

## 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.s.hasnain@liverpool.ac.uk).

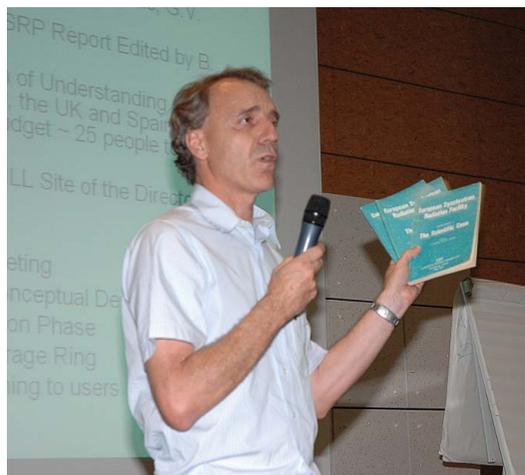
### Pascal Elleaume

We announce with great sadness the sudden death of Pascal Elleaume, one of the founding co-editors of the *Journal of Synchrotron Radiation*. Pascal Elleaume, Director of the Accelerator and Source Division (ASD) at the ESRF, was killed in a skiing accident on 19 March 2011. He was 55 years old. Pascal is survived by his wife H el ene and children Nicolas, Olivier and Camille. All our thoughts go to Pascal's family.

Pascal joined us as a potential co-editor of the *Journal of Synchrotron Radiation* when we began to put together the arguments and vision for a dedicated journal for the synchrotron radiation community in the early 1990s. This was at a time when such a vision was not universally accepted in the synchrotron radiation community, even more so in the accelerator physics community, which was quite happy with the services and readership provided by journals such as *Nuclear Instruments and Methods*. This was not surprising as the dedicated synchrotron radiation sources were still seen as originating from the 'high-energy physics' laboratories and associated community. Pascal was one of the very few accelerator physicists who recognized the need for a community-based journal in order for it to have its own voice, and provided the vision and necessary leadership. The journal was given formal approval, as was the appointment of Pascal as a co-editor, by the IUCr's General Assembly in Beijing in August 1993 at its 16th Congress. Immediately, we had to get down to the work that is entailed in launching a new journal and put together an inaugural issue for October 1994 covering all aspects of synchrotron science and technology. Pascal provided energy and commitment in ensuring that the launch was successful and that the journal received and published high-quality papers on accelerator science and technology. It is worth noting that at the time the ESRF had just become operational (the storage ring had started in 1992, with the first set of beamlines being commissioned and the first official users due to arrive on 1 September 1994). Those with a good memory will recall that the ESRF management, staff and the wider community were dealing with a major concern regarding the 'experimental floor problem' and its implications for the stable operation of the 'beam at sample'. Pascal did not shy away from the leadership required for the



Pascal Elleaume. This photograph was taken on 17 March 2011, two days prior to the tragic accident.



Pascal Elleaume with the blue book of ESRF, the first science case at the workshop '20 years ago how life at the ESRF started', on 14 June 2006.

new journal, at the same time focusing on his job during the day, ensuring that the first 'super-storage ring', a term coined in these pages to distinguish ESRF, APS and SPring-8 from other multi-GeV sources of the time, delivered to its users all that was promised. He edited a number of papers and contributed some of the highly desirable papers himself, which could easily have been published in more established journals.

Pascal joined the ESRF in 1986 having obtained his PhD under the guidance of Yves Farge and Yves Petroff. His thesis work had been centred on the pioneering observation and interpretation of free-electron-laser radiation at LURE. Pascal created the ESRF Insertion Devices Group, which has been responsible for one of the world's most successful designs, construction and commissioning of undulators for synchrotron radiation. More than 100 beamline-tailored insertion devices, which can be independently set with no mutual interference, are operational today on the ESRF's storage ring. Many of them are unique in their design and performance. As Director of the ASD at the ESRF for the last ten years, he has continued to seek greater machine performance, constantly enhancing beam quality for the end user.

