

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY
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**A
PROJECT REPORT
ON**

**“NEUTRALIZATION OF LEACHATE BY LOW COST
MATERIALS”**

*submitted in partial fulfillment of the requirements for the award of the degree
of Bachelor of Engineering in **CIVIL ENGINEERING***

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ABSTRACT

Landfill leachate are defined as those aqueous streams generated as a consequence of rain water percolation through wastes, biochemical processes in waste's cells and the inherent water content of wastes themselves. The generation of municipal solid waste grows exponentially in urban society as a consequence of population growth, concentration of population in urban centers and new patterns of consumption. One of the main problems generated by this common practice is the production of leachate. It is a very complex wastewater containing different heavy metals, organic and inorganic compounds, some of them refractory and toxic that possesses colour and odour.

There is lack of development of leachate neutralization in its proper perspective and now the piled-up waste is threatening our health, environment and well being. Therefore neutralization of leachate is essential before its disposal. There are several methodologies available for neutralization of leachate which is uneconomical so we are going for economical solution.

Electrochemical methods can offer an elegant contribution towards environmental control as electrons provide a means of removing pollutants by redox reactions. Electrochemical methods are based on anodic and cathodic reduction of impurities present in waste water. In the process of electrochemical oxidation the main aim has been to convert oxidisable species into carbon dioxide which can be left off safely into the atmosphere.