

## Appointment of New Board of Directors

The Railway Technical Research Institute (RTRI), a Public Interest Foundation, appointed new Directors at the 7th meeting of the Board of Trustees on June 13, 2013, when the former President Hisashi Tarumi, having held the post since April 2009, resigned and Dr. Fuminao Okumura took office as a new Executive Director. Following the 7th Board of Trustees meeting, the newly appointed Directors were assigned to the following posts at the 11th meeting of the Board of Directors, as described below.

The new Board of Directors will lead RTRI to extend its wide-ranging activities under the following three principles of action:

- (1) contribution to the development of society and management of railway operators by dynamically promoting a number of themes on research and development,
- (2) making efforts to prove worthy of the trust by society as a neutral railway technical research organization and
- (3) raising the levels of railway technologies, domestic and abroad, by utilizing the results of joint research projects with a number of research organizations including those in foreign countries.

Concretely, RTRI will systematically address research and development targets such as improvement of safety, energy efficiency, cost reduction of maintenance and facilities updating and conservation of trackside environment at high-speed running, by actively using advanced simulation technologies and information technologies.

We promote our research and development by dedicating our total ability and, in that process of, every researcher will aim

to become "the only one for RTRI", and to provide reliability to railway customers, society, and railway operators.

### Board of Directors

Eisuke Masada, Chairman

Norimichi Kumagai, President (Promotion)

Atsushi Ichikawa, Vice President

Kiyoshi Sawai, Vice President (Promotion)

Atsushi Kawai, Executive Director

Hideyuki Takai, Executive Director

Fuminao Okumura, Executive Director (New appointment)

Mitsutoshi Inami, Auditor



Front row from left to right: K. Sawai, N. Kumagai, A. Ichikawa  
Back row from left to right: M. Inami, H. Takai, A. Kawai, F. Okumura

## A Research Director Awarded a Decoration by Japanese Government

Shun-ichi Kubo, Director, Materials Technology Division was awarded the Medal with Yellow Ribbon at the 2013 spring recognition. The award was for his research on developing a technique to evaluate the wear characteristics of carbon composite pantograph sliders and for the invention of a new material for sliders.

The Medal with Yellow Ribbon is given to persons who are working actively at the forefront of their professions and possess good technical abilities or achievements to be good examples for other technologists.

As background information, pantograph sliders are fitted to the rooftop pantographs of EMUs to collect power while sliding along trolley wires at the train running speed. As a current of approximately 100 to 1,000A runs through the pantograph assembly, sliders are required to have the following characteristics:

- \* High strength and resistance to breaking
- \* Low coefficient of friction for easy sliding
- \* High conductivity
- \* High wear resistance without excessively abrading the trolley wire material.

Sliders are made of sintered alloys, carbon and other materials depending on the category of EMU and the section of the route where they are used. In recent years, however, sliders made of copper-base sintered alloy are gradually giving way to carbon composite sliders. As materials of higher performance have been used for sliders in recent years, further research is under way to develop the following:

- \* Lightweight carbon-base sliders for narrow-gauge railways
- \* Sintered alloy sliders for Shinkansen EMUs having new lubricating ingredients

