

**Recent Research and Development
of Railway Signalling and Telecommunications Technologies**

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This paper outlines new train control systems based on information technologies. It also describes studies on mechanical analysis model for switch-and-lock system, a track circuit coded method for improvement of immunity, automatic generation of an interlocking table, and lightning protection measures for signalling. In addition, it introduces the outline of a risk analysis of signaling systems, EMC, some applications of new telecommunication technologies, image processings, GPS, and formal methods to railway systems.