

SRI RAMAKRISHNA INSTITUTE OF TECHNOLOGY

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AUTOMATIC WASTE SEGREGATOR WITH IOT BASED GARBAGE MONITORING SYSTEM

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SYNOPSIS

The Automatic Waste Segregator is used to sort the trash into metallic, wet and dry type so as to recycle them separately. The proximity sensor gets activated while dumping the waste inside the flap and conveys the same to the Arduino. Waste slips over the slope and falls on the sensors. The sensors which are placed in the trash can detect whether the waste is metallic, wet or dry waste. For the final segregation, DC geared motors are used. The motor changes a circular base with separate container for each waste and rotates according to the suitable wastes. For the garbage monitoring system, Ultrasonic Sensor is installed at the top of trash can and will measure the availability of space in the trash. If the space is less than this threshold value, a message will be sent to the connected phone as "Basket is full" with trash identity number so that it can be emptied by proper arrangements. NODEMCU ESP8266 is the Wi-Fi module which is used to connect the arduino and shows the output in a BLYNK application which can be viewed in our smart phones. This kind of a project, if implemented on a large scale will help to maintain the cleanliness of the city.