

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 4, June 2023

Development and Optimization of Process Parameters of Microwaved Cured Polymer Based Natural Fibre (Coir) Reinforced Composite

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Abstract: Now a days the processing of natural Fibre reinforced polymer composite through microwave curing going on a fortunate step for better properties. It has been observed that the application of NFRPC is increasing day to day. Due to their low cost and light weight that type of composite is applying at various light load capacity areas. Processing of NFRPC depends on a large no. of factors. Due to practical constraint 3 domen parameters were considered during experimental investigation. The value of the parameter was selected on the basis of material characteristics and experimental available in the Laboratory. Design of Experiment were used for planning the experiments. Optimum process parameter was determined for improvement ultimate tensile strength. The selection of optimum parameter was assured by mechanical testing as well as microscopic structure. Processing of composite by using optimized parameters resulted in improvement in tensile strength by 3 %. Science.

Keywords: Scientific research, challenges, literature review

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