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current events

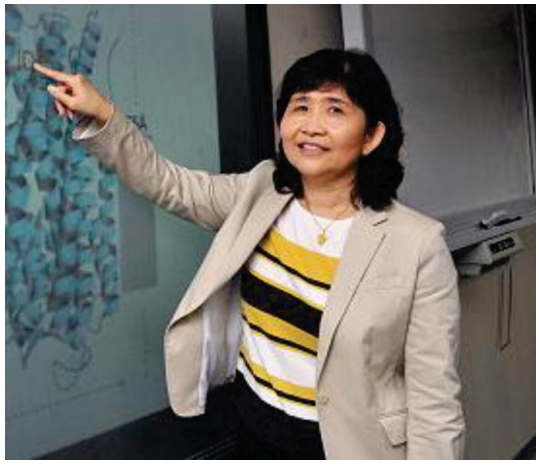
This section carries events of interest to the synchrotron radiation community. Works intended for this section should be sent direct to the Current-Events Editor (icege@ornl.gov).

Yuh-Ju Sun wins Sun Yat-Sen award

Professor Yuh-Ju Sun from Tsing Hua University has been awarded the Academic Publication Award from the Sun Yat-Sen Cultural Foundation for a paper entitled 'Crystal structure of a membrane-embedded H^+-translocating pyrophosphatase' [*Nature (London)*, (2012), **484**, 399]. The research utilized the National Synchrotron Radiation Research Center (NSRRC), Taiwan, and was conducted by a team jointly led by Professor Sun and Professor Rong-Long Pan, a chaired professor at the National Tsing Hua University. The team successfully outlined the molecular structure of the membrane protein H^+-pyrophosphatase that acts as a hydrogen ion channel of plant vacuoles.

H^+-pyrophosphatase is composed of two similar protein molecules, with each protein molecule penetrating the cell membrane 16 times. Its structure is extremely complex and can also transform the chemical energy of metabolic byproduct pyrophosphate into energy that other enzymes can utilize. Professor Sun stated that H^+-pyrophosphatase in plants can influence the growth rate and capacity for salt, cold and drought, thus H^+-pyrophosphatase is a key enzyme in the development and improvement of commercial crops. In addition, pathogenic bacteria such as tetanus, periodontal and pylori also have similar protein as H^+-pyrophosphatase on their cell surface. This means that the H^+-pyrophosphatase can also be used to develop drugs that target protein structures on the pathogenic bacteria.

The Academic Publication Award from the Sun Yat-Sen Cultural Foundation is presented to researchers who publish significant original research results in books or well-known domestic or international journals in the past three years.



Yuh-Ju Sun.

Chi-Chang Kao appointed SLAC Director

After an international search of nearly ten months, Stanford University President John Hennessy announced Chi-Chang Kao's appointment as the new Director of SLAC National Accelerator Laboratory. Dr Kao succeeds Persis S. Drell and represents the new

Chi-Chang Kao.

SLAC emphasis on photon sciences. SLAC is home to both Stanford Synchrotron Radiation Lightsource (SSRL), a third-generation synchrotron radiation source, and the Linac Coherent Light Source (LCLS), the worlds first hard X-ray fourth-generation source. Chi-Chang Kao is known within the synchrotron radiation community for his X-ray science contributions to resonant elastic and inelastic X-ray scattering techniques and for his previous leadership of the National Synchrotron Light Source (NSLS) and SSRL synchrotron sources.

Kao moved to SLAC in 2010 from Brookhaven National Laboratory in New York, where he served as chairperson of the NSLS. In his five years as chairperson of NSLS, Kao undertook major upgrades to the light source's scientific programs and experimental facilities, while also developing potential science programs for NSLS-II, the new light source currently under construction at Brookhaven. His research focuses on X-ray physics, superconductivity, magnetic materials and the properties of materials under high pressure.

