## World Academy of Science, Engineering and Technology International Journal of Materials and Metallurgical Engineering Vol:17, No:07, 2023

## The Use of the Steel Aggregate and Procedures for Application on Rural Roads to Improve Traffic

Authors: Luís Felipe da Cunha Mendonca

**Abstract:** Normally, rural roads do not have any type of coating, and when they have any coating, they have a high maintenance cost due to the characteristics of natural materials. The Steel Aggregate has specific technical characteristics, which considerably reduce the maintenance costs of rural roads with the execution of the Primary Coating. For use as a primary coating, it must be mixed with clay due to the physical-chemical properties of the material. The application is mainly in the Primary Coating of rural roads due to the cementitious property in the presence of water, offering greater resistance to wear caused by traffic and consequently a longer useful life of the coating. The Steel Aggregate executed on rural roads has reduced particulate emissions and offers normal traffic in any weather condition, as well as creating sustainability. Contribute to the quality of life of communities through improvements in the conditions of rural and urban unpaved roads. Leading to substantial savings in maintenance. Because the durability, if applied correctly, is about 3 years, but if annual monitoring is carried out, it can be extended for more than 5 years.

**Keywords:** steel slag, co-product, primary coating, steel aggregate

Conference Title: ICSMTME 2023: International Conference on Secondary Metallurgy Technology, Methods and Equipment

**Conference Location :** Paris, France **Conference Dates :** July 10-11, 2023