

IV. User Program and Statistics

SPring-8 calls for public use proposals twice a year, in principle. However, proposals were not called for 2020B because of the COVID-19 pandemic. The submitted proposals are reviewed by the SPring-8 Proposal Review Committee (SPring-8 PRC). Since 1997, SPring-8 has accepted a variety of proposals. For the promotion of research on industrial applications at SPring-8, the Industrial Application Division was established in 2005, with consultation support for industrial users being provided by the division's coordinators. Currently, Industrial Application Proposals account for approximately 16%–18% of the total number of proposals conducted at the public beamlines. There always exist those companies and research institutes that find it difficult to retain specialized staff and to accommodate the need for quick access to SPring-8. To appropriately respond to this circumstance, the SPring-8 Measurement Service has been established. In this framework of service, JASRI staff members perform measurements on behalf of users. It is up to the users whether to come to SPring-8 and be present during the measurements or to simply send their samples to SPring-8. As far as the formalization of the proposal system is concerned, applications for this service are treated as proprietary, and, therefore, are subject to the conditions applied to proprietary beamtime and the user beamtime fee for Time-Designated Proposals (calculated in two-hour increments), as mentioned in the previous section. Currently, the Industrial Application Division of JASRI is carrying out XAFS measurements on behalf of users

at BL14B2. Since 2009B, the purview of the SPring-8 Measurement Service has been expanded by including Mail-in Protein Crystallography Data Collection at BL38B1 and Powder X-ray Diffraction at BL19B2. In addition, the Feasibility Study Proposal for Industrial Application was introduced in 2018A. The Feasibility Study Proposal for Industrial Application is designed to provide a simple procedure for beamtime application to SPring-8 for users who are interested in the use of SPring-8 or considering an application to SPring-8. Feasibility Study Proposals for Industrial Applications are considered a form of proprietary proposals and are subject to the proprietary beamtime fee and user fee applicable to “Proprietary Time-Designated Proposals.” All three Engineering Science Research Beamlines (BL14B2, BL19B2 and BL46XU) as well as measurement techniques at these beamlines are available to this proposal. The staff of the Industrial Application Division of the Japan Synchrotron Radiation Research Institute (JASRI) will perform measurements at SPring-8 on behalf of users, in common with Measurement Services. Therefore, users can choose whether to come to SPring-8 and be present during the measurements or to simply send their samples to SPring-8. Protein Crystallography Automatic Data Collection was introduced in 2019B; users need only to send samples to SPring-8 to obtain data (no visit required).

SPring-8 has been consistently providing ~4,500 h of user beamtime per year. Since the start of its operation in 1997, SPring-8 has succeeded in providing users with

