Recent Studies on Railway Dynamics

Hiroaki ISHIDA

Train running causes numerous dynamic problems such as noises, vibrations of bridges, viaducts and ground, track settlement and wears of rails and overhead contact wires. These problems are more intensified as trains run at higher speeds. It is inevitable to solve such problems to attain high-grade performance of railway, and the foregoing problems are only solvable through cautious investigations. This paper describes current major subjects dealt with chiefly by Railway Dynamics Division, research activities on the said subjects to achieve the railway dynamic system optimum and future prospects.