

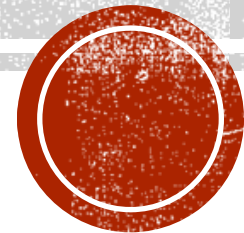
POLICY, FUNDING AND COLLABORATION OPPORTUNITIES IN NIGERIAN ROAD SECTOR

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POLICY DIRECTION

- Superpave Mixture Technology
- Recycling and use of waste in the road sector
- Introduction of concrete Technology.
- Use of Bio-oils in pavements
- Use of polymers in pavements
- Use of Natural asphalt



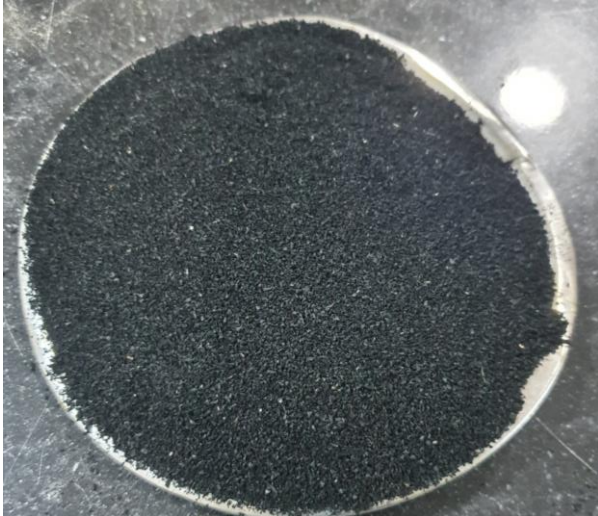
MARSHALL TO SUPERPAVE TECHNOLOGY



Plate 1: Superpave Mixture Technology



WASTE FOR ROAD SECTOR



Crumb rubber



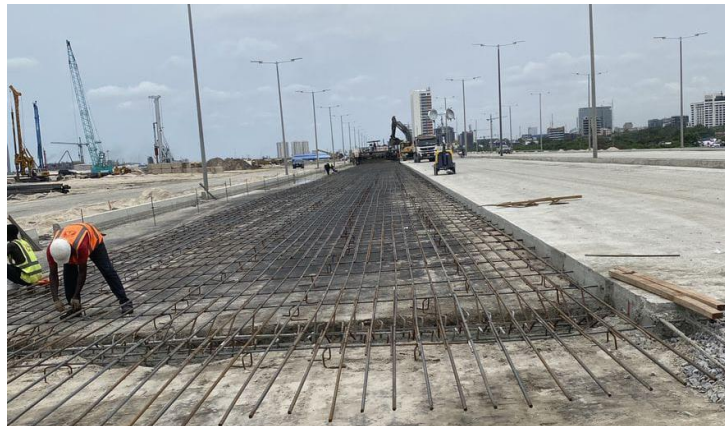
Polythene



Crumb rubber



CONCRETE ROADS



USE OF BIO OILS



Jatropha curcas oil