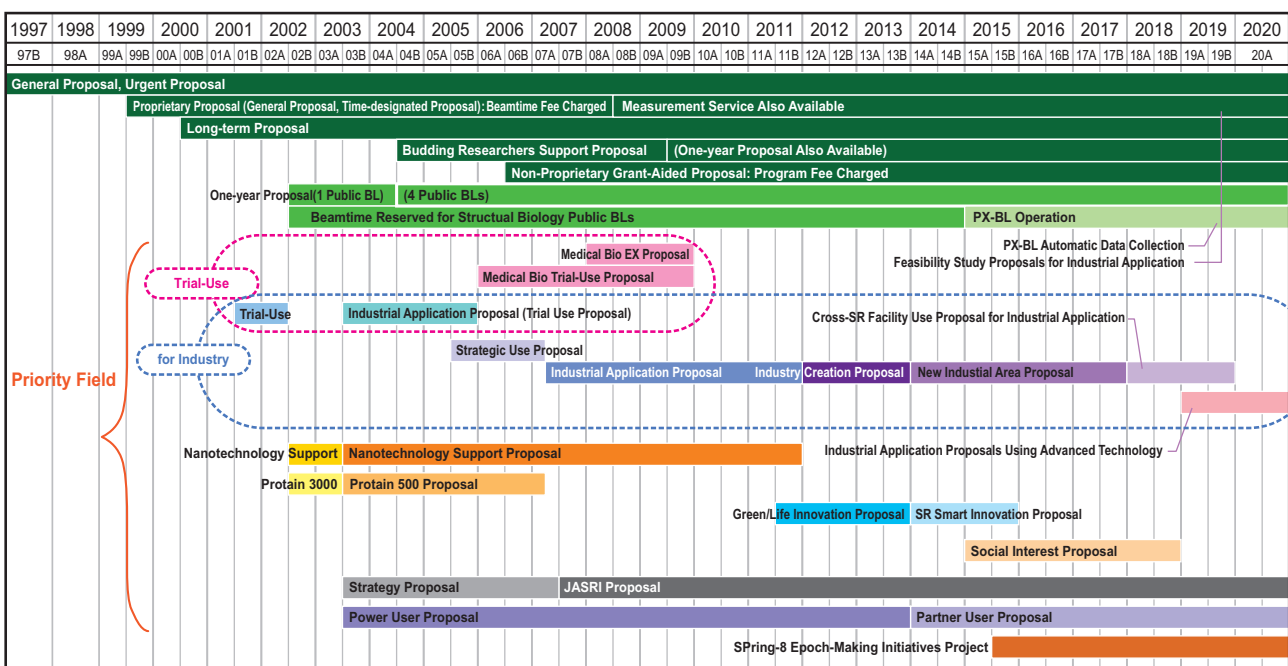


Fig. 3. Categories of proposals for the public beamlines.

a total beamtime of 91,859 h. The beamtime available to users, the number of experiments conducted, and the number of user visits at the public and contract beamlines

are summarized in Fig. 3. Part of the proposals are for proprietary use, for which refereed reports are not required. Figures 4 to 13 show the information on user programs.

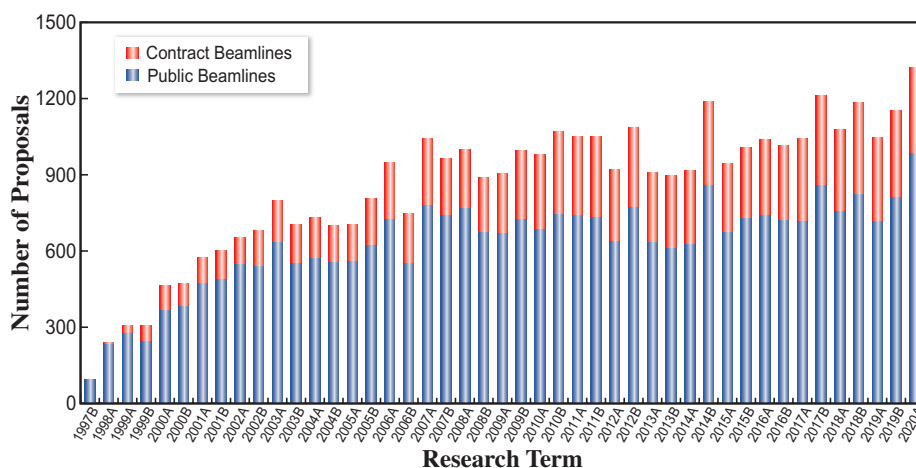


Fig. 4. Numbers of conducted experiments.

