

# Memorials 2013

## April 2013 Spring Break of the Photon Factory



At the Photon Factory, continual efforts have been made to replace older beamlines and instruments with newer ones that suit the latest technology and users' needs. During the spring shut-down period, the construction of new beamlines was busily conducted.

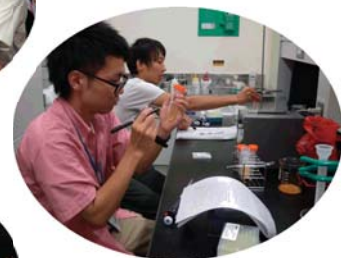
## May 29, 2013 Successful Acceleration of Electron Beam at the Injection Line of the Compact ERL

At the proof-of-principle machine of the Energy Recovery Linac (Compact ERL), the electron beam emitted from the photo-cathode DC electron gun was successfully accelerated up to the energy of 5 MeV by the superconducting accelerator.



## August 16-24, 2013 Summer Challenge

The 7th summer school on "particle and nuclear physics" and "material and biological science" was held at KEK. About 90 undergraduate students from 57 universities attended this school, which included basic lectures, facility tours of the Tsukuba and Tokai campuses and practical experiments.



**August 28-31, 2013**  
**LPBMS2013 at the Tsukuba International Congress Center**

LPBMS2013 (“Light and Particle Beams in Materials Science”) was held to discuss the latest scientific results of materials science obtained by quantum beams such as synchrotron light, neutrons, muons and slow positrons.

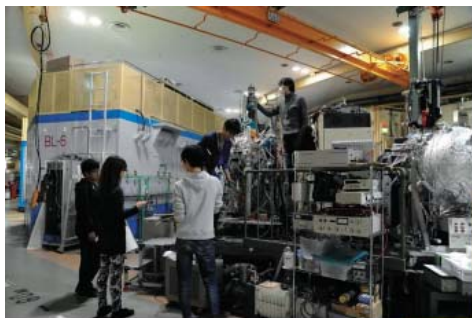


**September 8, 2013**  
**Open House**

Open House of the KEK Tsukuba campus was held and attracted about 4,300 visitors. All visitors enjoyed the pioneering world of modern materials, biology and accelerator science.



**November 9-10, 2013**  
**Summer Challenge in Autumn**



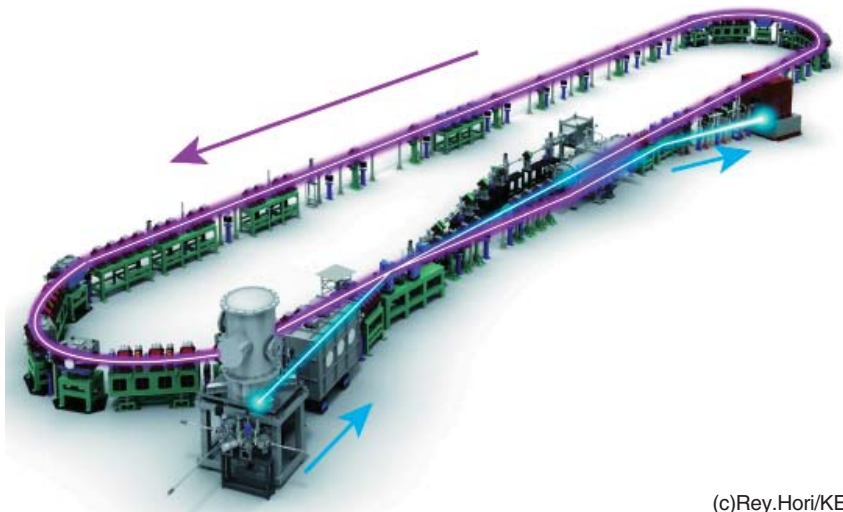
The students who participated in the summer challenge in August performed actual experiments using synchrotron X-rays in the PF and PF-AR.



March 12, 2014

## Energy Recovery Operation Successfully Achieved at the Compact ERL

Energy recovery operation was successfully achieved at the Compact ERL which was built for proof-of-principle studies of the Energy Recovery Linac (ERL).



(c)Rey.Hori/KEK


March 18-19, 2014

## The IMSS Science Festa 2013

The IMSS Science Festa 2013 was held with about 450 participants. The main purpose of this Festa is to promote complementary use of four quantum beams (synchrotron light, neutrons, muons and slow positrons) offered by IMSS.



# International Collaboration

 *June 13-22, 2013*  
*SESAME School in Turkey*

The 5th SESAME school was held in Turkey with 35 participants. SESAME (Synchrotron-light for Experimental Science and Applications in the Middle East) is a synchrotron light facility under construction in Amman, the capital of Jordan, and is scheduled to start operation in 2014. Five scientists from KEK gave lectures on photo-electron spectroscopy, XAFS, protein crystallography, X-ray powder diffraction and X-ray fluorescence spectroscopy.



*September 9-13, 2013*  
*ERL2013*

The 53rd ICFA Advanced Beam Dynamics Workshop on Energy Recovery Linacs “ERL-2013” was held at Budker Institute of Nuclear Physics (Novosibirsk, Russia). Scientists engaged in ERL projects from around the world gathered together and discussed various issues on accelerator technology.





January 25, 2014

## Japanese Prime Minister Mentions PF Indian Beamline

The Japanese Prime Minister Shinzo Abe attended the Japan-India Science and Technology Seminar held in Delhi and gave a talk in the closing session in front of about 90 people. In his greeting, he mentioned the Indian beamline constructed at the Photon Factory saying "This beamline is used for various experiments. I look forward to the results brought by future cooperation".