Francesco Sette, Director General of ESRF, said "I spoke at length with Pascal only on Friday 18 March, and we were making not only many exciting plans for the implementation of the upgrade programme but also to boost the research programme on 'Ultimate Storage Ring' sources, and to attract young students to this field that today presents exciting opportunities related to many new technical developments. During the two preceding days we had visited the storage ring tunnel and control room whilst welcoming important visitors. None of us could have thought that this would be the last visit together of 'his' machine."

We note that the ESRF has logged the longest ever uninterrupted delivery of X-rays to users. From 4 February to 16 March 2011, just a few days before Pascal's untimely death, user experiments received beam with 100% availability. This was during a period of five weeks,

or 795.5 h, without any interruption except the scheduled weekly maintenance periods. On 16 March 2011 the accelerator had to be stopped for a regular ten-day shutdown.

We at the IUCr and the wider synchrotron science and technology community will miss Pascal Elleaume enormously. We send our warmest thoughts and most sincere sympathy to Pascal's family.

### Economic impact of Brookhaven laboratory

Brookhaven National Laboratory, host of the National Synchrotron Light Source, the first dedicated synchrotron radiation source to be designed and built in the USA in the early 1980s, has a significant impact on the economy of Long Island and New York State, according to a report issued by Applesseed, a Manhattan-based consulting firm. The report can be viewed at <http://www.bnl.gov/economic/>. The Applesseed report covers fiscal year (FY) 2009, which includes the period 1 October 2008 to 30 September 2009. During that period the economic output generated by Brookhaven and its visitors amounted to USD 704 million, and the laboratory created 5400 jobs throughout New York State, 5190 of them on Long Island. Supporting local and state businesses whenever possible, Brookhaven also spent USD 212 million on purchases of goods and services in FY2009; USD 75.2 million of this total was spent in New York State, including USD 62.7 million on Long Island. 'Brookhaven National Laboratory is a major Long Island employer, and it brings hundreds of millions of dollars in federal research funding into the region every year', said Hugh O'Neill, President of Applesseed. "But even more valuable in the long run is the laboratory's role in strengthening Long Island's position as a major centre of innovation in energy, the life sciences, and other fields that are crucial to the growth of the region's, and New York State's, economy." The Applesseed report provides statistics on Brookhaven's direct spending as well as secondary economic impacts of spending, also known as the 'ripple effect'. For example, off-site spending by visitors to Brookhaven directly and indirectly accounted for an estimated USD 9.5 million in economic output and 97 jobs on Long Island in FY2009. The laboratory has also been making efforts to bring its discoveries that have commercial value to the marketplace. Between 2004 and 2009 Brookhaven's technologies generated USD 42 million in gross licensing revenue, averaging around USD 8 million per annum. If increases projected in spending on payroll, purchasing and construction are realised, and assuming levels of spending by visitors remain the same, it is estimated that between 2010 and 2014 Brookhaven will generate, on an average annual basis, USD 947 million in economic output and 7092 jobs throughout New York State, including an economic output of USD 849 million and 6531 jobs on Long Island.

Owned and funded primarily by the US Department of Energy, Brookhaven is one of New York State's largest scientific research centres. Located on a 5300 acre site in central Long Island, the laboratory employs more than 3000 full-time workers and is host to just as many visiting researchers each year from universities, industry and governmental agencies that use its world-class facilities.

The report drew comments from a number of senior politicians including US Senators Charles E. Schumer, Kenneth P. LaValle and Congressman Tim Bishop. For example, Senator Schumer said "This report is proof positive of something many of us in New York have known for a long time, that Brookhaven National Laboratory is a cornerstone of Long Island's job-creating high-tech economy. I will continue to lead the fight with my colleagues in the New York delegation who support growing research, jobs and innovation on Long Island, not shrinking it."