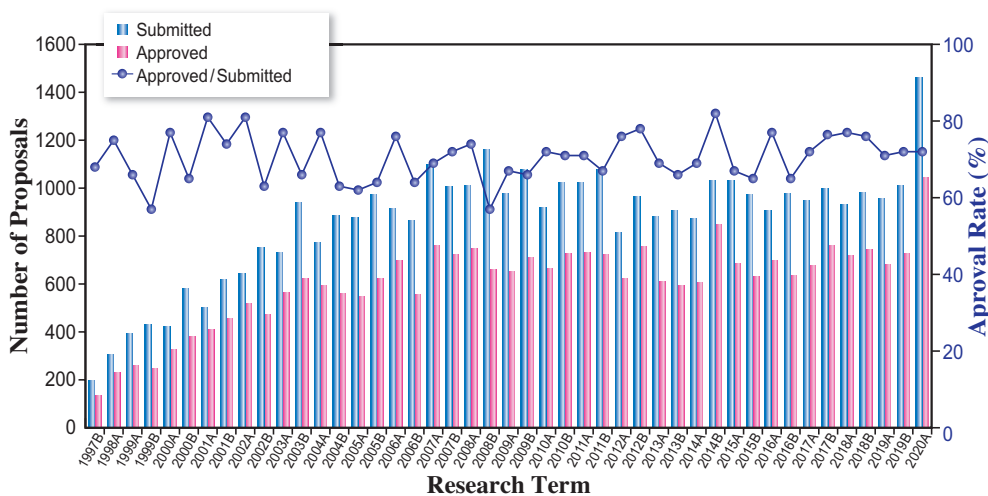


Fig. 5. Numbers of submitted proposals and approved proposals by research term (public beamlines).

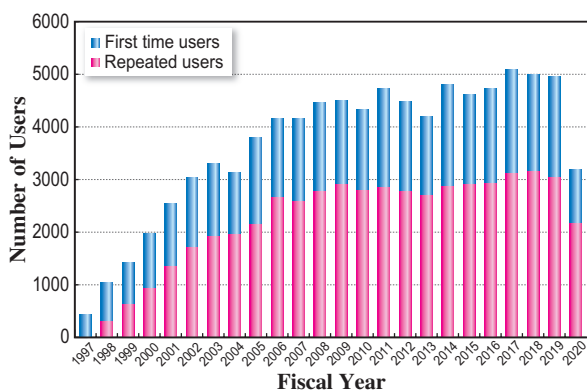


Fig. 6. Numbers of users by fiscal year.

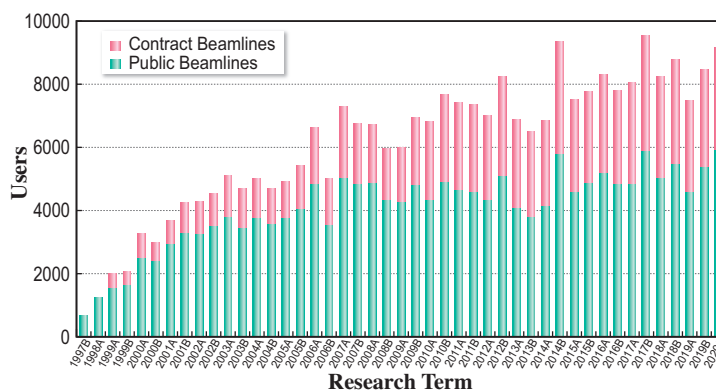


Fig. 7. Numbers of users visits by research term.

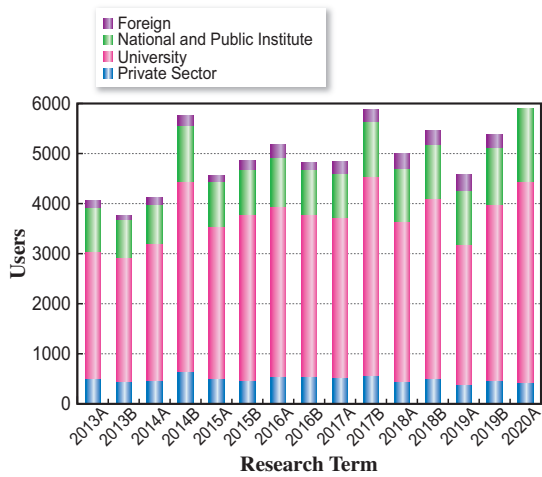


Fig. 8. Numbers of users by affiliation categories (public beamlines).

