PLASMA DISPOSAL OF PLASTIC WASTE AND GENERATION OF SYNGAS FOR POWER GENERATION

BRIEF DESCRIPTION:

The rapid rate of worldwide urbanization has led to increasing plastic waste generation. This increase has resulted in a large amount of plastic waste, particularly plastic bags and PET bottles, being littered on land filled. To address this problem a new technology has been developed for volume reduction of the waste streams through plasma pyrolysis resulting in by-product syngas which is a clean fuel

Salient Features: The bricks and building material obtained by this process have

Uniform gasification, Offers a single step treatment
Complete destruction of plastic waste
Reduce the need for landfill
Safer disposal of plastic waste

Advantage:

Energy recovery system- contributing saving of resources
Provides volume reduction of the waste streams
The extreme high temp. of plasma kill stable bacteria
Provide electricity to power the process
Supply excess electricity for sale
Formation of complex molecules , such as dioxins, is prevented
Reduce the need for landfill
Supply excess electricity for sale

Scale of development: Commercialized

