Abstract
This paper presents the design and simulation of a fuzzy controller to control the speed of a three phase induction motor based on the proportional derivative control architecture. The first part of the paper is aimed at examining the characteristics of motor-inverter systems in order to obtain the expertise necessary to implement the fuzzy controller. In the second part through the FIS computational tool MatLab®, the controller is designed and a simulation is carried out taking into account the implementation of various tests on the system. Finally a comparison was made with previous work done on this topic with the corresponding conclusions.

Keywords
Three phase induction motor, fuzzy speed control, PD, VSC.