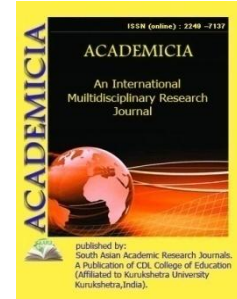




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**PLASTIC SOLID WASTE RECYCLING: A STATE-OF-THE-ART  
 ASSESSMENT AND POTENTIAL APPLICATIONS**

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**ABSTRACT**

*Plastic solid waste (PSW) of polymers such as high density polyethylene (HDPE), low density polyethylene (LDPE), Nylon, and others) is posing new difficulties, which are significant research concerns in today's situation. Production of various goods made of various plastic materials has increased dramatically. This massive rise in plastic goods has resulted in increased trash production, posing new problems. Some studies have published findings in the area of PSW management using various recycling techniques. This article summarizes the numerous research projects undertaken by researchers in the area of recycling, as well as the progress made in the recovery and management of PSW using various methodologies (i.e. primary, secondary, tertiary, and quaternary) and various identification/separation approaches. This study also looks at how various reinforcements, such as sand, natural fiber, hemp fiber, metal powder, and others, affect the characteristics of virgin and recycled HDPE/LDPE/Nylon PSW.*

**KEYWORDS:** *Plastic Waste, Plastic Trash, Polymers, Recycling, Solid Waste.*

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