"I am honored to be asked to lead SLAC, a truly exceptional national laboratory", Kao said. "It is a place not only known for incredible accomplishments over the last 50 years in the arena of high-energy physics, but it has established itself as one of the world's premier laboratories for particle astrophysics and cutting-edge research in X-ray science. It's a lab with a talented and dedicated staff and an extremely bright future, one that will help solve some of the greatest scientific challenges facing the world today. I am very much looking forward to working with everyone at SLAC, Stanford and the DOE to lead the lab into its next successful chapter."

15th International Workshop on Radiation Detectors set for SOLEIL

The French synchrotron radiation facility, SOLEIL, will host the 15th Annual Conference on Radiation Imaging Detectors, on 23 to 27 June 2013. The workshop will be held at the Campus des Cordeliers in the centre of Paris, France. This conference will feature plenary sessions with invited and selected speakers and will cover semiconductor, gas- and scintillator-based detectors. Topics will include processing and characterization of detector materials, hybridization and interconnect technologies, front-end electronics, readout and data acquisition systems as well as applications in various scientific

Campus des Cordeliers, Paris, France.

and industrial fields. Further details can be found at http://www.synchrotron-soleil.fr/Workshops/2013/IWORID2013.

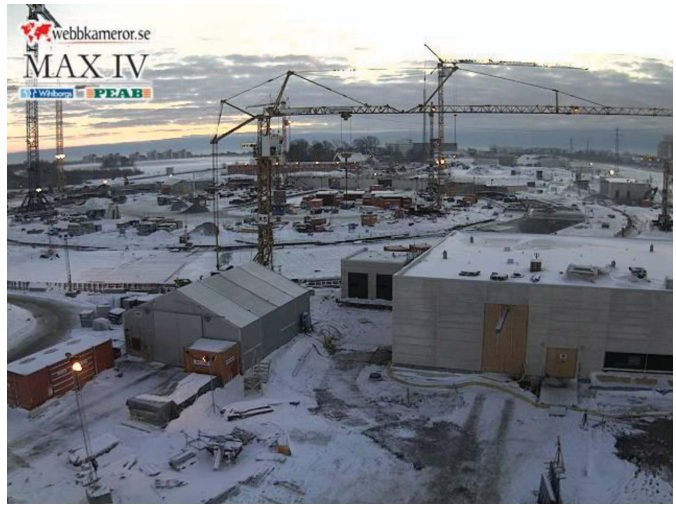
Nugent to step down as Australian Synchrotron transitions to ANSTO

Keith Nugent, Director of the Australian Synchrotron (AS), announced that starting 1 January 2013 the AS will be operated by the Australian Nuclear Science and Technology Organization (ANSTO). ANSTO is an agency within the portfolio of the Australian Department of Industry, Innovation, Science, Research and Tertiary Education which also runs the OPAL research reactor and which is responsible for 'delivering specialized advice, scientific services and products to government, industry, academia and other research organizations'. Professor Nugent also announced his resignation effective as of 13 January 2013 to take a new position at La Trobe University, the third largest university user of the AS.

The Australian Synchrotron.

First internationally funded beamline at MAX IV

The new MAX IV synchrotron facility in Lund, Sweden, has announced that Estonia and Finland will provide EUR 4 million for an international beamline, that will join seven beamlines funded through the Wallenberg Foundation and Swedish universities. Christoph Quitmann, Director of the MAX IV laboratory, explained 'This announcement is an incredibly important milestone in our efforts to become an international laboratory. We have a number of contacts in northern Europe and are working to bring in more international investors. We hope that this decision will be the first of many like it.' The MAX IV facility will include a 1.5 GeV ring for soft materials research and a 3 GeV ring for experiments that require higher X-ray energies. The rings use a novel multibend achromat scheme pioneered at MAX III. The 1.5 GeV ring has a targeted emittance of 6 nm rad and the 3 GeV ring has a very low emittance goal of <0.3 nm rad, designed to make it the world's brightest storage-ring-based light source.



Web camera from the MAX IV site.