Journal of
Synchrotron Radiation
ISSN 0909-0495

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).

Tony Blair visits Diamond

On 2 November, Tony Blair, the British Prime Minister, visited Diamond and saw for himself that Diamond Light Source has reached the final milestone in the construction of the facility. Applauding the success of reaching this final milestone, the Prime Minister said, 'This new world-class facility shows the importance this country attaches to science and scientists. Our future prosperity rests more than ever before on the hard work and genius of our scientists and how we harness their research to deliver improvements in all our lives. This is exactly what Diamond Light Source will help us achieve in many fields, from developing new drugs to tackling climate change.' The Prime Minister heard that the facility is on schedule to open its doors to users in January 2007.

The first research station to reach this landmark achievement is the nanoscience beamline, led by Dr Sarnjeet Dhesi, who was previously at Daresbury and ESRF. Two other research stations have since followed in their footsteps. Commenting on this achievement, Dr Dhesi said, 'This is great news for the science community; with the nanoscience beamline, it will be possible to analyse the properties of the surface from many different materials with extreme precision, and thereby contribute to the development of innovative materials with superior properties and performance. With the exceptional sensitivity of the light generated at Diamond, we will be able to obtain high-resolution information as small as a few millionths of a millimetre.'

The Prime Minister went on to address a Royal Society meeting in Oxford where he reflected upon his visit to Diamond. He titled the talk "Britain's path to the future – lit by the brilliant light of science" (see http://www.pm.gov.uk/output/Page10342.asp).

Tony Blair, speaking at Diamond.

Synchrotron community remembers Neville Smith

Neville Smith, Scientific Director of the Advanced Light Source and a pioneer in photoemission spectroscopy, died at home on 18 August 2006 after a brief battle with cancer. His colleagues (Peter Johnson, Steve Kevan, Zahid Hussain and Janos Kirz) at ALS wrote: Neville was born on 21 April 1942 in Leeds, England. A Foundation Scholar at Queens College, Cambridge University, he obtained a BA with First Class Honors in 1963. Under the supervision of Tom Faber he went on to study the optical properties of liquid metals in the Cavendish Laboratory and earned his PhD in 1967.

Following his thesis work, the power of the newly emerging technique of photoemission excited Neville's curiosity and he moved from England to join the group of photoemission pioneer Bill Spicer at Stanford, where he worked on the optical and photoelectric properties of alkali metals. In 1969 Neville moved to Bell Laboratories, where he pioneered angle-resolved photoemission spectroscopy (ARPES) in 1972 and *k*-resolved inverse photoemission spectroscopy (KRIPES) in 1982. With co-workers he showed how these techniques could be used to probe the band structure of crystalline solids and surfaces. In particular, his work on the so-called 'phase model' produced important insights into the surface electronic structure of transition metals.

Neville was an early user of synchrotron radiation, at the Tantalus facility at the University of Wisconsin. With the development of each new generation of light source, the second-generation National Synchrotron Light Source at Brookhaven National Laboratory and the third-generation Advanced Light Source (ALS) at Lawrence Berkeley National Laboratory, Neville participated in pioneering applications of the new technologies. In particular, with co-workers, Neville's contributions ranged from the development of new electron spectrometers through to the conception of new configurations of light spectrometers. This novel instrumentation was successfully applied to the development of a range of new spectroscopies, which Neville applied to a broad range of problems in condensed matter physics, including charge density waves in layered compounds, bulk and surface band structure of simple metals, adsorbate structure

Neville Smith.

determination by photoelectron diffraction, and magnetism in bulk metals and thin films. These pioneering techniques have been very widely adopted and are now essential ingredients to our understanding of the electronic, magnetic and superconducting properties of a diverse array of materials, and earned Neville a Distinguished Technical Staff Award at Bell Laboratories and, in 1991, the Davisson-Germer Prize of the Advanced Light Source.

His considerable experience in these areas led him to serve on the advisory committees of several international light sources, including BESSY II in Berlin, the Canadian Light Source in Saskatoon, the Elettra Light Source in Italy and the Australian Light Source in Melbourne. He became Scientific Program Head of the ALS in 1994. There he played a key role in the development of the facility from its early years, helping to build the scientific program, advising on strategic planning issues, and supervising the general user program. Indeed, Neville and his wife Betsy will be remembered for their warmth and hospitality by the members of many advisory committees to the ALS. During the last few years of his life he spent several months as a Senior Visiting Scientist of the Humboldt Foundation, in Julich and Berlin.

Neville had impeccable scientific judgment, both in terms of choosing problems to work on himself and also in advising facility management on scientific directions. His quiet and unassuming demeanor sometimes masked his very profound character, though rarely his dry sense of humour. His family, friends, collaborators and colleagues will sorely miss his guidance and playful camaraderie.

Fifth SESAME users' meeting and a hands-on crystallographic workshop

The fifth SESAME users' meeting was held in the magnificent halls of Bibliotheca Alexandrina, Alexandria, Egypt, between 27 and 29 November 2006. This was followed by a hands-on workshop on protein crystallography in Cairo on 30 November to 2 December. The workshop was attended by Bill Duax, the Past-President of the IUCr.

The users' meeting was attended by some 120 delegates, with more than 60 from other member countries and Europe. Delegates heard talks on uses of synchrotron radiation in material science, nanotechnology, structural biology, environment, archaeology, physics, engineering, medical and biological sciences. The delegates also heard about the progress on the construction of SESAME. There was much enthusiasm on the news that the building would be complete early next year and that positions for two beamlines scientists were immediately available (www.sesame.org.jo).

Bill Duax, the Past-President of IUCr, at the workshop that followed the users' meeting.

Canada Foundation awards $25 million to three projects on the Canadian Light Source

The Canada Foundation for Innovation (CFI) awarded $25 million to three projects led by teams from the University of Guelph, the University of Saskatchewan and the University of British Columbia to be built at the Canadian Light Source (CLS), national synchrotron facility at the University of Saskatchewan. The three projects together comprise five new beamlines. Construction is expected to begin in early 2008, with some of the new facilities operational as early as 2011. CFI will provide up to 40% of the total $64.5 million in funding for the beamline projects, with the balance to be made up from other partners. Operating costs will be covered by CFI and the CLS operating budget. "These investments represent a tremendous boost to Canada's research capacity," said CLS Executive Director Bill Thomlinson. "Today's support from the Canada Foundation for Innovation is helping us build critical infrastructure which positions the CLS as a global leader in synchrotron science."

The new beamlines include (i) the Brockhouse X-ray diffraction and scattering sector, (ii) BioXAS, life science beamline for X-ray absorption spectroscopy, and (iii) the quantum materials spectroscopy centre. The projects announced today bring to 19 the number of beamlines in various stages of planning, construction, commissioning and operation at the CLS. There is room for about 30 beamlines at the national synchrotron facility.