

(iii) **Project title** : Development of air cleaner home textiles to reduce Indoor air pollution
(Sponsored by Ministry of Textiles, Govt. of India)

- Objectives** :
- Understanding nature of air pollutions in the indoor places using primary and secondary data and preparing research design
 - To evaluate various finishing chemicals/materials having characteristics to absorb/reduce air pollution
 - To select suitable fabrics and apply selected finishing chemicals using various techniques
 - To evaluate finished fabrics for various physico-chemical and performance properties
 - To take field trial of developed fabric in actual practice and modify, if required

- Research outcome** :
- Detailed information of the air pollutants present in indoor air using primary and secondary data has been collected
 - Identification of finishing chemicals required to reduce indoor pollution have been identified and procured
 - Application of various finishing chemicals on fabric has been done.
 - Trials of application of finishing chemicals have been done in large scale.
 - Studies have been completed with identified chemicals which were used in different concentrations.
 - Evaluation of treated fabric samples have been done for adsorption of air pollutant gases. Results have been encouraging.
 - An apparatus to determine Air Pollutant Gas Adsorption Capability of Fabric has been designed and developed and patent has been filed (Refer Fig. 16).
 - Project has been completed and report has been sent to Ministry of Textiles, Govt. of India.

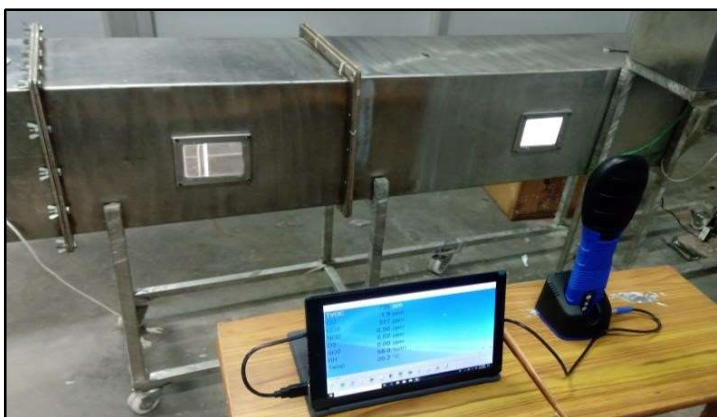


Fig.16: An apparatus to determine Air Pollutant Gas Adsorption Capability of Fabric