1 Experimental Proposals

1-1 Academic Proposals

The PF is a facility which accepts experimental proposals from researchers, mainly based at universities and research institutes, both inside and outside Japan. Experimental proposals are reviewed by the PF Program Advisory Committee (PF-PAC) and approved by the Advisory Committee for Institute of Materials Structure Science. The number of accepted proposals over the period 1993-2004 is shown in Table 1, where S1/S2, U, G and P denote Special, Urgent, General and Preliminary proposals. The number of current G-type proposals at any one time has been over 600 during recent years since proposals are active for two years. A complete list along with details of scientific output of the experimental proposals active in FY2004 can be found in PART-B of this volume.

S-type proposals are divided into two categories, S1 and S2. S1 proposals are proposals of excellent quality, including the construction and improvement of beamlines and experimental stations which will serve general users after the completion of the project. S2 proposals are proposals of excellent quality which require the full use of synchrotron radiation or a large amount of beam time. Both S-type proposals, after rigorous refereeing procedures, are supported financially by the PF. Table 2 summarizes the S-type projects active in FY2004. There is one S1-type proposal initiated in FY2004. Proposal number 2004S1-001 is a project for the construction and utilization of sub-nanosecond resolved diffraction beam lines to search for strongly correlated materials in the non-equilibrium states. The scientific outputs of S1 and S2 proposals are described in the Highlights of PART-A and the User's reports of PART-B of this vollume.

Proposals are also categorized by the five scientific disciplines corresponding to the five subcommittees of PF-PAC: a) electronic structure, b) structural science, c) chemistry and new materials, d) life science I (protein crystallography) and e) life science II. Fig. 1 shows the distribution of the proposals accepted by these subcom-

Table 1 Number of proposals accepted for the period 1993-2004.

FY	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
S1					3	1	0	0	0	0	1	1
S2		1	0	2	1	3	3	2	2	3	2	0
U				2	1	4	2	0	5	3	2	4
G	331	369	365	260	303	333	323	308	339	321	318	382
P	13	15	14	10	6	14	22	17	18	16	9	13

Table 2 List of S-type proposals active in FY2004.

Proposal No.	Spokesperson	Title
2001S2-002	Y. Murakami Tohoku Univ.	Charge, spin, orbital, and lattice ordering of strongly correlated electron system
2001S2-003	T. Ohta Univ. of Tokyo	Development of soft X-ray energy dispersive surface XAFS and its application to surface chemistry
2002S2-001	T. Takeda Univ. of Tsukuba	*In vivo* observation of live objects by phase-contrast imaging using separate X-ray interferometer
2002S2-002	M. Oshima Univ. of Tokyo	High-resolution photoelectron spectroscopy of semiconductor/magnetic nanostructures
2002S2-003	K. Sakurai NIMS	*In-situ* X-ray fluorescence imaging with quick feedback capability
2003S1-001	H. Sawa KEK-PF	New beamline construction for research of Strongly Correlated Electron System
2003S2-001	K. Akimoto Nagoya Univ.	X-ray diffraction studies on structural analysis and controls of semiconductor surfaces and interfaces
2003S2-002	S. Wakatsuki KEK-PF	Target oriented structural genomics of the Protein 3000 Project
2004S1-001	S. Koshihara Tokyo Inst. of Tech	Consturction and utilization of sub-nanosecond resolved diffraction beam lines to search for strongly correlated materials in the non-equilibrium states

mittees in FY2004.

.

1-2 Industrial Proposals

In addition to S, U, G and P-type proposals, there are two categories open for researchers from private companies. These researchers can join collaborative (C-type) proposals with PF staff members or they can submit their own proposals (Y-type). As listed in PART-B, there are 25 C-type and 2 Y-type proposals active in FY2004.

1-3 Statistics of the Proposals

Fig. 2 shows the variation in the number of registered users over the period 1990-2004. The total number increased gradually up to 1995, reached a constant value of about 2,400, and increased again after 2000. The temporary decrease in 1997 was due to the long shutdown during the high-brilliance modification of the PF storage ring. The responsible person of each proposal is requested to notify us when he/she published papers or reviews which are based on experiments carried out at the PF. These publications are compiled in a database which can be accessed through http://pfwww.kek.jp/, together with publications by PF staff members. A list of recent publications is found in PART-B. The distribution of the scientific fields is shown in Fig. 3 for publications during 1996-2004.

