A Novel Corrosion Resistant Composite Material Developed from LPDE Waste Plastic and GGBFS(Ground Granulated Blast Furnace Slag)

Padma, Swasthik

I have found a novel, Eco-friendly and cost effective material from LDPE waste plastics and GGBFS (ground granulated blast furnace slag). Plastic waste management is the most discussed topic of the present world as the accumulation plastic waste in the environment causes serious environmental pollution. The composite is made by mixing the granulated LDPE waste plastic with GGBFS in the proportion of 60:40 and extruded. The obtained granules are used in the different molding techniques based on its applications. My project involves the complete analysis of Mechanical, Thermal, Micro structural (SEM), anti corrosive properties and the applications of the composite. Based on the above analysis it has been proved that this is the best material developed from LDPE waste plastic and GGBFS composite.

Awards Won: