

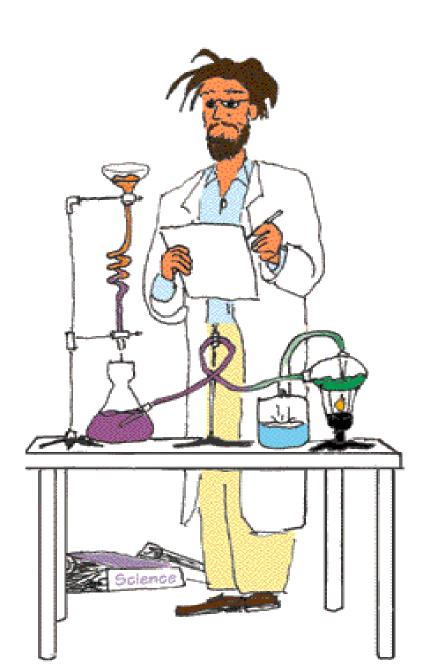
Recovering Citizenship-Recycling Resources

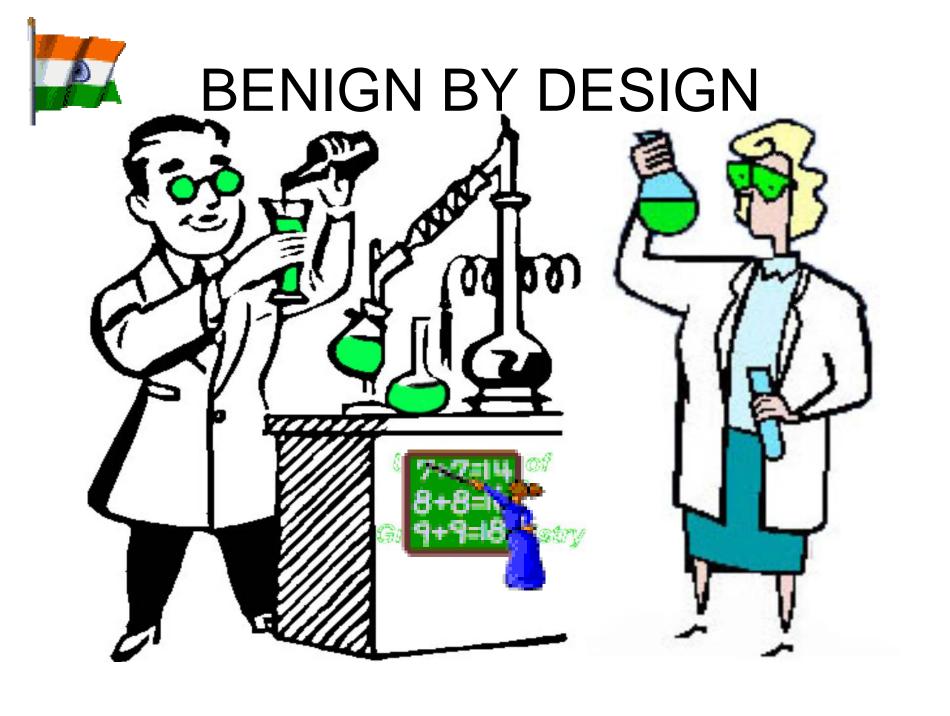
- Sending out our young chemists, with appropriate training
- improving students' understanding of their role in society as chemists.
- Through service learning students develop a civic professionalism

Why Chemistry?

First, chemistry, as the central science, is uniquely positioned to serve needs in the community.

Service learning and chemistry are a natural pair.





What is Green Chemistry?

Benign Disposal

Recycle/Re-use

Reduce - Chemical usage Energy usage

Replace - Hazardous materials, processes Inefficient processes Non-sustainable components

'Recyclable' symbols





The symbols to the left represent two variations of the original recycling symbol. The upper symbol in outline form is accepted as the traditional, or universal recycling symbol while the lower one was a modification. Paper products typically display the outline form, often with lettering such as- 'This product can be recycled' or 'Recyclable'. When identified with one of the symbols, products, containers or packaging materials are referred to as recyclable products, or products that are able to be recycled. A product marked with either symbol can be recycled if the regulations and/or ordnances of the local community provide for its collection. Although the symbols are used on products distributed nationwide, the laws governing collection of these products for the purpose of recycling are determined locally and vary widely from locality to locality.

'Recycled' symbols



A product, which may be a container or package, marked with this symbol was manufactured with at least some materials that have been recycled. Generally, additional information is conveyed with the symbol such as- 'Printed on recycled paper'.



When a percentage is indicated within the symbol, that percentage of the product has been made from recycled materials.



The flakes and pellets of cleaned postconsumer recycled PET are in heavy demand for use in spinning carpet yarns and for producing fiberfill and geotextiles.







The southern end in the garbage dump;



Mega constructions that reclaim the marsh.

PET Waste: A new environmental problem

Indiscriminate disposal of Polyethylene tetraphthalate (PET) bottles used in the packaging of soft drinks and drinking water is an emerging environmental problem in Chennai and its adjoining areas.

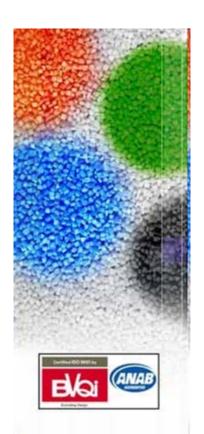
Statistics reveal that in Chennai, the total amount of PET bottles generated is about 140 tonnes per month. No proper unit for the recycling of PET bottles existed.

The process of recycling followed an unscientific method that ends up in unauthorised bottling by unscrupulous people.

FUTURA POLYESTERS LTD Works:

1, Kamarajar Salai, Manali, Chennai - 600 068, India







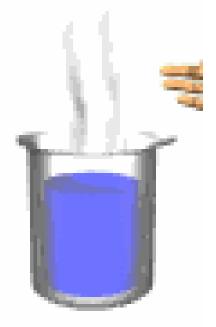




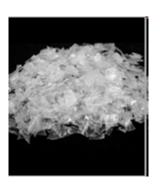












Department of Chemistry to carry out Service Learning Programme with the following aims:

i. To ensure that the waste PET bottles are recycled and used for the manufacture polyester fibre instead of being dumped in the wetland ecosystem.

ii. To formalize the recycling process ensuring health protection to recyclers.

iii. To recover the citizenship for the recyclers so that they become eligible to get social welfare schemes of the government.

students realized that waste management is not solely about technical solutions to waste disposal but is more so about social and environmental concerns.

4They introduced co management of recyclables, which will assert the participation of organized recycling groups and the public in waste management.

Hence a bottom up initiative involving neighbourhood community in recycling

THREATS:

- There is an increasing trend towards privatization of this sector.
- dominance of large-scale enterprises and multinational corporations controlling this sector.
- prioritize incineration and landfill as waste management techniques.
- developments may have serious effects on the informal recycling sector.



sustainability of the programme- issues to focus on:

Inclusion: formatting inclusive waste management programmes with organized recycling groups facilitating their articulation.

Equity: guaranteeing fair pay and social benefits for the service of resource recovery and assuring gender equity.

Eco-health: addressing all levels of health from protecting the health of the workers to improving environmental health.

Eco-efficiency: reducing waste at the source, introducing co-responsibility for producers and consumers and intensifying resource recovery.



