

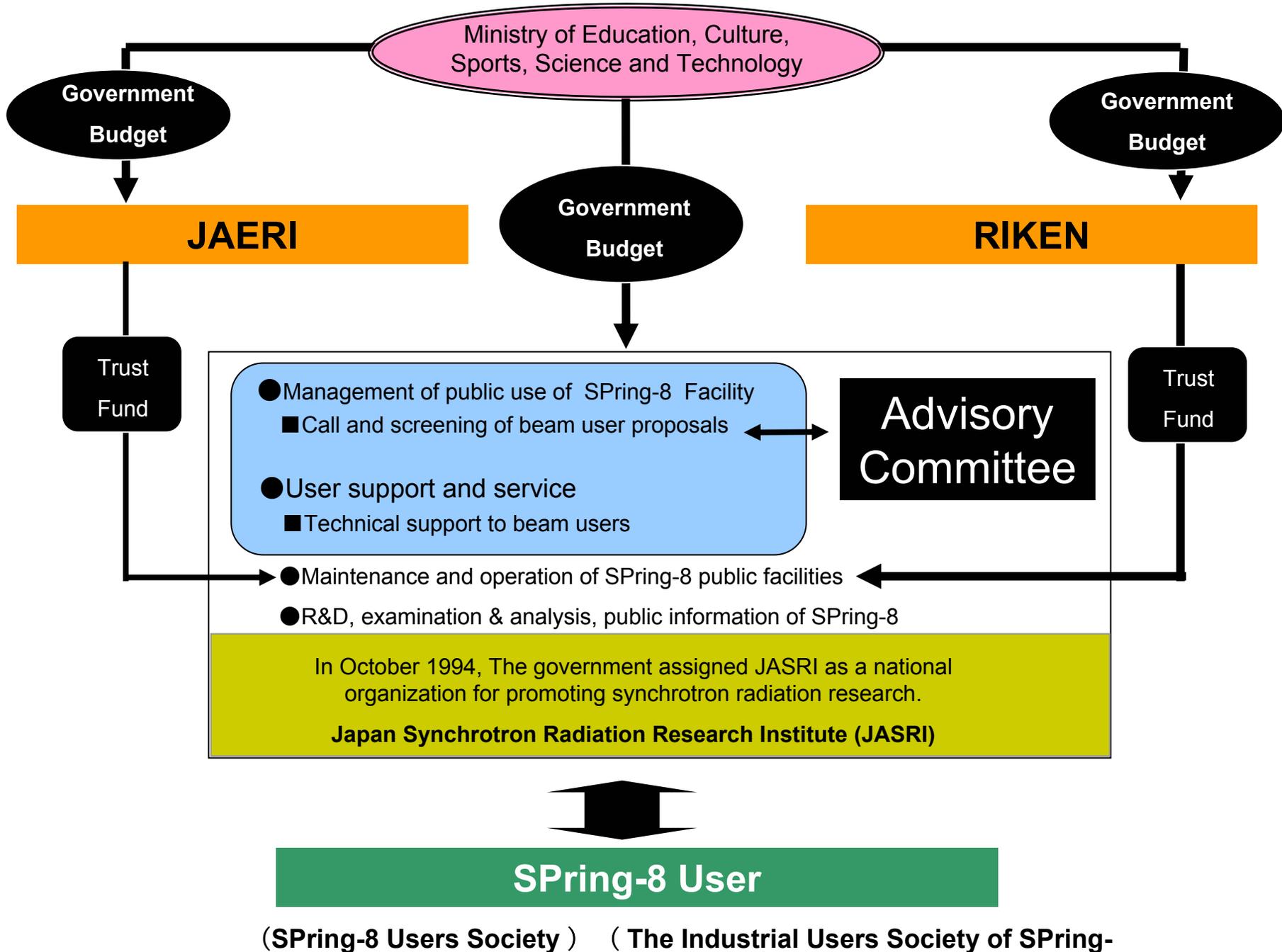
The Outreach of SPring-8

3-way meeting

APS/ANL

June 2-3, 2003

Management System of SPring-8



Interim Review Report on SPring-8

Review Items

All activities at SPring-8:

- Operation, maintenance, public use and management by JASRI
- Facility construction/maintenance and R&D by JAERI and RIKEN

Council

Chairperson:

Hidetoshi Fukuyama Professor, Director, Inst. for Solid State Physics, Univ. of Tokyo

Committee Members:

