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## Partial Replacement of Sand with Non-Hazardous Biomedical Waste

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**Abstract:** The construction industry is increasingly focusing on sustainable and eco-friendly materials to address environmental and resource depletion challenges. This study explores the partial replacement of sand with sterilized medical waste at 25%, 50%, and 75% proportions in concrete mixtures. The research investigates its effects on compressive strength, workability, durability, and environmental impact. The findings suggest that while lower replacement levels maintain structural integrity, higher proportions compromise performance. The study highlights the potential of repurposing medical waste to promote sustainability and waste management in construction.

Keywords: Cognitive Radio, Spectrum Sensing, Efficient Communication, System Security





