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Indian Institute of Technology, Hyderabad

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REPORT

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Topic : Characterization of bioaerosols in indoor & outdoor environment

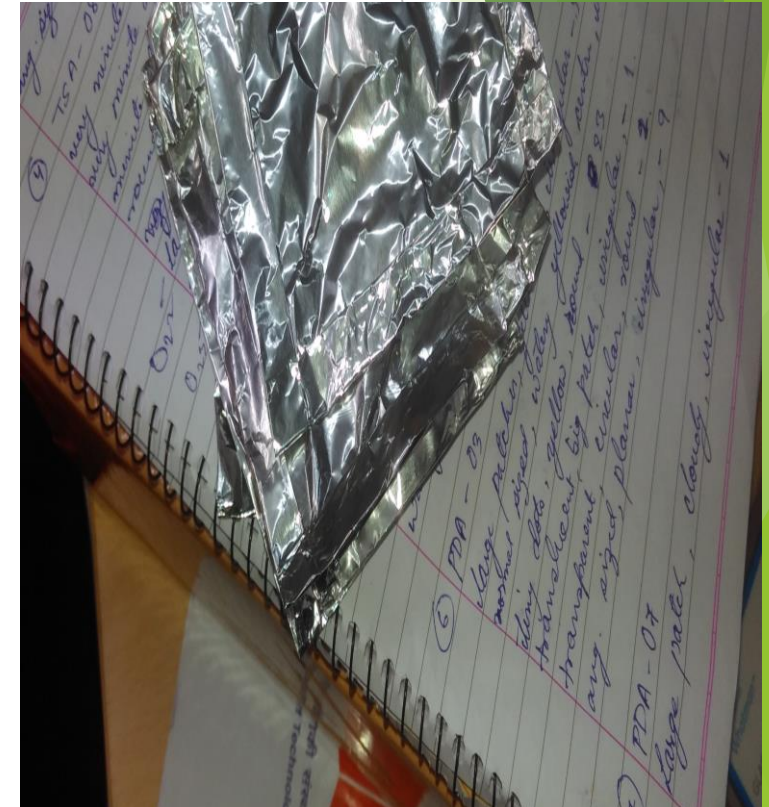


Characterization of bioaerosols in indoor & outdoor environment

Here I along with my mentor chose 50 houses in a village having more than 500 houses for the village survey of bacteria and fungi species as well as mercury content present in their indoor as well as outdoor environment.

We followed following steps to carry out the same :

1. Sampling : Filter papers were kept in muffle furnace at 250degrees for an hour for sterilization. TSA(Tryptic Soy Agar) for bacteria and PDA(P0) was mixed in proportion with type-1 water and autoclaved at 121degrees for approximately half an hour. Then plating was done.
2. Village survey : Here suction pump along with sampler and filter pump was used to suck the air in both environment. Temperature and humidity was checked. Lumex was used for mercury content measurement.
3. Counting colonies and Morphology : colonies of trapped fungi and bacteria was counted and based on structure morphology was done.
4. DNA extraction : This was the ongoing process in which colonies were extracted and placed in the centrifuge tubes mixed with different buffers and media.



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Thanks