Design and Development of a prototype for simplified separation of plastic waste

Abstract:—

With the rise of sensor technology, robotics and automation there is a new era of waste disposal management systems applied in variety of applications in the recycling and waste processing industries. Due to the rise in urbanization, there is a vital need for waste management.

The technological growth and innovation can contribute to achieve environmental sustainability. There are many compelling reasons for choosing these approaches. To manage the waste, automatic sorting systems are needed to be developed on the lower level as well as higher levels.

This paper presents an effective waste management system which is helpful in sorting plastic and metallic waste by using sensor technology. We discuss a new way of disposing the waste in household areas and in workplaces.

The robotic arm and the sensor technology are used for the detection and identification of different types of wastes. An effective system is built for separation and providing information to the authorities concerned.

Block Diagram:-

