

current events

This section carries events of interest to the synchrotron radiation community. Works intended for this section should be sent direct to the Current-Events Editor (s.hasnain@dl.ac.uk).

XFEL gets the official launch

Germany's Minister for Education and Research, Dr Annette Schavan, marked the official launch of the European X-ray Free-Electron Laser facility, XFEL, with the words 'This is world class!'. On 5 June, high-ranking representatives from the participating countries met in the Grand Elysée Hotel in Hamburg where the European Conference on Research Infrastructure took place. 'With the XFEL, a brilliant research landscape will be established in Europe that will be a great attraction to talents from all over the world', said Schavan. 'The funding negotiations with the 12 interested countries are so far advanced that the construction of this new research facility, which is very much sought after by the international scientific community, can now begin', said Schavan in front of representatives of the press and guests of the launching ceremony. 'We can now assume that the commissioning of the first six of ten possible experimental stations will begin in 2013. And we aim to upgrade this initial version as soon as possible to the complete ten-station facility.'

The price tag of the initial phase (six experimental stations) will be 850 million Euros (USD 1.13 billion, at 2005 price levels). The 12 international partners (Denmark, France, Greece, Hungary, Italy, the People's Republic of China, Poland, Russia, Spain, Sweden, Switzerland and the United Kingdom) will cover at least 25% of the costs of this initial version. The German share of at most 75% will be borne by the federal government and the two host states of Hamburg and Schleswig-Holstein. In a communiqué signed during the launching ceremony, the representatives of the partner countries declared, 'We are convinced that it is appropriate to begin the construction of the XFEL as quickly as possible in view of the international competition situation'. They also stated their intention to sign a convention on the foundation of an XFEL Limited Liability Company responsible for the construction and operation of the European X-ray laser by the end of 2007. The UK delegate, Dr John Womersley [Director of Science Strategy of the UK's newly created Science and Technology Facilities Council (STFC)], said, 'The creation of the Science and Technology Facilities Council earlier this year indicated the importance attached by the government to providing access for UK scientists to the large science infrastructures that are now needed for innovation and discovery. It was therefore rewarding to be able to sign the declaration in Hamburg, which officially launched the XFEL project earlier this week. The UK will now negotiate its participation in the XFEL company that is to be set up. Our participation in XFEL underlines STFC's commitment to innovative and important international science projects; over the coming year we will be working with our stakeholders to develop our plans for other large facilities.'

After the launch, Minister Schavan and EU Research Commissioner Janez Potočnik visited DESY, the Deutsches Elektronen-Synchrotron. Addressing the DESY staff, the Minister said, 'The European X-ray free-electron laser XFEL is a milestone, also for the development of DESY and a symbol for excellent work here'. EU Commissioner Potočnik added, 'The XFEL is one of the most exciting research projects in Europe and marks the beginning of the road map of the European Strategy Forum of Research Infrastructures (ESFRI)'. The European XFEL, which is based on the



From left to right: Albrecht Wagner, Chairman of the DESY Directorate, Jacek Gierlinski, representative of the Polish research minister, Annette Schavan, German research minister, Valerie Préresse, French research minister, Massimo Altarelli, Head of the European XFEL Project Team at DESY, Alexander A. Fursenko, Russian research minister, Ole von Beust, Mayor of Hamburg, and Peter Henry Carstensen, Prime Minister of Schleswig-Holstein.

superconducting accelerator technology developed at DESY in the last years, will attract scientists and students from various scientific disciplines to northern Germany. 'Today marks a milestone in the history of DESY', commented the Chairman of the DESY Directorate, Professor Albrecht Wagner. The 3.4 km-long research facility will be located between the site of the German Electron Synchrotron DESY in the Hamburg district of Bahrenfeld and the neighbouring town of Schenefeld in Schleswig-Holstein (Pinneberg district). It will begin on the DESY site, where the central supply stations will be situated. The main tunnel for the superconducting electron linear accelerator will take up the first 2.1 km of the 6–38 m-deep tunnel system. On the last kilometer, this tunnel will fan out into five separate tunnels in which the X-ray laser flashes will be generated. Here, the XFEL site Osdorfer Born will be erected with another access point to the tunnel and supply buildings. The underground experimental hall at the end of the facility will be located on the future 15 hectare research campus in Schenefeld, and provide space for ten experimental stations. 'Tenders for the construction of the underground tunnel system and the buildings can now be invited at the European level', said Dr Andreas Schwarz, DESY physicist and member of the European XFEL Project Team at DESY. 'In early 2008, we will then be able to simultaneously start construction on the three future XFEL sites DESY-Bahrenfeld, Osdorfer Born and Schenefeld.'

LCLS construction progresses

Since writing about the Linac Coherent Light Source (LCLS) last time [*J. Synchrotron Rad.* (2005), **12**, 386–388], significant progress is being made on civil construction (which is overall about 30% complete). The undulator hall is now 75% complete, requiring a



Latest photograph of the construction of the beam transport hall that traverses the SLAC research yard. Note the SLAC linac (looking westward) in the background. The beam transport hall will house the electron beam transfer line and diagnostics prior to its launch into the undulator.

further 585 feet of tunnelling. It is anticipated that, by the time our readers see this article, sunlight will shine through the tunnel. The near experimental hall is complete at ground level (experimental hut) and work is continuing now on the top floor. The LCLS gun and injector linac are fully installed and in commissioning. Operations are at 135 MeV and electron beam is transported through the first LCLS bunch compressor in the main SLAC linac. The drive laser system is working well. LCLS is preparing for a major installation to begin in September this year. This work will include the remaining modifications to the SLAC linac for LCLS, including the addition of the second bunch compressor. In January 2008, work will begin on installing the LCLS undulator and associated components, and the



Delegates at the 4GLS industry day.

first LCLS beam commissioning is expected to begin in December 2008, with the first phase of operations expected in spring of 2009.

4GLS holds a successful industry day

A second industrial user event took place on 10 May 2007, bringing together senior representatives from key businesses and research organizations who are interested in the application of fourth-generation light source (4GLS) technology. The event was held at the Daresbury Science and Innovation Campus and attracted John Stageman (Vice-President of Astra Zeneca) and Frances Saunders (Acting Chief Executive of UK's Defence Science and Technology Laboratory) as keynote speakers, setting the challenges by pharmaceutical and defence industries on how 4GLS is likely to provide a step change in technological capabilities. The meeting attracted many industrial leaders who broke out into several thematic groups and provided a detailed report to the 4GLS team.