

ABSTRACT

The main point in this work is the parametric estimation of Electrospinning setup by the fuzzy analysis in MATLAB. As electrospinning defined a process in which manufacturing of fine nanofibers done. During the manufacturing of nanofibers, a process done in the presence of an electrostatic force (few micro to nanometers in diameter). Electrospinning setup involves the human interference therefore it operates with the specific function. During its performance on auto mode, it perform some particular complex type series actions where computer programming involves as an autonomous. Two inputs and two outputs are considering in the simulation process as first input is voltage and its corresponding output is flow rate while in the other hand second input is distance and its co-related output is diameter. These input and output relations represents in such a way like how much flow rate is needed to flow is depend on the voltage. Likewise, how much diameter is required is also depends on the applied voltage. By increasing the applied voltage, flow rate first increases then reach in constant state and after that flow rate decreases by the increasing of applied voltage. In the case of distance and flow rate combination which expressed as when the distance increases flow rate first reach in constant state then decreases by the increasing of distance. For calculating the error, comparison required between the simulated and theoretical values.