

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).

SAGA Light Source: an example of regional development

SAGA Light Source (SAGA-LS) is located in Tosu City of the Saga Prefecture located approximately 25 km northeast of Saga City, Japan. Saga is the smallest prefecture of the Kyushu island, with a population of under a million. Saga Prefecture, the local government in Kyushu, decided at the turn of the century to build a modern compact storage-ring facility to act as a catalyst for expansion of the knowledge-based sector. It is part of the Kyushu Synchrotron Light Research Center that was established in 2002 and is the only synchrotron light facility in Kyushu, which has several national universities including Kyushu University, Saga University and Nagasaki University. Kyushu is the third-largest island of Japan and is the most southwesterly of its four main islands with a population of just under 15 million.

SAGA-LS is a 1.4 GeV storage ring with a circumference of ~ 76 m and has an eight double-bend cell with eight 2.93 m-long straight sections. The double-bend cell structure with a distributed dispersion system provides a compact source with a modest beam emittance of 25 nm rad and beam current in excess of 200 mA. At the end of 2004 the first beam in the storage ring was established when the construction and commissioning programme of beamlines began in earnest. Now it has nine beamlines, six of which are prefectural beamlines open for all of the users. There are three additional contract beamlines built and operated by Kyushu University, Saga University and Nikon Corporation. These beamlines together provide a whole suite of powerful tools covering the techniques of X-ray diffraction, protein crystallography, XAFS, X-ray fluorescence and LIGA among others. It is clear how, in less than a decade, this investment in a large-scale science infrastructure project by a local government is influencing and stimulating the local economic and knowledge growth, thus making local areas attractive to promising graduates and science leaders.



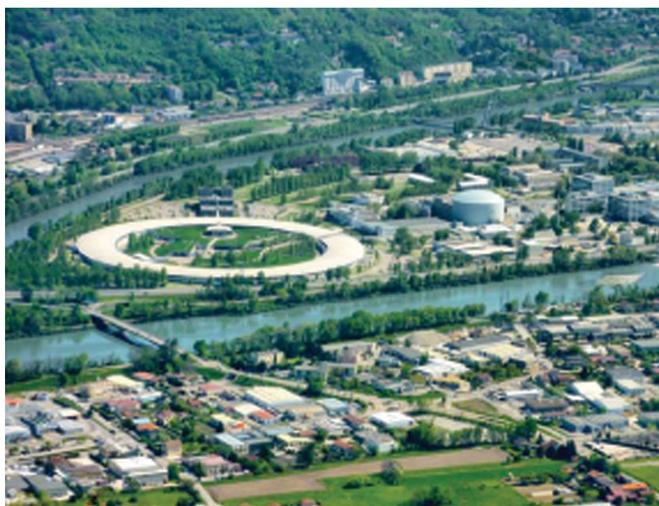
From left to right, Masaki Yamamoto (RIKEN, Spring-8), Hiromichi Kamitsubo (Director General of SAGA-LS, who was also one of the founding Main Editors of the *Journal of Synchrotron Radiation*), Samar Hasnain and Yasuharu Hirai (Vice Director of SAGA-LS) in the experimental hall of SAGA-LS.

APS Upgrade Roadmap consultation

George Srajer, who has been with the Advanced Photon Source (APS) for just over 20 years, has been appointed as the Project Director for the APS Upgrade project, and Deputy Associate Laboratory Director of Facility Development for Photon Sciences. A set of scenarios have been announced for wider consultation as part of the APS Roadmap for future beamlines. This is a long-term plan for the locations of current and potential future programs/beamlines. The plan incorporates not only the activities included in the base and contingent scope of the APS Upgrade project but also proposed activities outside of the APS Upgrade. A summary of scenarios and the document that describes the guiding principles in developing scenarios are posted at <http://aps.anl.gov/Upgrade/Forum>.

ESRF plans for the next 20 years

In a few weeks the ESRF will celebrate the 20th anniversary of the first delivery of X-rays into the experimental hall. ESRF's Council has established a 'Working Group for the Scientific Mission of the ESRF' (SME-WG) with the task of reinforcing the mission of the ESRF to guide both the users' programme and the international role of the ESRF up to the year 2030 and beyond. Michel van der Rest, Vice-Chairman of the ESRF Council and former Director General of the French national Synchrotron Soleil, will chair the Working Group with Robert Donovan (UK), Helmut Dosch (DE), Salvador Ferrer (ES), Jacques Ghijsen (BE/NL), Nils Mårtensson (DK/NO/SE/SF), Christoph Quitmann (CH), Giorgio Rossi (IT), Charles Simon (FR), Joel Sussman (ESRF Associates) as representative of member countries. In addition, Michel Spiro and Jochen Schneider have been appointed by the Council. The Working Group will deliver a report to the Council by the end of 2012. This report will address, *inter alia*, how the ESRF machine could be kept at a world-leading position and whether a major accelerator upgrade could be envisaged; which areas of science should be developed at the ESRF in the longer term, and



ESRF in Grenoble.

which new facilities should complement or replace existing ones; and, finally, how the ESRF should position itself with respect to the other synchrotron sources. The report of the Working Group will review the international context in which the ESRF operates today and its foreseen evolution, providing answers on how the investments by the Members and Associates of the ESRF could deliver maximum benefits for cutting-edge science, for innovation, for competitiveness of European industry in synchrotron-based methods and techniques, and for its European synchrotron user communities.

Diamond reaches its 10th anniversary

Diamond, the UK's national synchrotron science facility, was formed a decade ago on the 27 March 2002, when the Wellcome Trust and the UK Government signed the Joint Venture Agreement and Diamond Light Source Ltd was born. To celebrate this 10th anniversary milestone and join in with Her Majesty's Diamond Jubilee celebrations, Diamond is asking local people in Oxfordshire 'What were you doing

on the 27 March 2002?'. If this date is a special one for you because you were born on this day, or were married on it, then Diamond would like to hear from you. This is so that you and your family can be special guests at one of the Inside Diamond public open days that are being held in June 2012.

Gerd Materlik, Diamond's Chief Executive, said 'It has been a real honour to lead this project and be part of a team who in less than five years got the facility constructed as well as up and running for scientific users and all this on time, on budget and to specifications. The following five years were spent delivering science as well as building up the next phase of construction. We have achieved around 1600 scientific publications so far and over 3000 researchers are now making up the user community. With a team 430-strong, Diamond is now on the way to deliver its full potential.'

The latest achievements include the structure of the enterovirus 71, a major agent of hand, foot and mouth disease in children that can cause severe central nervous system disease and death [*Nat. Struct. Mol. Biol.* (2012), **19**, 424–429]. This virus is a serious public health threat in the Asia South Pacific region and this achievement opens new opportunities for therapies being developed.

John Wood, the CEO of CCLRC (now merged with another research council to form STFC) at the time when Diamond was established, commented 'I arrived at RAL [Rutherford Appleton Laboratory] shortly after the decision to locate Diamond there had been taken and my first job was to assure staff of their future. The legal basis of the company still had to be determined and this took a considerable amount of time and effort before it was finally decided. The original intention had been to site Diamond behind ISIS, which would have made it out of sight and would have then prevented the construction of target station 2 (of ISIS). I argued for siting it where it is currently located so that it could be seen by all travelling down the A34. UKAEA, who own part of the land, would give no assurance that the land was completely clear of war-time debris and we agonized whether to have it checked over first and eventually took a risk since the cost of checking was so high.' Those who have travelled to the Harwell Science and Innovation Campus now can see the spectacular building of Diamond at its entrance.



Diamond on Harwell Campus.