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## RETHINKING OF MATERIALS FOR EARTHQUAKE RESILIENT STRUCTURES

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### ABSTRACT:

Earthquakes are one of the most destructive natural catastrophes. A scientific knowledge of the occurrence may enable future earthquakes' impacts, both in India and abroad, to be predicted and dealt with more accurately successfully. Over the previous few decades, there is a massive increase in investments in buildings, equipment, and infrastructure. Whenever there is any calamity occurs, that is resulting in heavy losses to the infrastructure. These increasing economic losses due to seismic occurrences year after year, making it necessary to evaluate economic loss accurately as the impacts are serious and long-lasting. Estimating the economic damage caused by the earthquake is also crucial for developing policies and determining the need for help from both within and beyond India. As a result, the focus on understanding the importance of prior and present measures for earthquake prevention and mitigation is becoming more and more relevant. This paper also looks at the historic and modern advances in the materials that may be utilised to build earthquake-resilient structures. As a result, the primary aim of this study is to comprehend the impact of earthquakes and to comprehend mitigation measures.

**Keywords:** Building Technology, Earthquake Mitigation, Resilience, Innovative Materials, Traditional Materials

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