

Eco-Projects on campus include rainwater harvesting structures, Percolation ponds, Solar powered lights, solar panels on roof top of hostel, Herbal Garden, a Labrynth and a Vermin-Composting unit



LP GAS FIRED INCINERATOR: Disposal of napkins and biological wastes



Purchase of Particulate analyser -APM 550 sampler for measuring PM 2.5 particles



SERVICE LEARNING REPORT-DEPARTMENT OF CHEMISTRY Fine

Particulate analyser in Thathaneri



Filter paper before analysis



Filter paper after analysis

Analysis of fine particulate matter revealed the following:

Place	Weight of filter paper before analysis in g	Weight of filter paper after analysis in g	Time in hrs	DGM reading	Amount of particulate matter present in g	Concentration of PM 2.5 in $\mu\text{g}/\text{m}^3$
Lady Doak College(Front gate)	0.15980	0.16224	8	10.625	0.00244	229.64
Lady Doak College(Back gate)	0.15577	0.15667	4	3.759	0.00090	239.42
Goripalayam	0.15649	0.15756	4	3.850	0.00107	277.92
Periyar Bus Stand	0.16097	0.16217	4	3.950	0.00120	303.79
Thathaneri	0.16071	0.16126	4	3.778	0.00055	145.57

From the above table it is clear that the air is highly polluted with fine particulate matter in Periyar bus stand and Goripalayam. In Thathaneri, the presence of fine particulate matter is comparatively less. This may be due to the high amount of moisture and humidity present during the day of analysis. Also, there is not much movement of vehicles in Thathaneri. It is a

crematorium where pollution is expected mainly from burning of corpses. During the day of analysis, there was no such activity and this could also be one of the reasons for less fine particulate matter present there. Lady Doak College is situated in a highly densely populated area where motorized vehicles are used frequently. Hence there is high concentration of fine particulate matter.

Some recommendations were made based on our study to the people residing in those areas

- **Public mode of transportation:** People were encouraged to use more and more public modes of transportation to reduce pollution. Also car pooling can be done. Vehicles could be serviced periodically to check for the release of toxic gases.
- **Stop burning things:** Large amounts of pollutants are released when materials are burnt. These produce secondary particulate matter which has adverse health effects on humans. Also, large amount of fossil fuels are burnt to produce electricity. Environment can be saved from degradation by reducing the amount of fossil fuels. Hence people were advised to stop burning papers, plastic and other materials which could release harmful pollutants.
- **Reduce, Reuse and Recycle:** These concepts were explained to the people residing in those areas. They were asked not to throw away items that are of no use to them. In-fact to reuse them for some other purpose.
- **Emphasis on clean energy resources:** Clean energy technologies like solar energy could be used. Government has been providing grants to consumers who are interested in installing solar panels for their home which will go a long way to curb air pollution.
- **Use energy efficient devices:** CFL lights consume less electricity as against their counterparts. They live longer, consume less electricity, lower electricity bills and also help you to reduce pollution by consuming less energy.