

### **Evaluation of Railway Curve Squeal Noise Using Roller Rig and Running Tests**

Takeshi SUEKI      Tsugutoshi KAWAGUCHI      Yasuhiro SHIMIZU  
Toshiki KITAGAWA      Hiroyuki KANEMOTO      Masahito KUZUTA

Roller rig tests were performed to investigate the characteristics of curve squeal. Running tests with an actual train were also carried out to validate the results of the rig tests. Curve squeal noises and related wheel vibrations were observed in both the roller rig and the running tests. The tonal peak frequencies due to curve squeals coincided with each other in both tests. However, the magnitude of the noises and vibrations in the rig tests was much larger than those in the running tests. The vibration characteristic of the rollers of the rig may be the reason for the disagreement of the magnitude.