

Preface

The purpose of the SPring-8 Project is to construct the world's most brilliant synchrotron radiation source in the soft and hard X-ray regions. The construction of the facility started in 1990, and the Project approaches its final stage of construction with the most outstanding progress in this year being the successful commissioning of the injector linac and the booster synchrotron. This report summarizes the activities of the SPring-8 Project in 1996.

Installation of the linac was completed by the end of 1995, and the power test of the entire system started in January 1996. After the RF aging of the waveguide and accelerator columns for three months, the commissioning of the linac started on August 1, and it succeeded to accelerate electrons up to 1 GeV one week later. As for the booster synchrotron, its installation and precise alignment were completed in September. After the full power test of two months, the synchrotron commissioning started on December 6. Electrons were accelerated up to 8 GeV on December 16. The installation of all magnets in the storage ring was completed, and the precise alignment of focusing magnets is under way. The installation of vacuum chambers and RF cavities has already been completed and the evacuation test is going on. The commissioning of the storage ring is scheduled in March, 1997.

Ten public beamlines and four JAERI-RIKEN beamlines are under construction together with two R&D beamlines. In addition, the detailed design of two other JAERI-RIKEN beamlines and five contract beamlines is in progress. R&D on the new types of insertion devices (ID) has been pursued. A pilot device, an in-vacuum undulator, was completed on the SPring-8 site and sent to the ESRF for on-beam tests of its performance. The construction of the front end parts of the beamlines together with the transport channels and optical elements are well under way. Most beamline components as well as their IDs are standardized. The construction of hutches in the experimental hall is also in progress.

The central building for research and administration, the cafeteria, guest houses for visitors, the building for the medical application of SPring-8 are under construction and most of them will be completed in June, 1997.



H. Kamitsubo

H. Kamitsubo
Director, SPring-8