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**THE PRODUCTION OF CEMENT VARNISH AS A SUBSTITUTE FOR  
TILES IN FLOOR PROTECTION AND POLISHING**

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**ABSTRACT**

This research explores the feasibility of producing an eco-friendly, cost-effective varnish using soybean oil and lime juice for responsible replacement of traditional flooring tiles. This research also touches the topic of green building materials with respect to growing demand due to heightened costs and environmental considerations. The purpose of this project is to develop such a cement varnish that will have durability, beauty, ease of use, and environmental concerns altogether. An item by item detailed procedure for cement varnish preparation has been discussed: preparation of raw materials, mixing, additives addition, aging, filtration, and application, with a special fine point that careful measurement is to be ensured along with proper mixing techniques in order to achieve the given specified uniformity and quality of the end product.

It also discusses the main potential benefits of using the cement varnish-cost savings, environmental sustainability, and design versatility-but asserts that the main disadvantage is water resistance and durability relative to other forms of tiles. This study intends to access the sustainability aspects of building possibilities by presenting a feasible alternative for the

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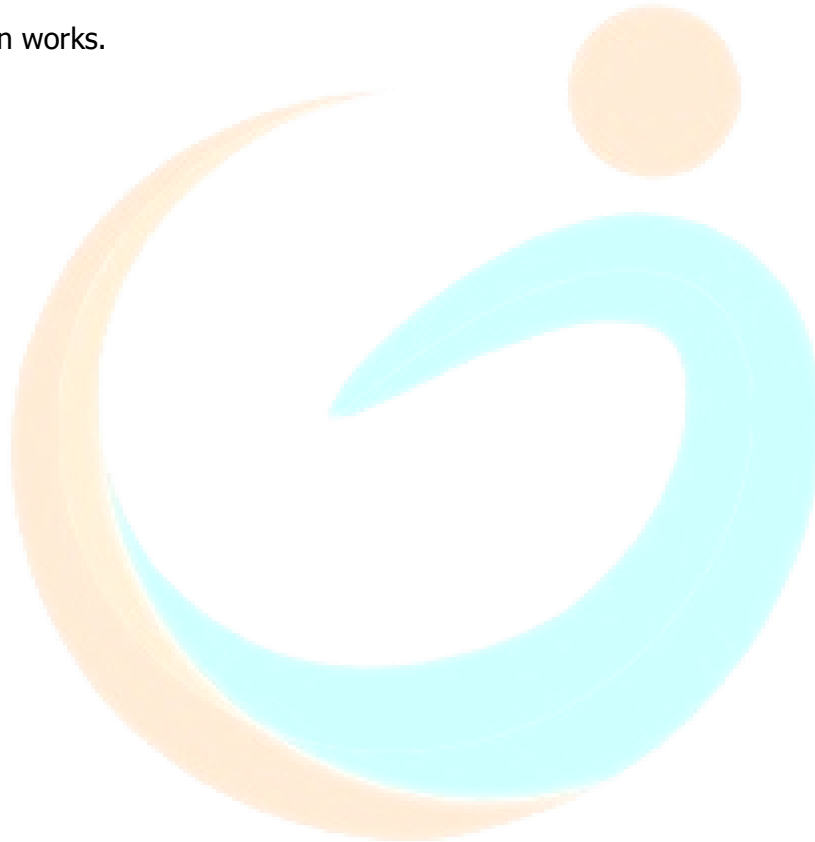
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sole purpose of polishing and protecting the floor. The research exercise formed part of student researchers' studies with collaboration from civil engineers, indicating the possibility of interdisciplinary exchange in such sustainable development challenges. The findings of the research may therefore support future developments and drive towards green materials within construction to evolve on a greener and more responsible trajectory for built environments and restoration works.



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