View of NSLS-II on 4 April 2011.

Currently, NSLS-II, the new light source, is the laboratory's major construction project. NSLS-II is the largest science project in the Department of Energy complex nationwide. This USD 912 million facility will be among the world's best synchrotron light sources with lowest emittance. The construction of NSLS-II is at an advanced stage (see photograph). Steven Dierker, the NSLS-II Project Director, said 'We have watched with pride and wonder as the construction workers built this building. We have been motivated by a shared belief that the world-leading capabilities of NSLS-II are essential in order to tackle some of the most importance scientific challenges of our time. The research programs at NSLS-II will touch almost every area of science and technology that is critical to our economic and energy security as well as to enhancing our quality of life.'

### Science minister inaugurates Diamond Phase III

David Willetts MP, UK's Minister for Universities and Science, met scientists, engineers and industrial partners at Diamond Light Source, the UK's national synchrotron facility, and formally inaugurated Diamond's Phase III development, as part of his visit to Harwell Science and Innovation Campus in Oxfordshire on Monday 14 March. The minister was shown around the synchrotron, including some of the latest developments on the storage ring and two of Diamond's 19 operational experimental beamlines. The minister then unveiled a plaque to formally inaugurate Diamond's Phase III expansion programme. Diamond Light Source, opened in 2007, currently has 19 beamlines that are now operational and three more are under construction. In October 2010 the government confirmed further funding for the Phase III expansion, creating an additional ten advanced beamlines between 2011 and 2017, which will bring the total to 32.

The minister visited Diamond's Life Sciences area, and met partners from the Wellcome Trust and bioscience industries, including GlaxoSmithKline and Evotec. Around 40% of Diamond's research relates to life sciences, and in just over three years over 500 protein structures have been solved. He was then taken into the 562 m-circumference electron beam storage ring to see some of the new insertion devices, before visiting Diamond's engineering and environment village to meet Diamond scientists and engineers and industrial partners from Rolls Royce and Infineum UK who are working towards innovative energy and environmental solutions such as coatings for aircraft fan blades and improved fuels and catalysts. Following the visit, David Willetts said 'Combining academic research and commercial applications, Diamond is one of the really

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great scientific research facilities, not only in Britain but around the world, and the ten new beamlines of Phase III will further increase the high quality and quantity of scientific output. We all understand the importance of an excellent science base for the economy, as well as for fundamental research. We are committed to the future of Diamond, and confident that, with this investment, it will continue to lead the world in this area.' He added 'I know there is competition, I am always being briefed on the competitive challenge, we can never relax but we have stayed ahead of the competition, and I am confident that with this investment we will continue to be ahead of the rest of the world.'

### SRS Daresbury sends the last shipment to SESAME

Decommissioning of the Synchrotron Radiation Source (SRS) at Daresbury was completed at the end of March 2011, just two and half years after the last user beam. With this the last shipment of beamline and front-end equipment from SRS was loaded up carefully into a truck to sail from Liverpool to the port of Aqaba. It is expected to arrive at the SESAME site by May 2011, joining the previous shipments of beamlines and front-ends.

SESAME also received news from the Japan Society for the Promotion of Science (JSPS) that a proposal submitted by Professor Osamu Shimomura entitled 'The Promotion of the SR Sciences through the Collaboration with SESAME' has been adopted from 1 April 2011 for three years (until 31 March 2014). The proposal includes a seminar at the SESAME site, collaboration work of SESAME scientists with Japanese scientists, and training for scien-

tists/engineers at Japanese synchrotron radiation facilities. The approved budget totals USD 150000 over three years in support. SESAME is also expecting a number of members to commit to making voluntary capital contributions over and above their regular contributions in order to accelerate construction.



The last set of crates from SRS loaded into a truck on their way to SESAME. Dr Tracy Turner, Associate Director of SRS, is handing over the equipment to Samar Hasnain, representing SESAME.