

Current projects:

- Three-dimensional finite element models
 - 1) Modelling of falling weight deflectometer with non-linear behaviour of the subgrade (ABAQUS Standard with UMAT)
 - 2) Behaviour of ballasted railway and its foundation under static and dynamic loading (ABAQUS Standard)
 - 3) Impact of dynamic loading of the bogie (ABAQUS Explicit)
- Expert Systems for Effective Track Maintenance and Renewal Planning
- Reliability evaluation and optimisation of imperfect inspections for a component with multi-defects
- Optimizing Policies of Railway Ballast Maintenance and Renewal
- Reliability analysis and maintenance decision for railway sleepers using track condition information
- An integrated plan of ballast tamplng and renewal to reduce whole life cost

