

## **ABSTRACT**

*The fuzzy method is one of the model methods that can be used to control the system of light and contrast settings. The objective of this research is to apply fuzzy logic in automation system light and contrast and to describe the accuracy level in energy saving. The process involves adapting light in the room with electronic devices automatically based on outdoor light conditions using the LDR. Where the bright of dim lights are adapted by the light that is outside the room. Control of fuzzy logic is done by using Microcontroller Arduino. The input process is by fuzzy logic and controlled by Arduino so as to produce the desired output.*

**Keywords :** *Automatic Lighting, Fuzzy Logic, Roof Awning, Arduino, LDR sensor, Lamp Dimmer.*