

**Development of a Repairing Method for Ballasted Track by Filling Composite
Gel Consisting of Water Glass and Polymer**

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Where ballasted tracks include a high mix ratio of fine-particles, track irregularity tends to increase soon after the maintenance performed by tie tampers since the track maintenance impairs the density of the ballasted layer compacted by cyclic loading for trains. Therefore, in this study, we developed a method filling the gap under the sleepers with fill material for the realignment of tracks without impairing the density of the existing ballasted layer. Furthermore, we performed the test to confirm the validity of the foregoing method. Consequently, we could confirm that the foregoing method is effective for repairing the ballasted tracks.