

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 Councils for Scientific Policy and Managements. The number of accepted proposals over the period 1992-2003 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 FY2003 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 FY2003. There are one S1-type and two S2-type proposals initiated in FY2003. Proposal number 2003S1-001 is a project for the construction of a collaborative system at BL-1A where the materials science of strong electron-correlation systems will be investigated. Proposal number 2003S2-001, which is deeply related to 2000S2-003, investigates the structures and properties of the interfaces of semiconductors by X-ray diffraction at BL-15B2. Proposal number 2003S2-002 contributes the national project "Protein 3000", which is an ongoing project to determine 3000 protein structures. This project is divided into individual and comprehensive programs. The individual program consists of eight universities and institutes which use the

Table 1 Number of proposals accepted for the period 1992-2003.

FY	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
S1						3	1	0	0	0	0	1
S2			1	0	2	1	3	3	2	2	3	2
U					2	1	4	2	0	5	3	2
G	298	331	369	365	260	303	333	323	308	339	321	318
P	5	13	15	14	10	6	14	22	17	18	16	9

Table 2 List of S-type proposals active in FY2003.

Proposal Number	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	<i>In vivo</i> 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	<i>In-situ</i> 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

protein crystallography beamlines (BL-6A, BL-18B, AR-NW12) under this S2 proposal. The scientific output of S2 proposals is described in the Highlights of PART-A and the User's reports of PART-B of this volume.

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 subcommittees in FY2003

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 9 C-type but no Y-type proposals active in FY2003.

1-3 Statistics of the Proposals

Fig. 2 shows the variation in the number of registered users over the period 1990-2003. 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 the Appendices. The distribution of the scientific fields is shown in Fig. 3 for publications during 1996-2003.

It should be mentioned that we accept about 20 proposals per year from overseas, making up about 7% of the total number of proposals, as shown in Fig. 4. Most of these proposals are carried out in conjunction with Japa-

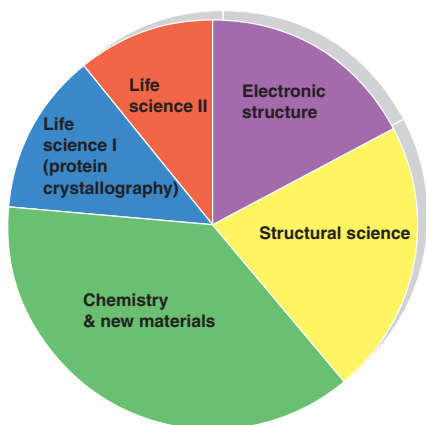


Figure 1
Scientific-field distribution of experimental proposals accepted for FY2003.

nese collaborators, and are considered as international collaborations.

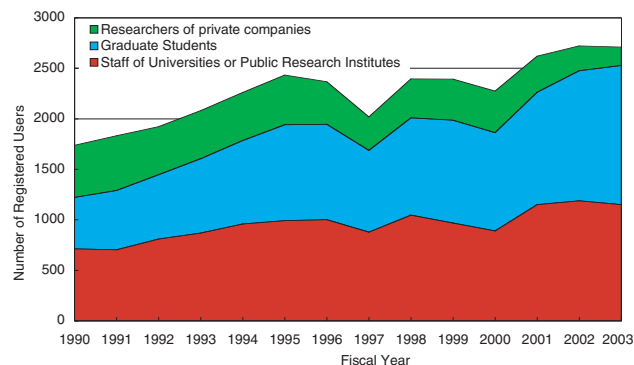


Figure 2
Number of PF users for the period 1990-2003.

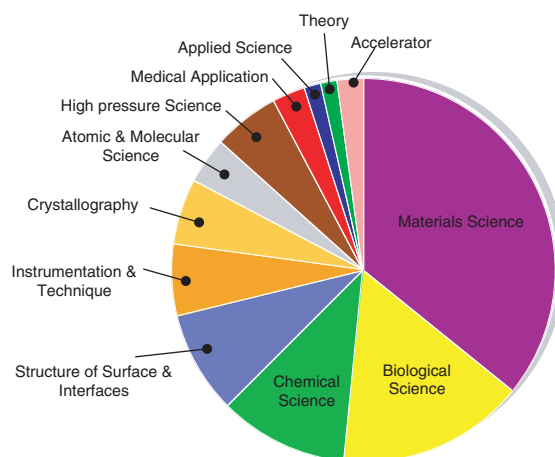


Figure 3
Distribution of publications by scientific fields in 1996-2003.

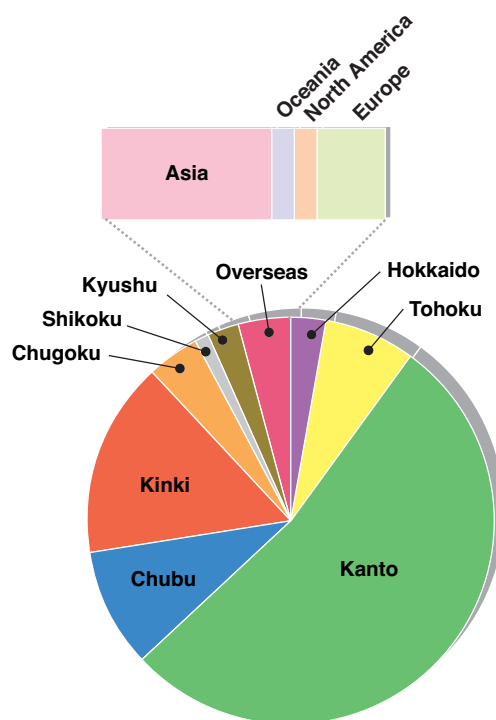


Figure 4
Regional distribution of the spokesperson of proposals accepted in FY2003. Note that proposals for BL-20B of ANBF are not included.