Yuji Ohashi	Professor, Dept. of Chem. & Materials Science, Tokyo Inst. of Tech.
Hideki Okuda	Managing Director, SHIONOGI & CO., LTD.
Toshihiko Ozawa	Executive Director, National Inst. of Radiological Sciences
Tomoji Kawai	Professor, Inst. of Scientific and Industrial Research, Osaka Univ.
Akiko Kobayashi	Professor, Research Center for Spectrochemistry, Univ. of Tokyo
Michiko Konno	Professor, Ochanomizu Univ.
Takamitsu Sawa	Director, Inst. of Economic Research, Kyoto Univ.
Koichi Niwa	Managing Director, FUJITSU LABORATORIES LTD.
Tadashi Matsushita	Deputy Director, Inst. of Materials Structure Science, KEK

Review Items and Results - 1

Public Use at SPring-8

Number of Users	SPring-8 is recognized as a facility fully open to users. (As of Feb 28, 2002, SPring-8 has been visited by a total of 20,205 users.)
Procedure for Public Use	JASRI invites proposal applications twice a year; the current system has been functioning well. Considering SPring-8 is expected to produce more results, it needs to find more flexible proposal selection procedures to meet the needs of users.
User Support	User Support by beamline scientists is recognized as sufficient. To meet diverse needs of users, there is still room for improvement.
Public Use	With the increase in the number of users and the expansion of research fields available at SPring-8, the efforts to encourage public use was rated highly.
Efforts to Attract Industrial Users	The number of industrial users has been steadily growing. Considering proposals from industrial users accounts for only 6% of all research proposals, SPring-8 must come up with measures to attract new industrial users.

Review Items and Results - 2

Research Activities

Status

Currently SPring-8 has 47 beamlines, all of which are available for a variety of experiments.

Research Results

The total of 1,364 papers were published by the end of FY2001 based on the research using SPring-8. To produce more research results, public beamlines need to be better managed.

Partnership

with Neighboring Research
Institutes and SR Facilities

A research complex in Harima Science Garden City facilitates collaborative projects among SPring-8 and its neighboring research institutes.

International Cooperation

Giving technical support and advice on the construction of SR facilities in Asia, SPring-8 is accepted as a core SR facility in Asia.

Review Items and Results - 3

Management of SPring-8

Management System

Organizational restructuring is indispensable for optimum efficiency.

User Support

Beamline scientists, coordinators and technical support staff are expected to provide more substantial support for users.

Proper Staffing /Training and Mobility

Efforts to attract talented researchers and foster young researchers are deemed appropriate. Much needs to be done, however, to improve mobility of researchers.

Maintenance/Upgrades of the Facility

The construction of the high-performance SPring-8 and the maintenance of beamlines have been successful despite high level of expertise required.

Recommendations

Management:

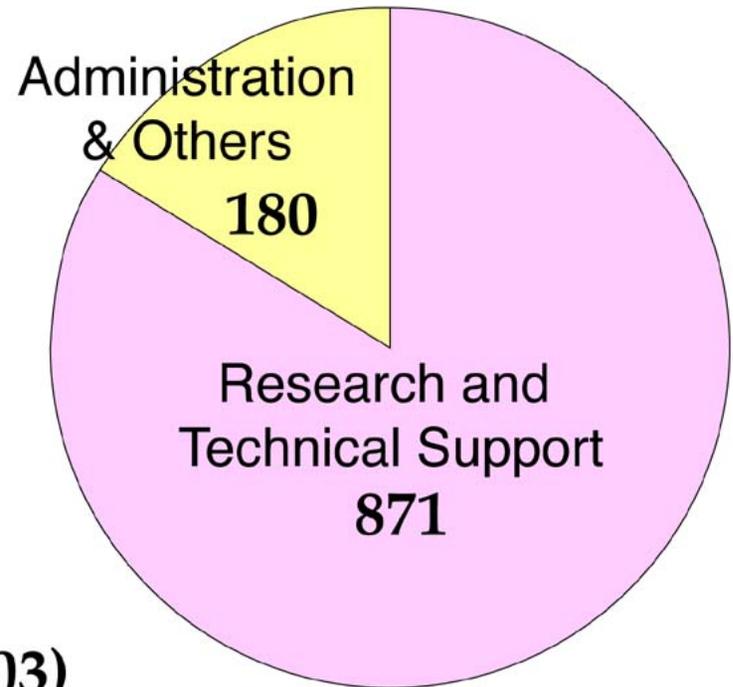
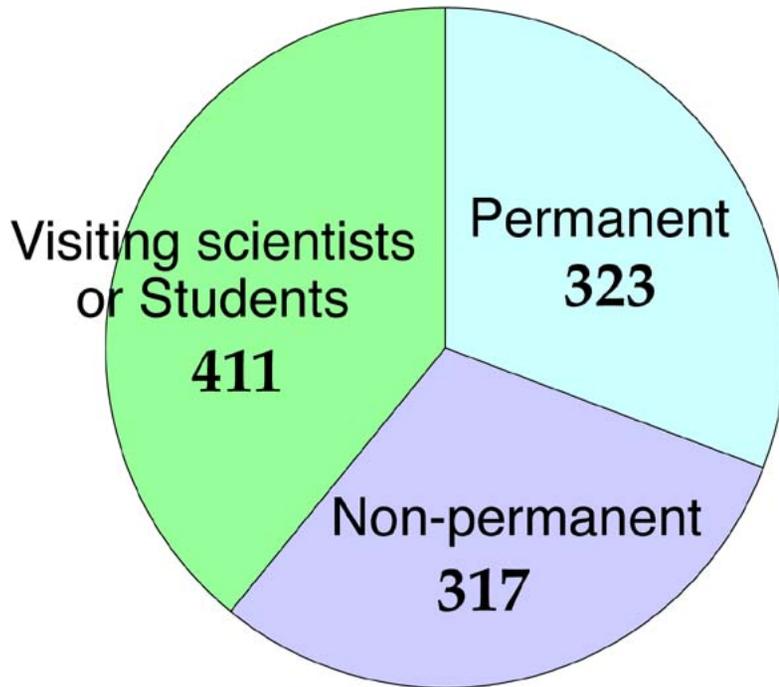
- **Promotion of Strategic Research**
 - a) **Priority Research Program**
 - b) **Power User Program**
- **Efforts to Find New Users and Promote Industrial Use**
 - a) **Increase of beamline staff**
 - b) **Industry-academia-government collaborative projects**
 - c) **Technical support by coordinators**

