International Collaboration

The PF has maintained an international collaboration program with the Australian Nuclear Science and Technology Organization (ANSTO) since 1991. They constructed their own station (Australian National Beamline Facility; ANBF) at BL-20B in 1992 to perform X-ray diffraction and absorption experiments. There are about 50 proposals every year for this beamline, under which 120-130 Australian scientists carry out their experiments. Their experience at the PF will prove useful for the operation of the Australian Synchrotron Facility currently under construction.

A collaboration program between Japan and China under the support of the Japan Society for the Promotion of Science (JSPS) had started in 2000. As a part of the activities of the collaboration program, the core-university seminar was held at PF KEK under the title of "Singlebunch operation, the generation of ultra-short light pulses at storage rings and their applications" on Feb. 28-Mar. 1, 2005. There were 46 participants including domestic and foreign researchers from China, Korea and US.



Figure1 Participants of core-university seminar.

Experiences of single-bunch operation and experiments at some Synchrotron Radiation (SR) light sources were reported on the first day. On the second day, various methods of ultra-fast radiation pulse production and its application were mainly discussed. Facilities dedicated to the production of light pulses with ultra-short time duration for application in dynamical studies of processes in physics, biology and chemistry are in the planning stage all over the world. At this seminar, we had an intensive discussion about various concepts of ultra-fast pulse production by electron beam manipulation. This seminar provided a valuable opportunity to exchange the experiences and the future views of the single-bunch operation issues and the generation of the ultra-fast light pulses. Program and reports of this seminar are available at the web site http://pfwww.kek.jp/cus/2005/ (Fig. 1).

It should be mentioned that we accept about 20 proposals per year from overseas, making up about 7% of the total number of proposals. Most of these proposals are carried out with Japanese collaborations, and considered as international collaborations.

