1. Experimental Programs

The PF is a facility accepting experimental proposals from universities and research institutes, irrespective of the nationality. Experimental proposals are reviewed by the PF Program Advisory Committee (PF-PAC) and approved by the Advisory Council for Management. The variation in the number of the accepted proposals for the period 1990-2000 is shown in Table 1, in which the S1/S2, U, G and P stand for the special, urgent, general and preliminary proposals. S-type proposals are divided into two categories of S1 and S2. S1 is proposal of excellent quality including the construction of beamlines

Table 1. Number of proposals accepted for the past decade.

FY	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
S1								3	1	0	0
S2					1	0	2	1	3	3	2
U							2	1	4	2	0
G	238	284	298	331	369	365	260	303	333	323	308
P			5	13	15	14	10	6	14	22	17

Table 2. List of S-type proposals active in FY2000.

No.	Spokesperson	Title
97S1-002	M. Oshima The Univ. of Tokyo	Formation and new properties of quantum nanostructures
97S2-001	K. Ito PF	Photoelectron angular distribution from oriented molecules
98S1-001	H. Toraya Nagoya Inst. of Tech.	Development of the method for crystal structure analysis using high-resolution powder diffraction data
98S2-001	Y. Murakami PF	Direct observation of charge- and orbital-ordering in strongly correlated electron system
98S2-002	S. Shin The Univ. of Tokyo	Polarized Raman and photoemission spectroscopy in soft X-ray region
98S2-003	T. Koide PF	Soft X-ray magnetic circular dichroism study of the electronic and magnetic states of nanometer-scale magnets
99S2-001	T. Yagi The Univ. of Tokyo	Accurate characterization of the high pressure and high temperature in situ X-ray diffraction study and the physical property of the lower mantle materials
99S2-002	Y. Itai The Univ. of Tsukuba	In vivo observation of biological soft tissues with phase-contrast method using a separated-type X-ray interferometer
99S2-003	Y. Amemiya The Univ. of Tokyo	Development and application of X-ray ellipsometry
2000S2-002	M. Ito Himeji Inst. of Tech.	Spin- and orbital-magnetic moment-density distribution of ferromagnets by X-ray magnetic diffraction
2000S2-003	T. Takahashi The Univ. of Tokyo	X-ray diffraction studies on structures and properties of interfaces of metal-semiconductors and insulator-semiconductors

or experimental apparatus which will serve general users after the completion of the project. S2 is proposal of excellent quality, which requires full use of synchrotron radiation and a large amount of beam-time. Both S-type proposals, after rigorous refereeing procedures, are supported strongly by the PF from viewpoint of financial support and availability of beam time. Table 2 summarizes the active S-type projects in FY2000. Whole list of the experimental proposals effectual in FY2000 is available in PART-B of this volume. Proposals are also categorized by five scientific disciplines corresponding to five sub-committees of a) electronic structure, b) structural science, c) chemistry and new materials, d) life science I (protein crystallography) and e) life science II. Figure 1 shows the distribution of the proposals accepted by these sub-committees in FY2000.

In addition to the S, G, P and U proposals, there are two categories reserved for the researchers from private companies. They can join collaborative (C-type) proposals with the PF staff members; otherwise, they can submit their own proposals (Y-type). The machine time is charged for Y-type proposals. As listed also in PART-B, we have 18 C-type and 4 Y-type proposals in FY2000.

Figure 2 shows the variation in the number of registered users in these 10 years. The total number increased gradually up to 1995, and thereafter stayed at a constant value of about 2400. It almost corresponds to the length of the user time including a dip of FY1997 by a long shutdown for the high-brilliance modification of the PF storage ring.

The spokesperson of each proposal is requested to report back when he/she publishes papers or reviews which are based on the experiments carried out at the PF. Those publications are compiled in a database together with publications by PF staff members. A list of 2000 and 2001 is available in Appendices section (p.132-156) and the distribution by the scientific fields is shown in Fig. 3 for the publications of 1996-2000.

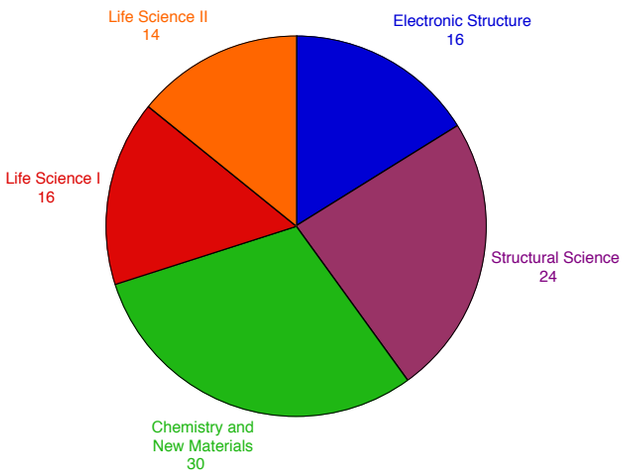

Figure 1.
Scientific-field distribution of experimental proposals accepted for FY2000.

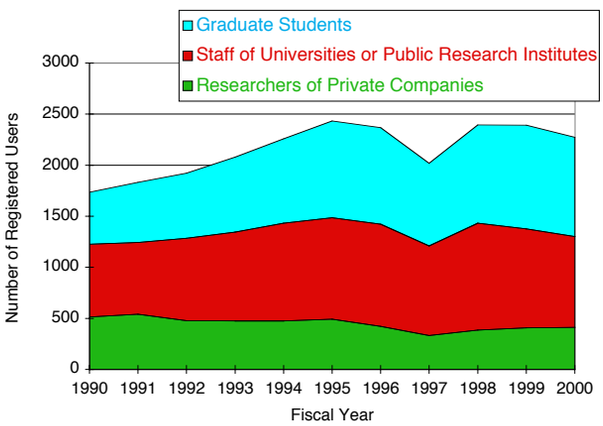

Figure 2.
Number of PF users over the period 1990-2000.

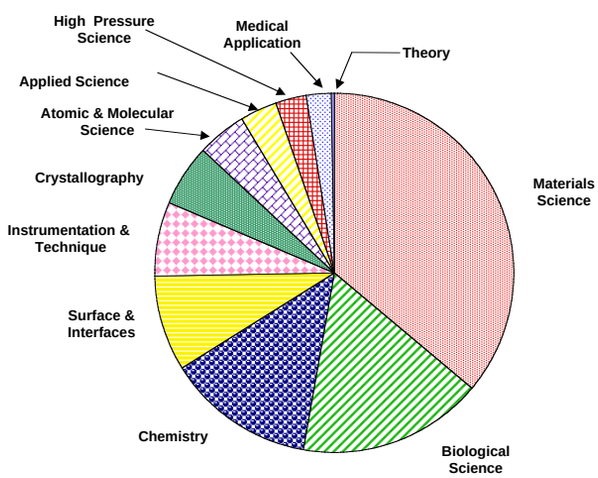

Figure 3.
Distribution of publications by scientific fields in 1996-2000.