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(57) Abstract :

Climate change has been of great concern of late. The harmful effects are the resultant of man-made objects which directly affect the environment. A major concern is the marine debris that has decreased the pleasant feeling which is essential to attract tourists and has also great damage to marine life. In this regard, this robot is designed to move around the beach using wireless commands, collect the sand along with debris and clean it using sifting mechanism based on density principle. The waste settles on a mesh, leaving out the soft sand on the beach. The collected waste is manually taken into a container. The moving mechanism is driven through relays interfaced to a microcontroller chip. The sand lifting mechanism, constructed with chain sprockets and the chain mechanism firmly attached to the stable mechanical structure and along with rotary mechanism will be fixed permanently to the chassis of moving structure