

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

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2011 and 2012 are milestone years about superconducting Maglev system. 2011 was 100th anniversary that superconductivity was discovered in 1911 by Heike Kamerlingh Onnes in Holland. Then, the designation of the construction of the Chuo-Shinkansen is presented to Central Japan Railway Company from Minister of Land, Infrastructure and Transport in May, 2011 and aims to come to practical use in 2027. Moreover, the research and development of the linear motor was started in 1962 by Railway Technical Research Institute of the Japanese National Railway. This year is 50th anniversary. This report describes the recent research trends on the major components of the superconducting Maglev system with looking back to the history. In addition, the outline is introduced about some research attempts in which application of superconducting and linear motor technology to the conventional railway system has been examined.