Organization:

- **Streamlined decision-making process**
- **Restructuring for efficient management**
- **JASRI's initiative in planning and budgeting**

Manpower at SPring-8

JAERI, RIKEN, JASRI



(FY2003)

	Chart 1			Chart 2		Total
	Permanent	Non-permanent	Visiting scientists or Students	Research & Technical Support	Administration & Others	
JAERI	42	26	7	67	8	75
RIKEN	61	163	289	477	36	513
JASRI	220	128	115	327	136	463
	323	317	411	871	180	1,051

Programs for Graduate Students and Post-Docs

Research Trainee Program

- One-year contract (renewable twice)
- Financial support (traveling and lodging expenses)
- 21 students are currently in this program

Post-Doc Program

- Salary: 5,172,000 yen (US\$43,100)
- One-year contract (renewable twice)
- Employment opportunity
- 10 researchers are currently in this program

Industrial Use

BL19B2: Engineering Science Research Beamline

- Built to promote SR use
- One of the beamlines used for the "Trial Use Program"

Coordinator System

- Introduced in FY2000 to support industrial users

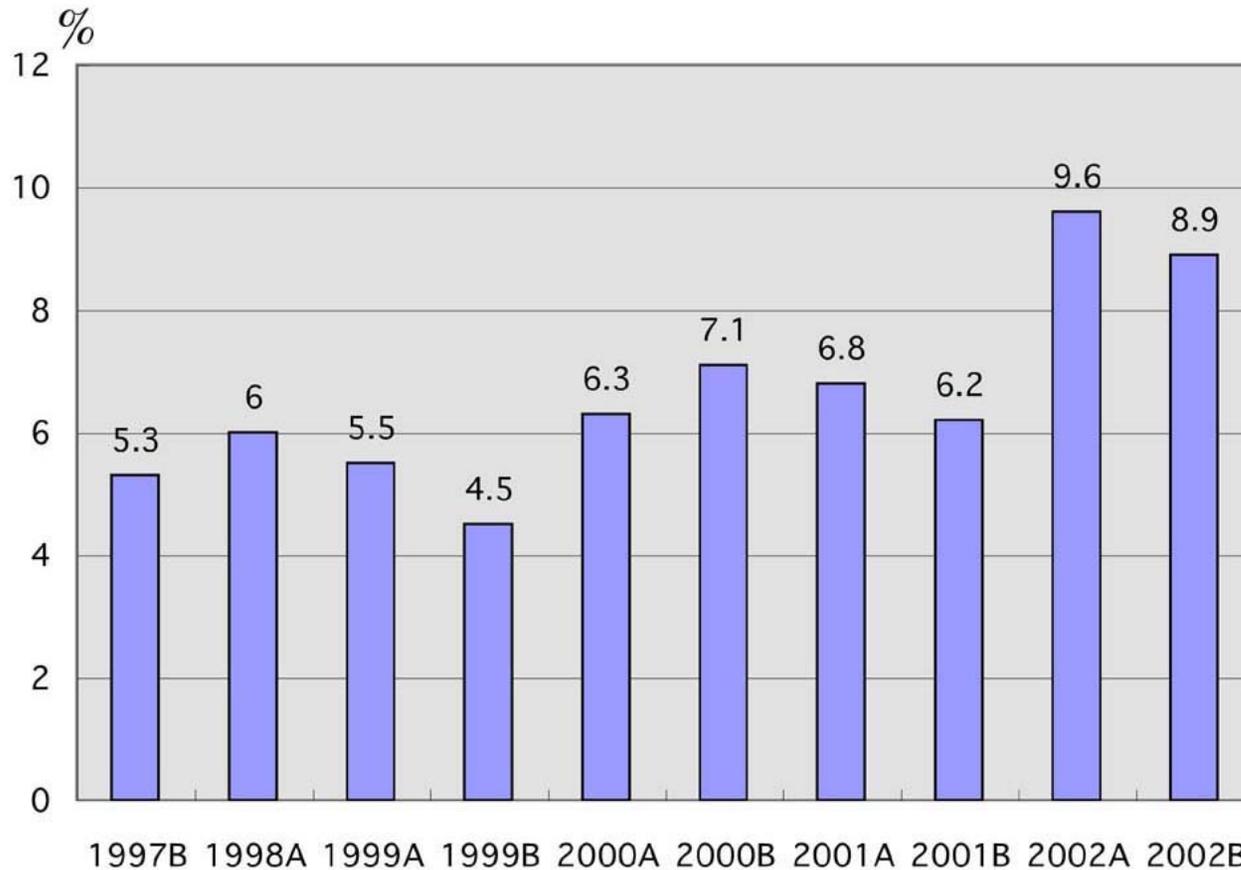
Workshops and Training Courses

- Programs for a variety of research fields and SR instrumentation
- Participants: 395 (FY2000), 405 (FY2001), 350 (FY2002)

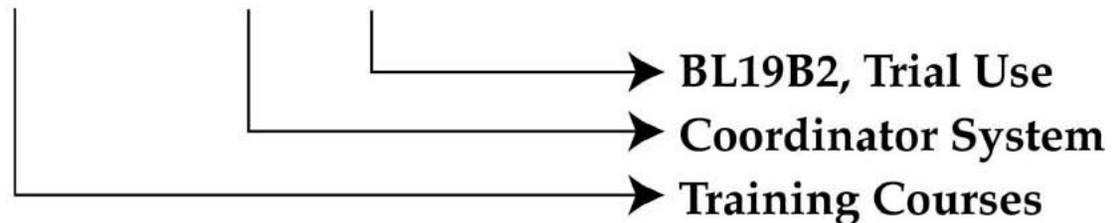
Trial Use Program

- Innovation to revitalize community-based industries
- Creation and Promotion of new industry
- Proposals: 35 applied, 33 selected

Industrial Use at SPring-8



Research Term



Power User Program

What are expected of Power Users?

- Produce excellent research results in pacesetting SR research fields
- Contribute to the development and upgrading of experimental stations
- Help open up new research fields
- Provide support for general users

What can JASRI do for Power Users?

- Beam time grant (up to 20%) for own use
