

# Japan and RTRI Enlivened WCRR 2016

## Stepping forward to WCRR 2019

In WCRR 2016, a total of 92 presentations including 66 oral presentations (24 from RTRI) and 26 poster presentations (8 from RTRI) were delivered by Japan. This ranks the second place (after Italy) among the countries that participated in the congress. Shuichi Myojo, manager of International Division reports on the contributions from Japan and RTRI.

## Plenary Sessions

On May 30, WCRR 2016 began with the opening ceremony, followed by Plenary Session 1 entitled "Customers, Market & Competition" with Masaki Ogata, Vice Chairman of JR East participating in the discussions as one of the panelists. In Plenary Session 2 on May 31, "Technology & Innovation," RTRI's President Norimichi Kumagai joined the panel discussion.



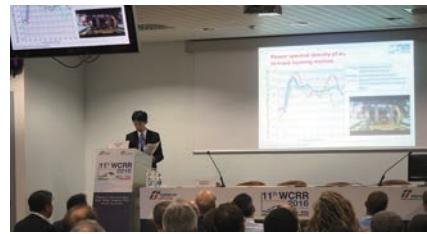
Mr. Ogata stressed that Information and Communications Technologies, including the Internet of Things, Artificial Intelligence and big data perfectly fit the needs of railways which require a tremendous amount of infrastructure and provide transport services to a vast number of customers. He also pointed out the increasing importance of open innovation including international collaboration.



Dr. Kumagai stressed that it is essential to increase the efficiency of R&D and to combine a wide variety of research techniques, including advanced simulation technologies in a well-balanced manner. He also mentioned the necessity of further improving the advantages of railways in areas of high energy efficiency and low carbon emissions, and introduced the latest research efforts of RTRI.

## Oral Sessions

Japanese participants made 66 oral presentations, 24 of which were from RTRI. This was the second largest number behind Italy and it helped improve the presence of Japan. Specifically, the presentations from RTRI were made on the research outcomes about performance and soundness evaluations, condition monitoring and diagnosis of facilities mainly in the fields of structures, track and catenaries. Furthermore, in the fields of communication technologies, train control /operation management systems and rolling stocks, the researchers made presentations on the application of new technologies and on proposals for new systems.



Mr. Yoneyama presented his paper entitled "Durability analysis of the fuel cell by the test rail vehicle", in which he reported the result of durability test of a railway vehicle powered by 100 kW-class fuel cells. For fuel cell vehicle, please see also Page 20.



Dr. Watanabe presented his paper entitled "Performance Evaluation for Long PC Extradosed Bridges", in which he discussed the applicability of two types of PC extradosed bridges to high-speed railways through the analysis of dynamic interaction between vehicle and structures as well as measurements. (An extradosed bridge is a hybrid between a box girder and a conventional cable-stayed structure.)

## Awards

The awards for outstanding research papers were given for eight oral presentations, one for each of the eight research fields, one poster presentation and one Proof-of-Concept presentation. A special award for young researchers was also given to one researcher under the age of 30. From among Japanese researchers, Yoshikata Tanabe of JR Central won the award for the outstanding research paper in the field of "Operations and Safety."

## Exhibition

At the technical exhibition which was open in parallel with the presentation sessions, 29 companies and organizations participated. From Japan, JR East and Hitachi Ltd., participated as well as RTRI and other JR group companies. RTRI ran a display booth, exhibited posters and brochures to introduce RTRI and JR companies and did promotional activities for the WCRR 2019, 12th congress to be held in Tokyo.



## Promotional Activities of WCRR 2019



**12th WCRR  
2019 Tokyo  
Oct. 28 – Nov. 1**

The next WCRR congress is to be held at the end of October 2019 in Tokyo. At the Closing Ceremony in Milan, Marco Caposciuti of Trenitalia handed over the position of the Chairman of the WCRR Organizing Committee to RTRI's Executive Director Fuminao Okumura. Executive Director Okumura expressed his thanks and respect to the efforts of the Italian Organizing Committee which

successfully completed WCRR 2016. He referred to the significance of the next WCRR congress being held in Asia, a region showing rapid progress in economy and railway technologies. Furthermore, he expressed his hope that many people will come to Tokyo from around the world and understand the vital role that railways play in the Japanese economy and society.