



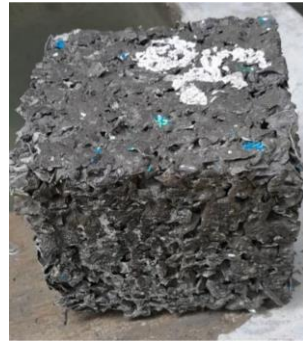




Product Development

| Sr. No | Title of Product | Name of Faculty | Description/Specification | Photos |
|--------|---|--------------------|--|---|
| 1 | Composite Brick by using Waste Materials | Prof. S. R. Patil | Composite bricks are made up of waste materials from industries and agriculture sectors. The composition of waste material of brick are spent wash, gypsum (fertilizer waste), fly ash and soil. These bricks possesses same properties like conventional brick but light in weight. |  |
| 2 | Low Cost Water Heater | Dr. C. P. Pise | This product is manufactured mainly with solar panel. It is cost effective product and can be used for heating water for various purposes. |  |
| 3 | Bamboo Reinforced Manhole Cover | Prof. A. A. Kamble | Bamboo was used as a construction material in early days. The main target of the study is to reimburse the conventional materials like steel by naturally available bamboo sticks. Bamboo proves to provide good reinforcement as it holds very good tension and compressive strength. |  |
| 4 | Pre-fabricated Bamboo Reinforced Concrete (Fencing Panel) | Prof. A. A. Kamble | Bamboo is perceived as a sustainable, quickly developing, and crude economic material. The investigation endeavours to legitimize selecting bamboo as an appropriate material for efficient and judicious development. Bamboo holds very good tension and compressive strength. |  |

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| 5 | Plastic Brick/ cube | Prof. A. V. Karande | Out of the total waste produced 15-20 % is synthetic materials, including plastics, and 60% solid waste. Plastic waste material can be used in the concrete brick efficiently. Usage of plastic in brick makes concrete light weight. Plastic is fibrous in nature, and the unique production process prevents air pockets from forming within the bricks which makes it sufficient durable. |  |
| 6 | Particle Board using sugarcane bagasse | Prof. A. V. Karande | Particle board is wood based panel product manufactured under pressure and temperature. In the manufacturing of this board agro based residue is used. Sugarcane bagasse, a waste product from sugar industry is used for manufacturing of particle board. The prominent objective is waste recycling and reduction. |  |
| 7 | Paver Block using tile & plastic waste | Prof. A. A. Kamble | The main objectives of usage of tile and plastic waste for manufacturing of paver block are environmentally friendly, cost effective, durable, maintenance cost is low, high load bearing capacity and thermal resistance. By using tile and plastic waste to manufacture paver blocks, we can create a product that is not only eco-friendly but also functional and visually appealing. |  |




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