The Current Situation of the Use of the Rare-metals in Railways

The study group on the current situation of the use of the rare-metals in the railway system

Rare-metals contribute to improving the characteristics of many materials and also to revealing new functions of them. In resent years, there have occurred many cases where the supply of these rare-metals has become unstable and those prices have fluctuated severely, and they have been anxious about growing of this tendency. So the national project of developing substitute material and saving of resource material have been promoted. Under these conditions, the current situation of the use of the rare-metals in a railway system, the assessment of influence by, and the countermeasure against the shortage of rare-metals has been investigated. It has been made clear that the railway materials involving less rare-metals and substitute material must be developed independently by the railway itself. It has been estimated that the rare-metals have a large influence on the performance of battery etc. which are expected to be used in a future railway system.