

**R & D of Superconducting Maglev and Applications  
of its Technology to the Conventional Railway System**

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RTRI is advancing research of a maglev vehicles motion simulation, experimental studies on the applicability of high-temperature superconductivity material to on-board magnets and research on evaluation of the ground coil, etc., and is achieving results as described in this report. Research on application of Maglev technology to the conventional railway system is also ongoing. For example, there are a flywheel energy storage system using superconducting magnetic bearings, a rail brake system applying linear induction motor technology, a contactless power supply system and a magnetic refrigeration system for air-conditioners as a development theme. This paper describes the outline of these researches and developments.