

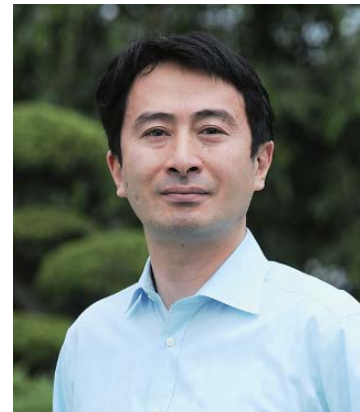
## A Report on WCRR 2008

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The 8th World Congress on Railway Research (WCRR 2008) was successfully held in Seoul, Korea, from May 18 to 22, 2008, under the auspices of the Korea Railroad Corporation (KORAIL), the Korea Rail Network Authority (KRNA) and the Korea Railroad Research Institute (KRRI) with the full support of the country's railway industries. Approximately 800 members from 35 countries participated in the Congress, whose 49 sessions were contributed to by a total of 290 theses. The principal theme of the Congress was *Towards a Global Railway*. The Railway Technical Research Institute (RTRI) sent 23 members to make oral presentations and poster sessions. At an exhibition held in parallel, the RTRI ran "RTRI JR GROUP" booth to introduce advanced technologies using JR group brochures, posters and videotapes. Three RTRI members also presided over a session each.

Mr. Masao Uchida, RTRI Executive Director, gave a keynote speech entitled *Technology Innovation and its Implementation around the World* at the plenary session to introduce a wide range of technologies in Asia on the topics of high speed, safety, passenger convenience, infrastructure maintenance and conservation of the global environment. The following pages summarize the theses contributed to the Congress by eight speakers from the RTRI.



The RTRI JR GROUP booth at WCRR 2008



RTRI Executive Director Masao Uchida speaking at the WCRR 2008 plenary session

### Presentations from RTRI

Session	Presenter	Paper Title
I.3.1.1	Hiroyuki SAKAI	A Long-Term Observation System for Protecting Railroad Services from Natural Disasters against Climate Changes Causing Heavier Precipitation
G.1.4.4	Naoki AIHARA	Evaluation of Modal Shift by Extension of the Tohoku Shinkansen Line
I.2.1.1	Hirofumi TANAKA	Estimating Method of Wheel Load and Lateral Force Using Axle-box Accelerations
I.3.3.6	Mizuki TSUNEMOTO	The Effect of Resistance at Supporting Point on Tension and Current Collection Performance of Overhead Contact Line
I.2.3.1	Xiu LUO	Damage Evaluation of Railway Structures Based on Train-Induced Secondary AE Parameters
I.2.3.2	Takehiro KOBAYASI	Transition Structures between Rigid Conductor Line and Catenary Overhead Contact Line
R.2.4.3	Akihito KAZATO	Measures against High-Frequency Vibration for Next-Generation Tilt Control System
R.3.3.3	Shogo KAMOSHITA	Development of Assist Steering Bogie System for Reducing the Lateral Force
R.2.4.7	Kazuyuki HANDA	Experimental Reproduction of Wheel Thermal Cracks
R.3.3.7	Erimitsu SUZUKI	Vibration Reduction Control Methods for Superconducting Maglev Vehicles
S.2.3.4	Atsushi IDO	Study on Under-Floor Flow to Prevent Ballast-Flying Phenomena
S.3.1.4	Haruo YAMAMOTO	Effect of Current Collection Noise and Interception in Running on GPS Signal Reception
S.2.4.4	Mitsuru IKEDA	Evaluation of Aeroacoustic Noise Source Structure around Panhead of a Pantograph in High-Speed Railway
S.1.4.3	Takayuki USUDA	The Pantograph Contact Force Measurement Method in Overhead Catenary System
S.2.2.4	Sinya FUKAGAI	Development of Friction Moderating System to Improve Wheel/Rail Interface in Sharp Curves
Poster	Tetsuo UZUKA	Integrated Simulator for AC Traction Power Supply
Poster	Shunsuke SHIOMI	Development on Analysis Model for Shinkansen Switch-and-Lock System
Poster	Yasuhiro UMEHARA	A study of Virtual Running Test of Railway Vehicle
Poster	Tamami KAWASAKI	Hygienic Environment of Railway Stations - Investigation and Countermeasures for Reduction of Microbial Volatile Organic Compounds (MVOCs) Generated by Fungi in Railway Stations -
Poster	Keiichi TAKEUCHI	An Estimation Method of the Possibility of Constructing High-Speed Data Transmission Lines Using Metallic Cables along Railway Lines
Poster	Fumio OKIMOTO	A Study for Reducing Wear of Contact Wire at Stations of High Speed Line by Using Wear Map of Wire
Poster	Kenichi OGAWA	Energy Efficiency and Fuel Consumption Rate of Fuel Cells Test Railway Vehicle
Poster	Naoki AIHARA	Inventory Analysis of Transport in Japan Based on Input-Output Tables