ABSTRACT

Temperature can affect humidity. The interaction between temperature and humidity also directly affects human health and well-being. Relative Humidity (RH) of air is an indication of how much water vapor is in the air at a certain temperature compared to how much water vapor the air can actually hold at that temperature. This research discusses the prototype of a humidifier control device. Fuzzy Sugeno logic is applied to overcome uncertainty and complexity in sensor data decision making. The DHT22 sensor is accurate in detecting temperature and humidity, with an error value not exceeding 10% in each experiment. The MQ-135 sensor can detect pollutants from several experiments that have been carried out. Testing the implementation of 9 rule bases taken 4 data for each rule shows the success rate indicates high accuracy with an average value of 91.66%, it can be concluded that the fuzzy program made is fairly effective, fan speed and mist maker function properly and telegram notifications can provide warnings if the air quality in the room is not good.

Keywords *: Control System, Notification, Air Humidifier, Indoor Air Quality, Internet of Things*