

## **The 4th Japan-UK Track Maintenance Workshop Held in Winchester, UK**

**On November 22, 2018, the Railway Technical Research Institute and University of Southampton held the 4th Workshop on Track Maintenance between UK and Japan in Winchester, UK.**

Since 2013, RTRI started to hold Japan-UK workshop on track maintenance in order to pick up issues shared by Japan and UK and develop them into future joint research projects. This year's workshop, the 4th one, was held at Wessex Centre of Winchester Cathedral in Winchester and 35 persons from RTRI, 6 universities of UK and Japan and 2 rail operators from Japan participated. They had discussions regarding issues of railway tracks including high-speed rail track.

The workshop was started by the welcome greetings by Professor William Powrie of Univ. of Southampton, and followed by 8 presentations from UK side and 7 from Japan side, total 15 presentations. The topics of presentations by UK included track maintenance of HS1<sup>\*1</sup>, the research into fiber-reinforced trackbed ballast, test equipment for railway track, and track design considering the construction of HS2<sup>\*2</sup>. The presentations by Japanese researchers dealt with maintenance of Shinkansen, mechanical properties of ballast and track vibration. Through the presentations, they shared information regarding the latest research output on ballasted track and slab track. The workshop was closed by the remarks by Dr. Momoya, Head of Track Structures and Geotechnology Laboratory, and Prof. Powrie and they agreed that ballasted and slab track maintenance and high-speed rail design are important issues shared by both countries and they will continue sharing information.

### **Outline of Prof. Powrie's opening remark:**

This is the 4th of the UK-Japan track maintenance workshop. At the first workshop mainly the topics regarding ballasted track were dealt with, but since the 2nd workshop, we have picked up issues on high-speed rail and slab track. In the U.K., HS2 project is currently going on and it has been discussed which of ballasted or slab tracks should be adopted for HS2. At this workshop, 15 presentations will be made including that issue. I am looking forward to productive discussions.

### **Outline of Dr. Momoya's closing remark:**

Today, we had presentations covering a wide range of issues on ballasted and slab track. UK and Japan share the technical issues of both types of tracks and the issues need further research and development. I would like to propose that the next workshop be held in 2020, at RTRI or the Univ. of Leeds.

### **Outline of Prof. Powrie's closing remark:**

This has been a very interesting workshop with many presentations on ballasted track maintenance, high-speed line design, noise and vibration, We hope to keep in touch with Japanese researchers toward 5th workshop.

\*1 HS1: High Speed One

A high-speed railway line in UK connecting the Channel Tunnel and Saint Pancras Station in London.

\*2 HS2: High Speed Two

A high-speed railway line planned in UK following the opening of HS1. The first-stage line is to be opened in 2026, connecting London and Birmingham.



Prof. Powrie making an opening remark



Dr. Momoya making a closing remark