- Financial support for research supplies
- Reimbursement of travel expenses (incl. group members)
- Fellowship opportunities at JASRI (for young researchers)

Cooperative Graduate School Program

- Foster young researchers
- Revitalize and enrich graduate education
- Strengthen cooperation between JASRI and academia

University	since	School/Faculty/Dept
Kobe University	1997	Science
Kobe University	2000	Medicine
Okayama University	2000	Science

- How: Competent researchers working at SPring-8 are appointed as adjunct professors of the universities, and students can receive research supervision from the adjunct professors and obtain credits.

Summer School Program

Purpose

- To have future researchers, engineers and technicians catch a glimpse of research at SPring-8

Programs

- Lectures
- Laboratory work using SR at SPring-8

Instructors

- Researchers of JAERI, RIKEN, JASRI and Himeji Institute of Technology

Participants (undergraduate and graduate students)

- 20 in 2001, 20 in 2002, (50 in 2003 expected)

Conferences (April2002-March 2003)

May 1-4	24th Advanced ICFA Beam Dynamics Workshop on Future Light Sources
July 28-Aug 2	Gordon Research Conference
Aug 22-26	International Workshop on Photoionization (IWP2002)
Sept 3-6	The 7th Harima International Forum
Oct 15-16	The 5th SRRTNet Workshop
Nov 11-14	The 7th International Workshop on Accelerator Alignment(IWAA2002)
Dec 4-6	International Workshop on Beam Orbit Stabilization (IWBS2002)
Mar 19-20	The 8th Harima International Forum
July 7-9	Summer School 2002
Sept 10-11	The 6th SPring-8 Symposium
Dec 18-20	The 6th Technical Workshop for SPring-8
Mar 3-4	LEPS(□ Laser Electron Photons at SPring-8) Workshop LEPS03
Mar 24-25	The Workshop “Generation of High Energy Synchrotron Radiation by Using a Superconducting Wiggler and Its Applications