

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).

Workshop on X-ray Detectors for Synchrotron Radiation

On 8–9 March 2004, a number of international experts gathered together in Chester, the home of the IUCr, to discuss the current status of X-ray detectors for synchrotron radiation and to draw up a road map for the development of detectors and associated technologies so that the ever-increasing brilliance of synchrotron radiation sources can be utilized. Dr Peter Siddons reviewed the current status in the USA. He reported that, despite a request and subsequent submission of a detector road map to the Department of Energy, funds have not yet come forward. However, significant funding is expected. Two detector proposals have recently been funded by the NIH including the development of pixel detectors. Christian Broennimann reviewed the detector development in Europe with particular emphasis on the efforts at the Swiss Light Source (SLS). The work at the SLS has resulted in two solid-state pixel detector systems, a one-dimensional high-resolution diffraction detector and a two-dimensional photon-counting detector for protein crystallography. Data were shown where most of the diffraction was in a single pixel. The Pilatus detector (the largest pixel detector array for synchrotron radiation), which has relied on high-quality bump bonding (a unique local strength), has demonstrated a high quality of data. William Helsby reviewed the current UK strengths in synchrotron radiation detectors. The C-Train/XPRESS for XAFS and RAPID wire chambers for small- and wide-angle X-ray scattering were highlighted. These reviews were followed by breakout groups with a detailed recommendation for a detector research and development road map. A common theme which emerged was that there is an urgent need for international cooperation among the different synchrotron radiation centres so that resources and expertise can be pooled to make a step change necessary to match the detectors performance with the sources development.

Schopper receives UNESCO's Albert Einstein Gold Medal

On 15 April 2004, Professor Koichiro Matsuura, Director General of the United Nations Educational, Scientific and Cultural Organization (UNESCO), awarded UNESCO's Albert Einstein Gold Medal to Professor Herwig Schopper, the President of the SESAME Council.



Professor Herwig Schopper receiving UNESCO's Albert Einstein Gold Medal from Professor Koichiro Matsuura, Director General of UNESCO.



Professor Herwig Schopper with the members and Chairs of the SESAME Beamline and Scientific committees.

The Albert Einstein Gold Medal is a high distinction that UNESCO confers on outstanding figures who have made a major contribution to science and international cooperation. The award was given in the presence of the SESAME Beamlines and Scientific Committees and UNESCO representatives of countries involved in the project. Professor Matsuura said that Professor Schopper is an outstanding scientist who has published extensively and has made remarkable contributions to the advancement of science in such cutting-edge fields as nuclear and particle physics as well as other areas of advanced scientific research. With his profound insight into the most complex issues of physics, Professor Schopper has provided leadership worldwide in the creation and use of high technology research facilities in particle physics. He was involved from the outset in the successful construction of the Large Electron Positron collider (LEP) at the European Organization for Nuclear Research (CERN), the world's largest accelerator facility located in Geneva. In addition, he oversaw the Deutsches Elektronen Synchrotron (DESY) accelerator facility, the major accelerator facility in Germany. His contribution to international scientific cooperation has been enormous. From 1981 to 1988 he was Director General of CERN. From 1994 to 1996 he was President of the European Physical Society, and from 1993 to 2002 he was a member of the Scientific Council of the Joint Institute for Nuclear Research (JINR) in Dubna, Russia. And, of course, Professor Schopper has been President of the Council of SESAME since 1999. Professor Matsuura went on to say, "SESAME epitomizes what international scientific cooperation should be. Certainly, without Professor Schopper, the project would never have advanced to its current stage. I am very grateful to him for all he has done to bring the project towards reality. As you all know, I am a firm believer in this project, which will give the Middle East region a world-class laboratory with facilities for basic research and many applications. SESAME will promote economic development from within and will be a bridge in the region between the South and the North. Equally important, it will offer a means of building up a culture of peace through science." Professor Matsuura concluded by saying that "2004 is an important year for you and that two months ago you celebrated your 80th birthday. I must stress, however, that, in awarding you this UNESCO medal, it is not only to pay tribute to your past activities, but also a way of letting you know that UNESCO plans to count on your help for many years to come!"

Vignola joins SESAME

Gaetano Vignola, well known in the synchrotron radiation accelerator community, joined SESAME as the machine director. He began his career in accelerator physics in 1967 when he joined the ADONE group in Frascati National Laboratories, where he was involved also in the commissioning of a 2 T wiggler and in free-electron laser experiments. In 1983 he moved to the NSLS at Brookhaven, where he participated actively in the commissioning of the facility. In 1990 he went back to Frascati where he proposed and successfully led the construction of the DAFNE F-factory, a high-luminosity high-current 1 GeV collider.



Gaetano Vignola.

APS Rosalind Franklin Young Investigator Award

Dr Alexis S. Templeton has been chosen to receive the first APS Rosalind Franklin Young Investigator Award. Her work as a graduate student at Stanford University and more recent studies as a Postdoctoral Research Associate at Scripps Institution of Oceanography, University of California, San Diego, centres around the influence of microorganisms in the speciation of heavy metals in environmental systems, as well as the role of bacteria in the weathering of basaltic glasses in deep ocean environments. To simultaneously investigate both the abiotic and biologically-mediated reactions at biofilm/mineral interfaces, Alexis has relied heavily on a diverse array of spectroscopic and microscopic techniques. For her graduate work, she used microbeam X-ray fluorescence, conventional and grazing-angle X-ray absorption spectroscopy, and long-period X-ray standing wave (XSW) synchrotron-based techniques. A particularly novel development was her combination of the XSW technique with XANES spectroscopy to determine the vertical distribution and speciation of selenium within microbial biofilms formed on oxide surfaces. The combined methods she used provide a fully three-dimensional characterization of trace-element distribution and speciation at a complex interface and represent a major advance in the approach to investigating such systems.