

**Improvement of the Superconducting Properties of High Temperature Superconducting
Wires for Railway System**

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High Temperature Superconducting (HTS) wire has significant potential for railway system applications. RE-123 coated conductors such as YBCO tape have made progress in many institutes towards the industrialization. Bi-2223 tape is currently a promising candidate for various engineering applications such as HTS cable, motors and transformer for railway. For improvement of the superconducting properties, performance characterization of HTS wire was conformed. HTS DC cable is ideal for transmitting between substation and electric train. We completed the prototype DC cable of 2 meter length of Bi-2223 tapes for trial purposes.