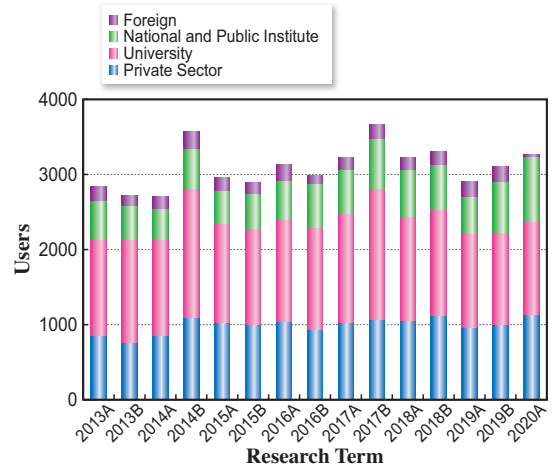


Fig. 9. Numbers of users by affiliation categories (contract beamlines).

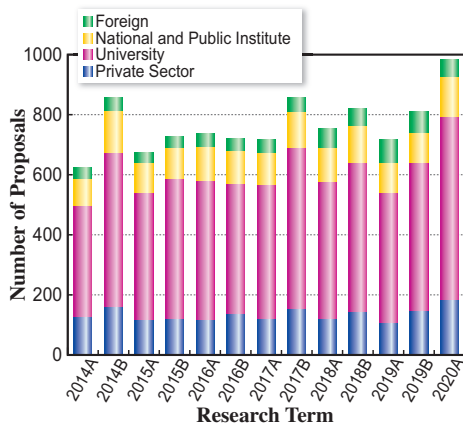


Fig. 10. Numbers of conducted proposals by affiliation (public beamlines).

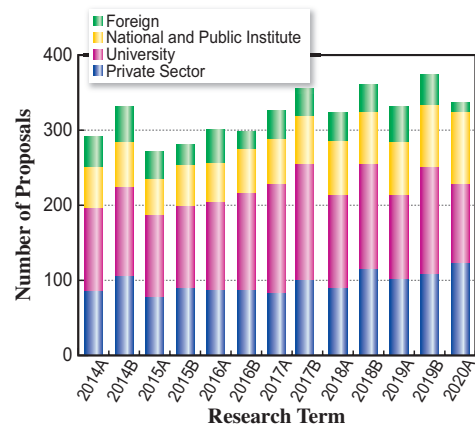


Fig. 11. Numbers of conducted proposals by affiliation categories (contract beamlines).

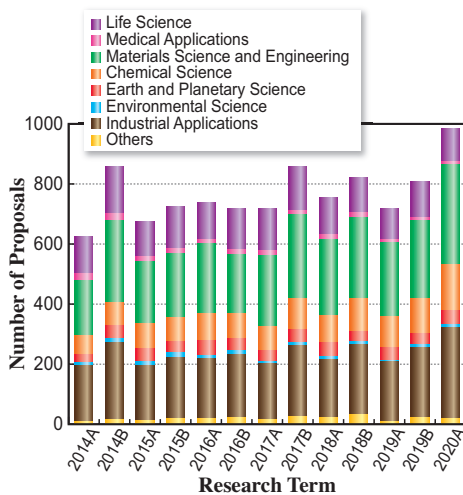


Fig. 12. Numbers of conducted proposals by research area (public beamlines).

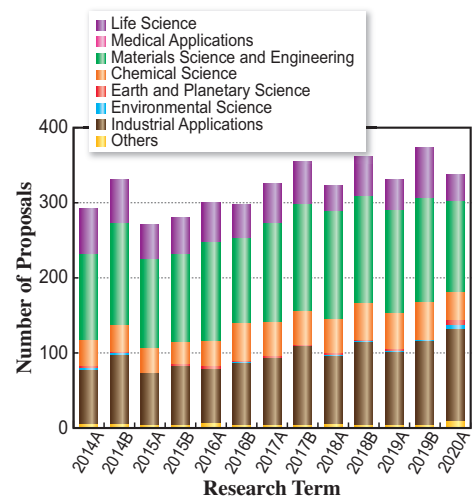


Fig. 13. Numbers of conducted proposals by research area (contract beamlines).