

current events

This section carries events of interest to the synchrotron radiation community. Work for this section should be sent directly to the Current-Events Editors Friso van der Veen (friso.vanderveen@psi.ch) or Paul Zschack (pzscheck@bnl.gov).

Last light at the National Synchrotron Light Source (NSLS)

On 30 September 2014, the National Synchrotron Light Source (NSLS) at Brookhaven National Laboratory ended operations. Associate Laboratory Director for Photon Sciences Steve Dierker and Laboratory Director Doon Gibbs spoke at a closing ceremony that was webcast live from the control room, both recounting their personal experiences as NSLS users many years ago. By all measures, NSLS was an outstanding scientific user facility. In the 32 years of operation from 1982 to 2014 there were 57000 users, 17182 publications, 7122 Protein Databank deposits, and contributions to two Nobel Prizes (2003 and 2009). Indeed the reach of the NSLS is long. Many leading scientists across the globe trace experiences through the NSLS. The facility provided significant contributions to technique developments, including inelastic X-ray scattering, magnetic X-ray scattering, surface diffraction and resonant scattering, and also to technology developments, such as mini-gap undulators and the Chasman–Green lattice. Former NSLS Chair (1995–2000) Michael Hart flew in from England to attend the closing events and was quoted to say: ‘Now, after 32 years, it is time to write up the history of the most successful and influential synchrotron light source in the world!’. At 4 pm, the facility shut down for the last time, a moment witnessed by hundreds of people gathered in NSLS, in conference rooms at NSLS-II, in offices around the Brookhaven campus, and from around the world through the live webcast.



The National Synchrotron Light Source (NSLS) at Brookhaven National Laboratory, which ended operations on 30 September 2014.

NSLS-II begins accelerator operations and beamline commissioning

The US Department of Energy (DOE) has approved the start of routine operations at the National Synchrotron Light Source II (NSLS-II) at Brookhaven National Laboratory. When fully built out, the NSLS-II will accommodate about 60–70 beamlines using 27 straight sections for insertion-device sources, 30 bending-magnet or three-pole-wiggler sources and multiple branches on canted or shared ports. Accelerator commissioning has proceeded very smoothly and, with this authorization, the commissioning of the insertion devices, front-ends and beamlines has begun. There are six beamline ports developed in the initial suite of beamlines which exploit the brightness of the NSLS-II source. These first beamlines



The National Synchrotron Light Source II (NSLS-II) at Brookhaven National Laboratory, for which the US Department of Energy has approved the start of routine operations.

include a Hard X-ray Nanoprobe with expected 10 nm initial spatial resolution; a Coherent Hard X-ray Scattering beamline for materials dynamics studies using photon correlation spectroscopy; a Coherent Soft X-ray Scattering beamline with world-leading coherent flux between about 200 eV and 2 keV, and having full polarization control using elliptical polarized undulator sources; an Inelastic X-ray Scattering beamline with initial resolution of 1 meV; a Submicron Resolution X-ray Spectroscopy beamline with diffraction-limited spatial resolution from 4.6 to 27 keV; and a beamline for X-ray Powder Diffraction located on a damping wiggler source. To complement these, an aggressive schedule for beamline developments is being executed with more than 20 additional beamlines in various stages of development and construction.

LCLS Director appointed

Michael Dunne, the Director for Laser Fusion Energy at the Lawrence Livermore National Laboratory (LLNL), has agreed to become the next Director of Linac Coherent Light Source (LCLS) at the Stanford Linear Accelerator Center (SLAC). Dr Dunne officially



Michael Dunne, the new Director of the Linac Coherent Light Source at the Stanford Linear Accelerator Center.

started in this new position on 20 October 2014. As a leader in the field of high-powered lasers with substantial experience in designing and operating photon science research facilities, he is well suited to take on the LCLS Director role. Prior to his appointment at LLNL, he was the Director of the UK's Central Laser Facility (CLF), one of the world's leading laser facilities, with science programs ranging from atomic and plasma physics to biomedical research and ultrafast science. While at CLF, Dunne was responsible for a number of significant advances and upgrades, as well as for expanding the facility's international user base.

ESRF celebrates 20 years of user operation

The European Synchrotron Radiation Facility (ESRF) is marking 20 years since the start of the first user experiments. A day after its

official inauguration on 30 September 1994, scientists began their research. Since that time, the ESRF has delivered almost a quarter of a million shifts during over 90000 user visits and has contributed to almost 25000 publications and three Nobel Prizes.

The first discussions about the project that eventually became the ESRF were held as far back as 1975 and construction began in 1988 with 12 countries supporting the project. When the ESRF officially opened its doors to users in 1994 it offered 15 operational beamlines. By the time it was finished in 1998 the number of available beamlines had doubled. The ESRF is now supported by 21 countries with Russia sealing its membership to the ESRF in June this year.

Over the past 20 years the number of annual users of the ESRF has steadily grown. During 1994, there were 271 user visits; in 2014 there were already 2667 in the first six months. The number of publications has increased from just short of 100 in 1994 to almost 1200 so far this year and over 1800 in a typical full year.