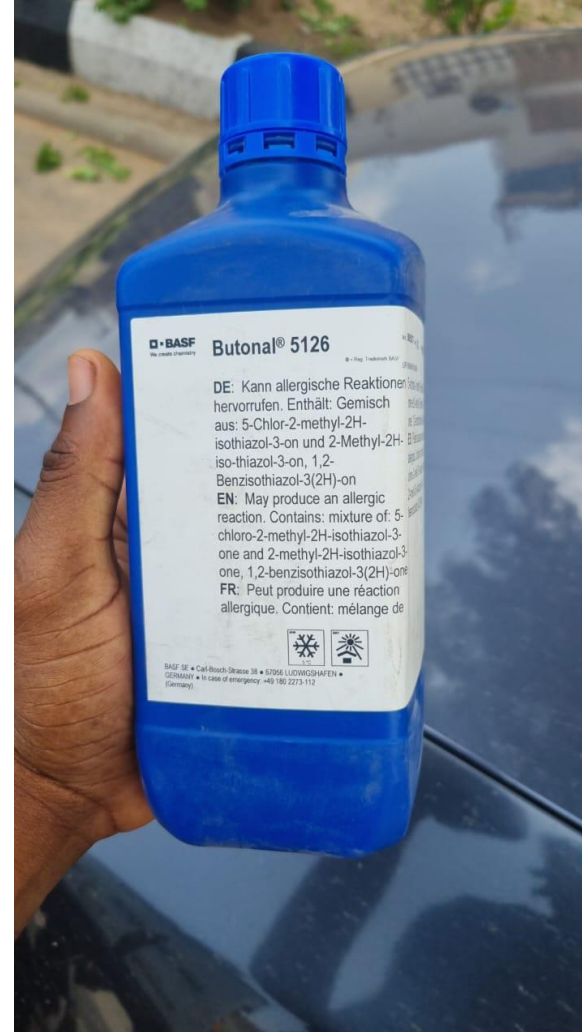
Neem oil



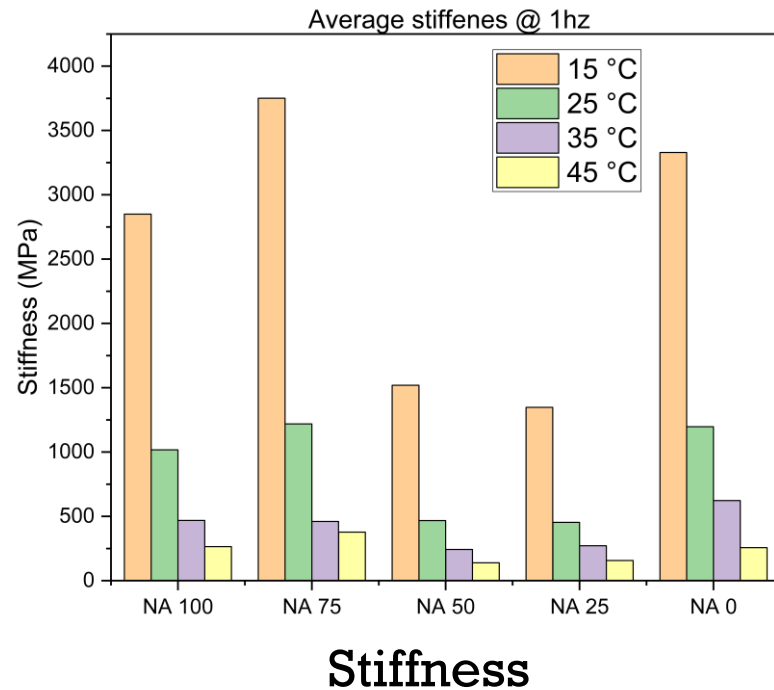
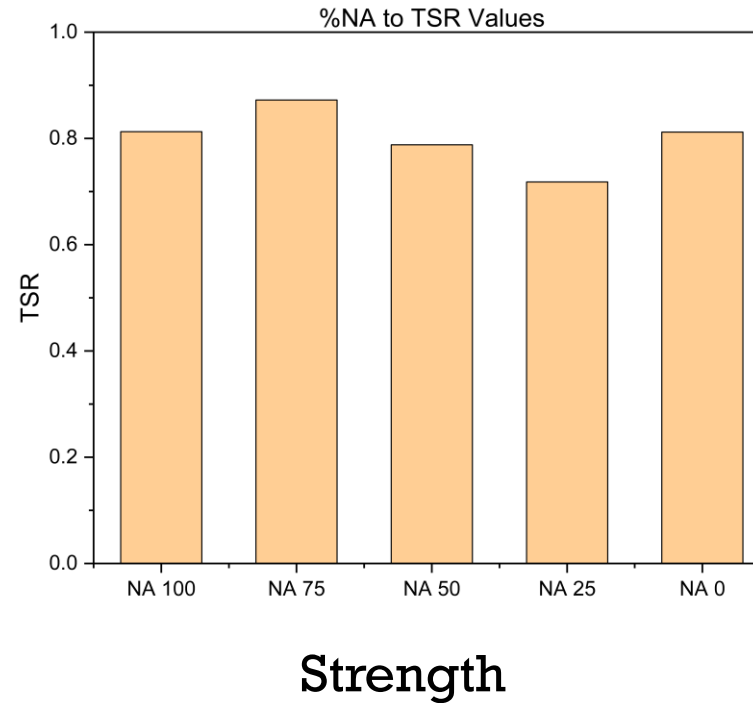
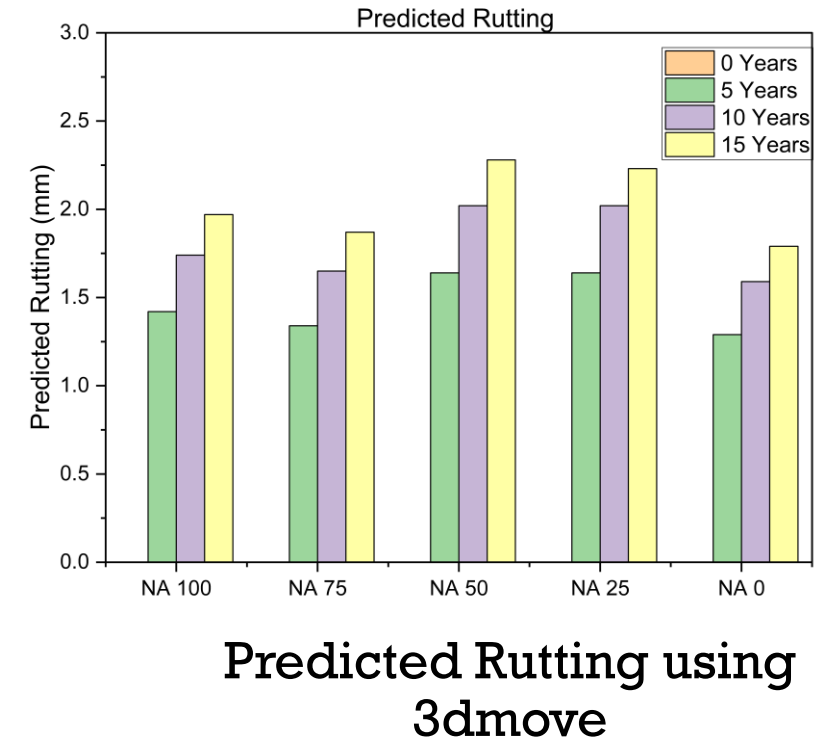
Locust beans oil



USE OF POLYMERS



CASE STUDIES USING NATURAL ASPHALT



FUNDING

- Budgetary Allocation
- Limited PPP funding.
- Roads user charges such as tolls are poorly implemented and rarely available.
- Nigeria Sovereign Investment Authority (NSIA)
- Presidential Infrastructure Development Fund (PIDF).
- . Multilateral and Bilateral Loans/Grants(China EXIM Bank,European Investment Bank, Africsn Development Bank, World bank etc).
- **European Union, DFID (UK), USAID, and GIZ (Germany)**



OPPORTUNITIES FOR FUTURE COLLABORATION

- **Nigeria-Europe Road Research and Innovation Hub.**
- **Joint research projects** between Nigerian institutes (e.g., NBRRI) and European counterparts target:
 - Joint ventures for **asphalt plants** and **modular construction systems**.
 - Leveraging **Horizon Europe** and **Erasmus+** for transport R&D and education exchange.
 - Promoting **local content** through European contractors training Nigerian engineers and technicians.
 - Promoting the use of ground breaking technology from Europe in solving problems.
- **Infrastructure Financing Support**
- **Technical Assistance and Capacity Building**
- **Public-Private Partnerships (PPPs)**



THANK YOU FOR LISTENING

