

# XIV CONGRÈS INTERNACIONAL DE VIABILITÉ HIVERNALE DU 4 AU 7 FÉVRIER 2014

# **THÈME:** 05. APPROCHES OPÉRATIONNELLES, ÉQUIPEMENTS ET MATÉRIAUX POUR LE SERVICE HIVERNAL

**SOUS-THÈME:** Matériaux de chaussée

Séance: ( ˈ	Affiche: 07/02/2014 (	09:00 - 11:00 h

Salle:

# MR. MASATOSHI YAMAGUCHI

# **Organisation:**

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## Titre de la présentation:

APPROCHE NUMÉRIQUE POUR SYSTÈME DE FONTE DE LA NEIGE PLACÉ SOUS CHAUSSÉES BITUMINEUSES PERMÉABLES

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## Resumé (anglais):

In Japan, 24 million people are living in cold and snowy area that occupies about 60% of the country. In order to secure the safe passing space in winter season, the Snow-Melting Equipment has been installed at lifeline network road. The Snow-Melting Equipment which heated circulation liquid is supplied to pipes set under the pavement body is most popular system. And then, this system is able to melt snow and keep freeze above road surface. As a heat source of this system, Groundwater which are mentioned taking advantage of the merit of constant temperature and heated water etc. are used. In recent years, from the nuclear power plant accident of the previous Great East Japan Earthquake, Ground source heat which is the one of the renewable energy is adopted. For the Ground source heat is the low density energy, it need to construct a lot of heat exchangers. The usage of Ground source heat combined with Heat pump system has possibility of reduction for the electric power supply.







