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MONTREE VARUKA : THE UTILIZATION OF FIBER FROM USED PAPER FOR  
PRODUCING FIBERGLASS. THESIS ADVISORS : SOMPONG THONGCHAI M.Sc.,  
CHUMPORN YUVAREE M.Sc., SUJIRA KHOJITMATE M.Sc. 147 p. ISBN 974-664-575-7

The purpose of this research is to study properties of used paper instead of Fiber Glass for producing Fiberglass Reinforced Plastic and analyze the physical and mechanical properties of reusing paper. This method gives added value for used material and decreases Fiber Glass's toxic stains on used paper in order to benefit industrial development. Three types of used paper, black and white paper, newsprint paper and kraft paper were used in this study. Each was used to make lined paper sheet. After that take it to test a paper's thickness, moisture, waste water and properties of tensile and impact in laboratory before producing Fiberglass Reinforced Plastic.

The result of utilization of Fiber from used paper for producing Fiberglass is the paper's thickness averaging 0.3 mm., moisture averaging 10.03 percent, BOD averaging 15.66 mg/l, COD averaging 41.33 mg/l, tensile averaging 11.89 Mpa and impact averaging 15.10 Mpa. It was also found that three types of used paper instead of Fiber Glass for producing Fiberglass Reinforced Plastic with statistical significance available 0.05.

Problems and recommendations indicated from this study are that the utilization of Fiber from used paper for producing Fiberglass in condition of low moisture for making good quality.