

Electronic waste (E-waste) is emerging as a unique waste stream which has drawn a lot of attention globally, and also in the Indian context, in recent times. This is a waste stream sector that is growing exponentially. This huge growth of E-waste is being managed in an informal way in developing countries, and even developed countries are facing trouble in managing this huge volume of E-waste that is being generated. E-waste contains various heavy metals and precious metals (electronic spare parts) and when they are discarded into water, air or soil, it eventually affects the livelihood and our environment.

The newer technologies can help in recovering the precious and rare earth metals which have a good value, and with this, there can be a drastic change in sustainability in the waste management sector, and can also help in providing economic and social benefits. Our project focuses on the extraction process of the precious metal (gold) from the PCBs of old mobile phones using aqua regia (HCl+HNO₃), and the experiment regarding this will be carried out, considering the necessity of recycling and E-waste management in the near future.

Features:

- Minimizing E-waste generation in urban areas
- Reducing Leachate effect, thereby eliminating groundwater pollution
- Reducing the incineration process, and thus saving cost and energy



04 PROJECT

RECOVERY OF
GOLD METAL
FROM PRINTED
CIRCUIT BOARDS
OF OLD MOBILE
PHONES

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