

## **Subjects on Track Technology Focussed on from Dynamical Point of View**

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It is essential to understand the characteristics of vehicle/track dynamic response for efficient and economical track maintenance. Many efforts have been made experimentally and analytically to obtain more precise and efficient solutions. In particular, very high frequency phenomenon of fishplate rail joints, which probably leads to hanging sleeper has been recently analysed by a newly established model, and the dynamic behaviour of ballast stone which surely leads to ballast settlement has been attempted to analyse by granular model. On the other hand, multi-body dynamics has been developed very much so that many vehicle dynamic behaviours has been analysed precisely enough. This paper describes the status of track dynamic model focusing on the above-mentioned track maintenance subjects and the future development of track maintenance subjects and dynamic models.