IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 6, Issue 5, March 2026
Impact Factor: 8.2

Rubberized Bituminuos Concrete for Durable Road Infrastructure

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Abstract: *The disposal of waste tyres has emerged as one of the most serious environmental problems across the globe. Every year, millions of tyres are discarded from vehicles and end up in landfills or are burned, causing severe air and soil pollution. Due to their non-biodegradable nature and high volume, waste tyres occupy valuable landfill space and contribute to environmental degradation. Therefore, it has become necessary to find eco-friendly and economically viable methods for utilizing waste rubber effectively.*

In the field of civil engineering, several researchers have explored the incorporation of waste tyre rubber in road construction as a sustainable alternative material. When crumb rubber, obtained from shredding discarded tyres, is blended with bitumen, it modifies the physical and chemical properties of the binder, improving its performance under varying climatic and traffic conditions. The resulting material, known as Crumb Rubber Modified Bitumen (CRMB), has been widely recognized for enhancing flexibility, elasticity, and resistance to cracking, rutting, and aging...

Keywords*: waste tyres*

DOI: 10.48175/568