It should be mentioned that we accept over 20 proposals per year from overseas, making up about 5% of the total number of proposals, as shown in Fig. 4. Most of these proposals are carried out in conjunction with Japanese collaborators, and are considered as international collaborations.

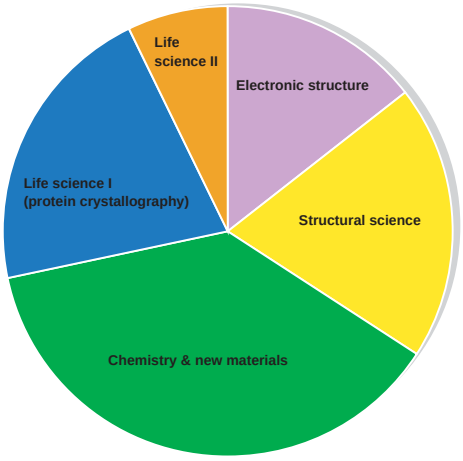

Figure 1
Scientific-field distribution of experimental proposals accepted for FY2004.

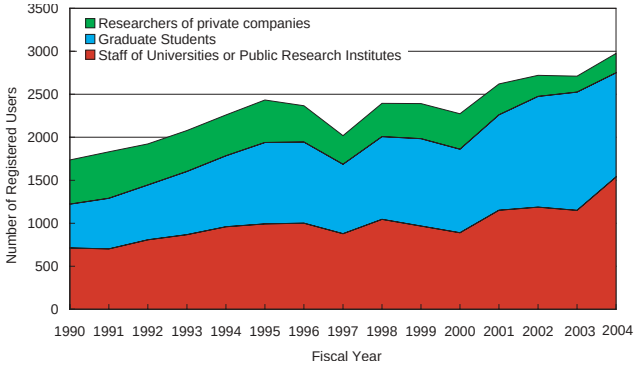

Figure 2
Number of PF users for the period 1990-2004.

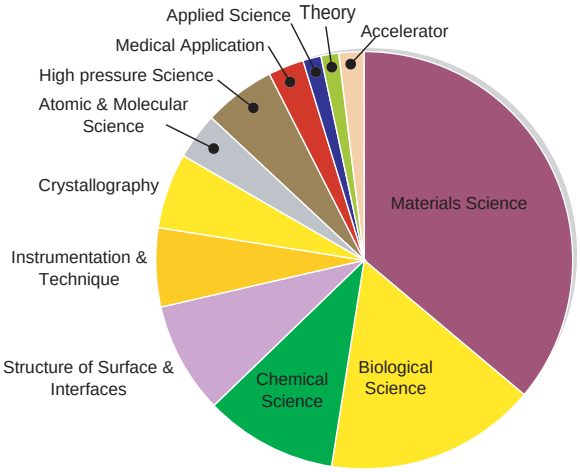

Figure 3
Distribution of publications by scientific fields in 1996-2004.

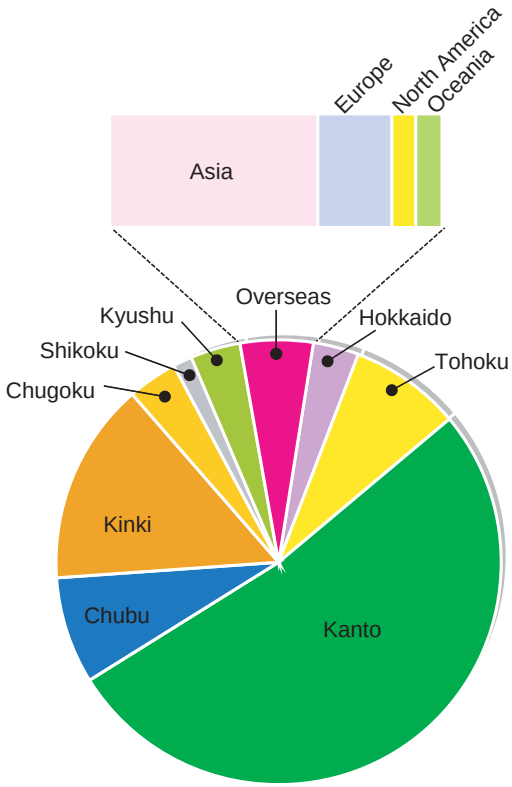

Figure 4
Regional distribution of the spokesperson of proposals accepted in FY2004. Note that proposals for BL-20B of ANBF are not included.