

Research on Eco-Sustainable Recycling of Industrial Wastes

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Abstract : In Romania, billions of tonnes of wastes are generated yearly, an important amount being stored within industrial dumps that covers high soil areas and affects the environment quality, especially of ground and surface waters. Landfill represents in Romania the most important way for wastes removal, over 75% being generated every year, the costs with the dumps construction being considerable. In most of the cases, the wastes generated mainly by the energy industry, oil exploitation and metallurgy, are still considered wastes with NO-use, and their removal and neutralization represent for transport, handling and storing, high non-productive expenses which raise the cost of the useful products obtained. The paper presents a recycling idea of three types of wastes in order to use them for building materials manufacturing, by promoting ECOWASTES LIFE+ project, whose aim is to demonstrate that the recycling of waste from energy industry (coal combustion waste), petroleum extraction (drilling mud) and metallurgy (steelmaking slag) is technically feasible.

Keywords : fly ash, drilled solid wastes, metallurgical slag, recycling, building materials

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