

current events

This section carries events of interest to the synchrotron radiation community. Full or partial inclusion is subject to the approval of the Main Editors, to whom all correspondence should be sent.

APS sets new standards for its future operation

This month, APS will see currents of 130 mA for a time which is aimed at analyzing the impact of higher currents on beamline components. APS recently completed its first run of 2002 providing the longest single user run in APS history (providing 1872 h of user beam time), while simultaneously establishing a new user run record for availability of 97.1%. As a result, records were also broken in the maximum integrated current delivered (182.2 A h) and, owing to the reliability of top-up operation, a record was achieved in the average current for the run (97.4 mA). The success of this run has set a new standard for future operation at the APS.

Photon Factory proposes major upgrade

In order to meet the strong demand for more insertion-device beamlines, the Photon Factory has proposed a future upgrade of the PF Storage Ring to create four new short straight sections of 1.5 m and to lengthen ten existing straight sections. Two insertion devices, ID02 and ID16, could be as long as 9.2 m. Mini-gap insertion devices with gaps of less than 5 mm are also proposed. The Photon Factory has recently invested significantly in its structural biology laboratory and is expected to play a significant role in the Ministry of Education, Culture, Sports, Science and Technology's Life Science division initiative for a five-year targeted structural genomics project of determining 3000 structures or unique folds.

SRS sets itself for a strong future

The synchrotron radiation source at Daresbury is the first dedicated X-ray source which came in operation in early 1981. It saw a major lattice modification in 1987 and since then more and more insertion devices have been introduced with nearly half of the instruments based on insertion devices. The latest multipole wiggler is a 2.46 T nine-pole device with an external gap of 20 mm (internal gap of 15 mm). The wiggler was designed and built at the laboratory (see figure to the right) and will be installed in section 10 in January 2003.

This will provide a very competitive MAD protein crystallographic facility (<http://nwsgc.ac.uk>). Currently a new 500 kW klystron power supply from Thales is being installed. Provision of this new supply, which incorporates advanced crowbarless technology, will address the major source of SRS faults over the last two years. The SRS has also begun a major reorganization in terms of Science Colleges, namely Biology and Medicine; Materials and Engineering; Physics; Structural and Environmental Chemistry. The changes address a global debate about the nature of synchrotron radiation facilities whether they are simply Service Centres or are Centres for Science and Discovery.

