

## *Preface*

Last year witnessed a set of major accomplishments for us. One significant milestone was the successful completion of the machine upgrade for the superconducting RF module which replaced the old Doris cavities. This five-year project was successfully completed in December 2004. By retiring the older components around the storage ring we gained more breathing space to introduce additional insertion devices that were not possible before. Valuable knowledge acquired in this process will enable us to plan and design our next-generation light source.

The move also starts a new era in experiments by providing us the needed environment for advanced research. By adding many more application-specific experimental stations, our users are able to produce results as described in the highlights of this report. It is worth noting that these high-caliber instruments benefit our users immensely. Another major event was the start of research activities focusing on genomic medicine which began in the spring of 2005. We are certain that further progress in biology research will be taking place as a result of this.

Each research summary presented in this report highlights a note of triumph in the quest for scientific knowledge. Together, they illustrate a great diversity of subjects derived from synchrotron radiation research ranging from the photoexcitation in molecules, hydrogen bond ordering under extreme conditions, the structure of mesoporous silica films, to the fabrication of new nano-structured materials. Publications associated with our facility are detailed in the publication list followed by a total of 246 abstracts that are grouped according to the beamlines where the experiments were conducted.

*Editorial Committee*