respectively. As can be seen from the figure, the budgets for JAERI and RIKEN have been reduced since FY2001 because the construction such as of utility facilities is approaching completion. Meanwhile, construction of beamlines has been halted due to lack of budget.

In FY2004, the total number of JASRI staff members was 488. The total number of SPring-8 staff members amounts to 1,099 when staff at JAERI Kansai Research Establishment and RIKEN Harima Institute is combined with the JASRI staff. The breakdown of the staff according to the types and fields of employment is shown in Fig. 7.

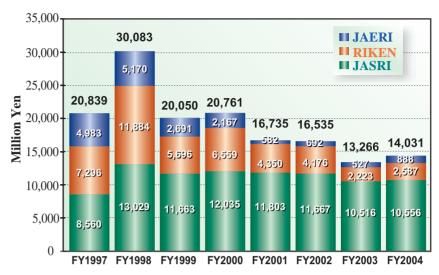
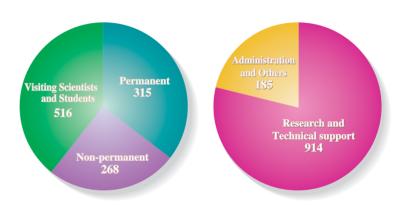


Fig. 6. Budget at SPring-8: JASRI, JAERI and RIKEN.



		by Type		by Field		
	Permanent	Non-permanent	Visiting Scientists and Students	Research and Technical Support	Administration and Others	Total
JASRI	219	130	139	349	139	488
<b>JAERI</b>	34	20	9	54	9	63
RIKEN	62	118	368	511	37	548
	315	268	516	914	185	1,099

Fig. 7. Manpower at SPring-8: JASRI, JAERI and RIKEN (FY2004).

# **Organization**

As mentioned earlier in the Budget and Manpower, the SPring-8 research complex comprises JASRI, JAERI Kansai Research Establishment and RIKEN Harima Institute, all of which are on site. While JAERI and RIKEN conduct their own research at SPring-8, JASRI is entrusted by the two with the operation, maintenance, improvement, upgrading, R&D and

safety management of SPring-8. Since SPring-8 is a facility open to the public, user support is also an important task of JASRI. The organization that JASRI has formed to accomplish these missions is shown in Fig. 8. The organizations of JAERI and RIKEN are shown in Fig. 9 and Fig. 10, respectively.