**Design And Analysis Of Domestic Windmill Blades**

**ABSTRACT**

The optimum twist of a windmill blade is examined on the basis of elementary blade-element theory. For a given wind speed and blade angular velocity, it is shown that the maximum power efficiency is achieved when the blade is twisted according to a program that depends upon the variation of the sectional lift and drag coefficients with angle of attack. Results for a typical airfoil cross-section show that the optimum angle of attack decreases from the maximumlift-coefficient angle of attack at the blade root to greater than eighty percent of this value at the blade tip. So we are design the blade using the catia v5 software and to find out the strength of material to be used for windmill project. To finding the strength of the material we are using ansys software. Optimization using Composite materials are used for Strength Calculations. Validate best Composition for given results.