

## Renewal of RTRI's Supercomputer

RTRI introduced a new computer system composed of two supercomputers XC30 and CS300 (Cray Inc., US) on September 1, 2013. This upgrading of computer power will enable RTRI to model the combined behaviors of railway system components in different fields to produce an upgraded high-performance railway simulator for use as a common tool for research and development. The general-purpose XC30 supercomputer, superior in economy and throughput, is customized for large-scale parallel calculations and features compatibility with a number of existing applications. The CS300 supercomputer performs multi-purpose calculations centering on applications for general-purpose analysis. The combination of these supercomputers claims a total throughput of 114.7 TFLOPS, approximately 10 times as high as that of the

prior conventional simulation system. RTRI will use this system from now on for numerical simulations to analyze various phenomena related to railways.



President Kumagai (right) at the opening ceremony

## A Taiwan Rail Technology Seminar Held at RTRI

RTRI held a seminar on Taiwanese Railway Technologies on November 5, 2013.

Since the inauguration of a high-speed railway in Taiwan in 2007, the number of users of the new railway has been increasing year after year. On conventional railways as well, remarkable developments can be seen with passengers increasing and stations are rapidly increasing. Five presentations were made by the guests from Bureau of High Speed Rail, Taiwan High Speed Rail Corporation, and Taiwan Railway Administration, on the topics of those presentations were various, including passenger seat arrangement, adoption of LEDs for cab lighting, investigation of derailment accidents, development of stations and rail operation management.

Besides RTRI researchers, a number of guests from railway companies leading manufactures, consultants and other organizations in Japan attended the seminar and reception enjoyed active information exchange.



Taiwan Rail Technology Seminar at RTRI

## The 1st Workshop of Ballasted Track Maintenance between Japan and United Kingdom

The 1st Workshop of Ballasted Track Maintenance between Japan and United Kingdom was held at RTRI on November 20 (Wed.) to 21 (Thur.) , 2013.

There are a number of common issues in the upkeep and maintenance of ballasted tracks between Japan and UK as the ground in these two countries is softer than that in continental countries. Under the circumstances, RTRI organized this Workshop with support from the British Embassy Tokyo and Scottish Development International.

We planned to meet on a regular basis to exchange information between the ballasted track researchers in Japan and UK and seek themes for a joint project to improve the efficiency of ballasted track maintenance.

The 1st Workshop was attended by 45 researchers from RTRI, Japan Railway Companies, universities in Japan and those in UK, with 10 presentations, seven from RTRI and three from UK. The 2nd Workshop will be held in autumn 2014 in the UK.



Prof. William Powrie (University of Southampton)



Prof. Peter Woodward (Heriot-Watt University)