

## Critical Investigation on Performance of Polymeric Materials in Rehabilitation of Metallic Components

**Authors :** Parastou Kharazmi

**Abstract :** Failure and leakage of metallic components because of corrosion in infrastructure structures is a considerably problematic and expensive issue and the traditional solution of replacing the component is costly and time-consuming. Rehabilitation techniques by using advanced polymeric materials are an alternative solution towards this problem. This paper provides a summary of analyses on relined rehabilitated metallic samples after exposure in practice and real condition to study the composite material performance when it is exposed to water, heat and chemicals in real condition. The study was carried out by using different test methods such as microscopy, thermal and chemical as well as mechanical analyses.

**Keywords :** composite, material, rehabilitation, structure

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