

Design of Dust Emission to Avoid Air Pollution

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Abstract: Amounts of Industries in India have been recognized a sharply increase from year to year with the increment reaching to 42 % per annum. Meanwhile Machineries produce particulate emissions in different sizes with high concentrations depending on type of vehicles, fuels, and engine capacity. Motor Particle emissions are not only to significantly contribute the atmospheric particles but also adverse to human health. In order to reduce the particle emission, it is needed a filter. This study was aimed to develop a thin filter using coconut fibre to reduce particulate emissions for Machines. The filter was made of coconut fibres that were grinded into power and mixed with glues The filter was tested by the measurements of particle concentrations coming out from the vehicle exhaust directly and the particle concentrations after passing through the filter. The efficiency of the filter was calculated by ratio of the particle concentrations before coming in the filter to the particle concentrations after passing through the filter. The results showed that the efficiency of the filter obtained more than 30%. The efficiency increases sharply when a number of the filters are arranged parallelly

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