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TITLE OF PROJECT: **EXPERIMENTAL STUDY ON PARTIAL REPLACEMENT OF FINE AGGREGTE BY SAW DUST**

NAME OF ALL AUTHORS: *MAYUR VISHAL SHENDE , SANUSH SURENDRA BHATKAR , RUPESH RAVINDRA BADAVE , PRASHANT JYOTIRAM JADHAV*

NAME OF YOUR MENTOR: *Prof. B. M. MALAGIMANI*

NAME OF YOUR COLLEGE: SVERI's COLLEGE OF ENGINEERING , PANDHARPUR

ABSTRACT (150-300 words):

This experimental investigation focuses on formulating a concrete mixture that incorporates sawdust as a substitute for fine aggregate. The study aims to comprehensively analyze the impact of sawdust concrete, specifically in terms of workability and adhesion of aggregates. Following the preparation of concrete blocks, a crucial aspect involves assessing the weight differential between the original concrete and those incorporating sawdust.Various proportions of sawdust (0%, 6%, 8%, 10%) are systematically blended into the concrete, replacing the fine aggregate. Subsequently, a series of tests are conducted, encompassing evaluations of both fresh and hardened concrete. Preliminary insights from the study suggest a potential decrease in both density and compressive strength in correlation with the percentage of sawdust integrated into the concrete matrix.The versatility of sawdust as an aggregate emerges, demonstrating its potential applicability in diverse contexts, including non-structural lightweight concrete and structural concrete. This research provides valuable insights into the feasibility of utilizing sawdust as a sustainable alternative in concrete formulations, paving the way for environmentally conscious construction practices.

KEYWORDS: RCA - SAWDUST, LIGHTWEIGHT CONCRETE, WASTE UTILIZATION, CEMENT, FINE AGGREGATE

CATEGORY: CONCRETE TECHNOLOGY AND BUILDING MATERIALS