

ISSUE: 05. OPERATIONAL APPROACHES, EQUIPMENT AND PRODUCTS FOR WINTER CONDITIONS

SUB-ISSUE: Snow melting methods

Session: ()

Poster: 05/02/2014 (09:30 - 12:30 h)

Room:

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Presentation title:

DEVELOPMENT OF A HEAT-PUMP SNOW-MELTING SYSTEM COUPLED WITH EXHAUST WATER FROM GROUND WATER SPRINKLER

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Summary:

Most popular snow-melting system in Japan is the ground water sprinkler. Around 15 °C ground water pumped up from several 10 to 2 hundred meters deep in the ground have enough ability to melt heavy snowfall if it is in relatively warm, around 0 °C of air temperature, regions like north west coast in Japan. Since the exhaust water after snow melting still keeps around 4 °C so as not to freeze, it has possibility to use as heat source of heat-pump system to melt snow on another area like pedestrian walkway.

