

## **The Trend and Recent Studies of Hybrid Railway Vehicles**

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Recently, diesel-battery hybrid railway vehicles which enable us to charge the batteries on board with the regenerative energy and discharge it effectively have been realized in commercial lines. Furthermore, EMUs of a battery-mounted type were produced in order to use them as the interoperation between the electrified section and the non-electrified section. Thus, a variety of hybrid railway vehicles with energy storage devices have appeared in recent years. This report introduces the trend and recent studies of these hybrid railway vehicles.