

# Research Theme: Interface Shear Behaviour of PCM- Strengthened Reinforced Concrete Beam Under Fatigue Loading

Reinforced concrete beams strengthened in flexure by spraying repair material to the tension face are susceptible to brittle debonding failures. Interface of the existing concrete and repair material is the weakest link in the structure. Polymer Cement Mortar (PCM) is known as good repair material due to its higher bond strength, lower permeability and thinner construction thickness. In fatigue loading, structures goes under cyclic loading and fails at much lower load than their yielding limit. So, this study will give a new idea about progress of development of shear stress at interface and suggest some conservative provisions to prevent the brittle debonding failure.

