

Date: 19 March 2025

Editor-in-Chief
Journal Innovative Infrastructure Solutions

Dear Editor,

Subject: Submission of Manuscript – *Sustainable Asphalt Innovation: Harnessing Treated Waste Cooking Oil for Enhanced Warm Mix Rubberized Pavement*

I am pleased to submit our manuscript titled “*Sustainable Asphalt Innovation: Harnessing Treated Waste Cooking Oil for Enhanced Warm Mix Rubberized Pavement*” for consideration in the Journal Innovative Infrastructure Solutions. This study explores the utilization of treated waste cooking oil (WCO) as a sustainable and cost-effective warm mix asphalt (WMA) additive, particularly in rubberized asphalt mixtures modified with cup lump rubber (CLR). Given the growing emphasis on environmentally friendly construction materials, this research presents a viable alternative to conventional WMA additives, offering both performance enhancement and sustainability benefits.

The study evaluates five asphalt mixtures, including conventional hot mix asphalt (AC14), CLR-modified asphalt (CMA), and three WMA variants incorporating WCO (AC14+WCO, CMA+WCO) and a commercial WMA additive (CMA+CX). Performance assessment was conducted through resilient modulus, dynamic creep, indirect tensile strength, moisture susceptibility, and Cantabro loss tests. These results suggest that WCO-modified WMA mixtures provide a viable, cost-effective, and environmentally friendly alternative to commercial additives, ensuring durability and enhanced mechanical performance for sustainable pavement construction. Given the scope and significance of our findings, we believe that this manuscript will be of great interest to researchers, practitioners, and policymakers in the field of transportation engineering and sustainable infrastructure development.

We confirm that this manuscript has not been published or submitted elsewhere for consideration. All authors have approved the submission and declare no conflicts of interest. We sincerely appreciate your time and consideration and look forward to your feedback. Thank you for your kind attention, and we look forward to the possibility of contributing to your esteemed journal. Thank you for your time and consideration.

Sincerely,
Mrs. Roziawati Razali (PhD)