YES PROGRAMME

RUBBER TILE TECHNOLOGY

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INTRODUCTION

AIM:-

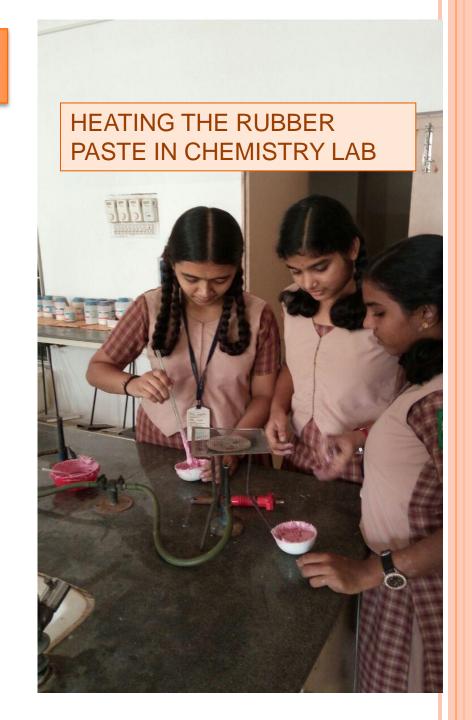
- To protect, conserve and save the environment.
- Rubber waste is non-biodegradable. It also harms the environment and the living beings adversely. So, it becomes essential that we reuse and recycle rubber waste to produce necessary and useful products.

MATERIALS REQUIRED:-

 Rubber waste(erasers), winter green oil, metal plate, scrap steel pieces, syringes, blower, wooden block, screw, glue gun, connecting tubes, tube connectors, mould, Bunsen burner, containers, tray, hand drill,

THE RUBBER PASTE

- The rubber is cut into small pieces.
- It is soaked in winter green oil overnight to soften it.
- The pieces are then blended using a hand drill.
- The paste is a semi solid.
- The soft paste is then heated on the Bunsen burner to dry it and harden it.



CONSTRUCTION OF HYDRAULIC PRESS

- Scrap steel pieces are welded together and attached to a wooden block using screws to make the stand.
- 6 syringes are inverted and attached together and stuck to the centre of the stand using glue gun.
- The syringes are connected to the blower using tubes and connectors.
- A metal plate is stuck to the base of the set of syringes to make the press.
- All the air spaces are blocked using fevi-kwik and M-seal.

WORKING

- The rubber paste is poured into the mould.
- The mould is kept on the wooden block right below the metal plate.
- Water is partially filled in the tubes.
- When the blower exerts a pressure, the syringes push the metal plate downward.
- Pascal's law is used in the press.

PASCAL'S LAW:- A change in pressure at any point in an enclosed fluid at rest is transmitted undiminished to all points in the fluid.

- The metal plate then compresses the mould into a rigid structure.
- It is then frozen for a few hours to harden.
- The tile is ready.

ADVANTAGES

- One of the best way to reuse rubber waste, conserve the environment and fulfill the needs of urbanization.
- Rubber is slip resistant, non conductive, durable and also a good absorbent.
- Natural resources are saved for future.
- Low maintenance is required.
- Rubber is also sound absorbent. It's natural elasticity can also reduce noise from walking and rolling carts by up to 18 decibels.
- Efficiency of hydraulic press is higher.

THANK YOU!!!!