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current events

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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 (pzschack@bnl.gov).

Construction activities at DESY

In order to extend the experimental capabilities of PETRA III and to continue applications formerly provided by DORIS III, additional beamlines are being built at the PETRA III storage ring.

This extension project comprises two new experimental halls on either side of the large new PETRA III hall (north and east) making use of the long straight sections and the adjacent arcs. The northern straight section already accommodates one of the 40 m-long damping wiggler arrays producing an extremely hard and powerful X-ray beam which can also be utilized for experiments. The long straight in the east will be used for additional insertion devices.

In total, ten new beamlines will be built within the scope of the extension project. The reconstruction started in February 2014.

Construction has also begun on the Centre for Structural Systems Biology (CSSB), a new interdisciplinary centre on the DESY campus dedicated to infection research. The result of an agreement among leading research institutions in Northern Germany, the CSSB will unite scientists from different disciplines under one roof, enabling close cooperation focused on key processes during the early stages of an infection. A new building will offer office and laboratory space to about 150 scientific and technical staff.



Construction site at the PXE east site (top) and north (bottom) on 7 February 2014.



CSSB construction site on the DESY campus in May 2014 (viewed from the PETRA III tunnel).

Within this collaboration, DESY will provide direct and fast access to experimental facilities at PETRA III. By fostering strategic cooperations and networking between universities and non-university research institutions, CSSB will be able to fully exploit existing resources and drive synergies in interdisciplinary approaches. Both its concept and infrastructure will make CSSB a highly innovative alliance institute, enabling it to rapidly gain visibility at national and international levels and develop into a leading research centre in the field. The construction of the CSSB building is expected to be finished in 2016.

CLS teams up with national not-for-profit to foster innovation

The Canadian Light Source has signed a Memorandum of Understanding with Mitacs, a national not-for-profit organization that brings together academia, industry and the public sector, to develop cutting-edge tools and technologies vital to Canada's knowledgebased economy.

'We hope that this partnership will facilitate access to synchrotron research capacity for industry-academic collaborations', said Jeff Cutler, CLS Director of Industrial Science. 'We believe we can make valuable contributions to innovative research projects.' The agreement will strengthen ties between the two entities, and will focus on jointly developing Mitacs projects and calls for proposals that generate research development and commercialization projects. 'This partnership between Mitacs and Canadian Light Source will bring the latest in academic knowledge and techniques to synchrotron science, helping solve complex research challenges', said Duncan Phillips, Vice President, Strategic Enterprises, Mitacs.

Several Mitacs programs will be used to foster the partnership including Mitacs Converge. A pilot program, Converge aims to increase the innovation output of Canadian small and medium enterprises and multi-national sponsor companies. The program links multi-nationals with expert researchers at Canadian universities and provides matching funding and support towards subsequent research, development and commercialization projects.

Rosalind Franklin Young Investigator Award

Julian Moosmann, PhD student at ANKA, the synchrotron radiation facility at Karlsruhe Institute of Technology (KIT), Germany, is the winner of the 2014 Advanced Photon Source Users Organization (APSUO) Rosalind Franklin Young Investigator Award. This biannual award was established in 2004 to recognize an important scientific or technical achievement by a young investigator (senior graduate student or within two years of his or her PhD. degree) that was accomplished at or strongly beneficial to the Advanced Photon Source (APS).



Julian Moosmann.

Julian has used synchrotron radiation at the APS to develop techniques for four-dimensional (time-resolved) imaging for the *in vivo* analysis of embryonic development, revealing biological processes that could not previously be observed.

SESAME moving back on track after collapse of roof

The 24th meeting of the SESAME Council was held on the premises of the Laboratori Nazionali di Frascati (LNF) in Frascati, Italy, on 12– 13 May 2014. This was the first Council meeting to be held after the collapse, on 14 December 2013, of the roof of SESAME's experimental hall caused by unprecedented heavy snowfalls. Although time was spent identifying the exact damage, drawing up clear plans for dismantling the roof, designing and constructing a new one, there was no major delay in progress in the construction of SESAME.

During this time, dismantling of the roof was completed as was procurement for the storage ring vacuum chambers. Construction of the vacuum chambers has now started and so has procurement for the storage ring girders, and manufacturing of three 80 kW 500 MHz solid-state amplifiers.

During the meeting in Frascati an agreement was signed between Elettra-Sincrotrone Trieste SCpA, SESAME and the Istituto Nazionale di Fisica Nucleare (INFN) to establish scientific technical collaboration between the three research institutions for the joint development of the RF (radio frequency) cavities needed for SESAME's storage ring. The agreement will allow SESAME to benefit from the Italian institutions' expertise in accelerator physics, as well as financial support from Italy; through INFN, the Ministry of Education, University and Research is providing EUR 1 million from its 2013 budget towards the construction of SESAME. In his statement at the meeting, Professor Marco Mancini, Head of the Department for Higher Education and Research, representing the Minister of Education, University and Research, informed delegates that Italy will be providing a further EUR 1 million in 2014, and this could possibly be repeated in the future.