



Research Team for Shanghai Synchrotron Radiation Facility

The research team has accomplished the largest-in-history scientific facility and platform for multi-disciplinary research in China, the Shanghai Synchrotron Radiation Facility (SSRF), which is one of the leading third generation intermediate-energy synchrotron radiation light sources in the world. On the basis of ten years' R&D of key technologies and timely optimization of the overall design, the team fulfilled the project within 52 months, including the development of the equipment, the construction of the facility and the commissioning.

The completion of the SSRF project was listed as one of the "Top Ten Scientific and Technological Achievements of China in 2009". More than 70% of its components were fulfilled by Chinese scientists and engineers and manufactured in Chinese industries, which was a result of quite a number of technological innovations and breakthroughs. Eventually, its success pushed forward

the development of high technology in related areas. For the first time in the world, SSRF realized the submicron beam orbit stability control in the SSRF storage ring on the large-scale soft soil foundation. The research team succeeded in integrating a series of world advanced technologies in this third generation synchrotron radiation light source, showing that the R&D capability of China in this kind of large-scale, ultra-high-precision, ultra-high-stability electromechanical equipments has been largely leveled up.

During the two years since its official opening, a total of 3,000 or so users from 217 institutions conducted experimental studies in more than ten disciplinary areas and achieved a large number of high-level research results. Up to date, SSRF has become a multi-disciplinary research platform playing an important role in innovation capacity building and talent fostering.

Three scientists received the award as outstanding

An aerial photography of the Shanghai Synchrotron Radiation Facility (SSRF).





contributors to the project. Prof. XU Hongjie from the CAS Shanghai Institute of Applied Physics (SINAP) is the director of the project, who is responsible for the all-around management of its construction, and directly in charge of the scientific goal for the project and the construction of beamlines and experimental stations. Prof. ZHAO Zhentang, also from the SINAP, is the deputy director of the project. He leads the design,

R&D, construction and commissioning of the three accelerators. Prof. CHEN Senyu, from the CAS Institute of High Energy Physics, serves as the project director in the R&D phase and the general consultant of the project during its construction, who directed the feasibility study, preliminary design and R&D of the project. They and other 10 scientists were awarded with the honor as the main contributors.



- ① The booster of the SSRF.
- ② The first annual meeting of SSRF users.
- ③ The electron storage ring of the SSRF.
- ④ The leader of SSRF Steering Board was inspecting the installation of the linac.
- ⑤ The linac of the SSRF.