

## A TWELVE MONTH ADHESION SURVEY ON A 280KM ROUTE

Wheel/rail adhesion has been studied over many years, but knowledge of its properties and behaviour under different conditions is still incomplete. It is recognised that, because of its randomly varying nature, many results must be collected and analysed before its behaviour can be assessed. To this end, the Tribometer Train was used to measure wheel/rail adhesion at regular intervals during one year over a 280km route. The aim was to provide enough results over a wide range of conditions to achieve an improved understanding.

The main results are presented and the influence of those factors expected to affect adhesion are discussed. The most important cause of low adhesion is found to be rainfall. Most other differences, including those between different lengths of track, are swamped by the random special and temporal variations which occur on all track. However, some specific "low spots" are identified, and associated with railside features such as flange lubricators and cuttings where the local humidity may be high.