



Newsletter on the
Latest Technologies
Developed by RTRI

Railway Technical Research Institute
2-8-38 Hikari-cho, Kokubunji-shi
Tokyo 185-8540, JAPAN
URL: <http://www.rtri.or.jp>

Editorial Office: Ken-yusha, Inc.
URL: <http://www.kenf.or.jp/en/>

Copyright © 2009 Railway Technical Research Institute.
All rights reserved.
Reproduction in whole or part without permission is
prohibited. Printed in Japan.

Railway Technology Avalanche

June 23, 2009 No.27

GENERAL INFORMATION

- President's Inaugural Address
Hisashi TARUMI 155
- Development of a Large Two-Dimensional Shaking Test Facility to Determine How
Railway Equipments and Structures are Damaged or Destroyed during an Earthquake
Masayuki KODA 156
- The 10th International Workshop on Railway Noise
Tatsuo MAEDA 157
- The 8th China-Korea-Japan Railway Research Technical Meeting
Hisashi TANAKA 157

ARTICLES

- Structural Improvement of Existing Steel Bridges by Combining the
Steel Girders with Concrete Decks
Masamichi SAITO 158
- Development of a Contact-Loss Measuring System Using Ultraviolet Ray Detection
Takamasa HAYASAKA 159
- A Method of Managing Wheel Loads and Lateral Forces Using Axle-Box Acceleration
Hirofumi TANAKA 160

President's Inaugural Address

Hisashi TARUMI
President

I assumed office as the President of the Railway Technical Research Institute (RTRI) in April 2009, succeeding Dr. Akita. After joining the RTRI when it formed part of Japanese National Railways (JNR) 39 years ago, I experienced a number of different positions including several at other organizations within JNR. At the time of the privatization and division of JNR, I was involved with planning the re-organization of the RTRI as an independent entity. For more than 20 years, the RTRI has been steadily attaining success in the field of R&D, especially in the development of railways for higher speeds, in the prevention of natural disasters, including earthquakes, and in the improvement of safety and convenience of travel, thereby making a significant contribution to railway operators as well as to Japanese society. The responsibilities now assigned to me are to follow through the current master plan, which is now in its final fiscal year, to prepare a new master plan for the coming years, and to promote preparations to cope with the reorganization of the public-interest corporation system undertaken by the Japanese government. Regarding the current master plan, the accomplishment of research projects that require comparatively long research periods is important. These include the design and application of a new signalling system, development of an evaluation method for vehicles' dynamic characteristics by using a hybrid simulator (HILS), evaluation of seismic performance and establishment of disaster-prevention countermeasures for existing railway facilities. In preparing a new master plan, on the other hand, it is necessary for the RTRI to establish R&D plans which will enable railways to play a greater role in sustainable development not only using our past experience but also taking fresh ideas and looking at the railway from a different angle. We shall also need to introduce research results and techniques covering non-railway fields as well. I will endeavour to accelerate the integration of accumulated

knowledge on fundamental technologies and focus more on basic research. The RTRI is now preparing documents and materials required for the renovation of the public-interest corporation system.

Although it is still not known how this issue will develop in the future, I will do my utmost to reinforce the already-established close relationship with the railway operators. The various industries need to respond seriously to the global economic slowdown triggered by financial crises, the reduction of greenhouse gases, and problems of resources and energy. Expectations for railways are constantly rising and in particular, there is really no end to the topics of railway enhancement and revitalization in overseas countries. In order to efficiently promote R&D capable of contributing to railway businesses while solving various problems, it is essential to enhance co-operation with related research organizations, in this country and overseas. I sincerely request you to positively extend your co-operation and exchange information with the RTRI. This Newsletter has been issued since 2003, as proposed by Dr. Hiroyuki Sakai, International Affairs Division, when I was Executive Director, International Affairs, so as to quickly publicize research outcomes abroad. I thank you for your understanding and co-operation.



垂水尚志