A Novel Approach to Control speed of Brushless DC Motor using Fuzzy Logic Controller

Rahul Ganvir
Department of Electrical Engineering,
SGSITS, Indore (India)

Dr. Sandeep Bhongade
Asst. Prof. Department of Electrical
Engineering, SGSITS, Indore (India)

Abstract – **DC drive systems are often used in many industrial applications such as robotics, actuation and manipulators. The purpose of this research work is to control the speed of Brushless DC (BLDC) motor by using fuzzy logic controller (FLC) in MATLAB / SIMULINK model. The scopes includes the modelling and simulation of Brushless DC motor, application of fuzzy logic controller to actual DC motor and to compare with the Proportion Integral (PI) Controller model. This examination is going to present the new capacity of assessing speed and control of the Brushless DC motor. By utilizing the FL controller, the rate can be tuned until it get like the desired output that a user wants.**

Keywords – **Brushless DC motor, Fuzzy Logic Controller, PI Controller MATLAB.**