

VECC SAP Report for the period from April, 2022 to June, 2022

In tune with the year-long Swachhata activities, Swachhata Committee, VECC has taken the leading role in execution of a series of activities during the last few months under Swachhata Action Plan (SAP) and to contain the spread of COVID-19 pandemic. The VECC Swachhata activities are concentrated in all three campuses i.e. Bidhannagar, Rajarhat, Chakgaria campuses including the residential complex, Anusahakti Abasan, Salt Lake along with the neighborhood. Following works/ events were carried out during April, 2022 to June, 2022.

Tree plantation programme:

Awareness programme has been initiated among the VECC employees towards tree plantation and the sustainable development for the protection of our environment. The immunity garden as developed at VECC last year created huge impact to the common man in terms of their awareness on immunity, immunodeficiency and auto immune disorders especially during these tough times of covid pandemic. Tree plantation programme was organized on 16th June 2022, the foundation day of VECC in VECC Bidhannagar campus and MCF Chalkgaria campus. Director-VECC, Director-RRI, CMD-ECIL and a few senior scientists of VECC planted trees in presence of other staff members.



Beautification of campuses by using our own resources:

VECC Swachhata Committee had organized many social welfare activities in our community during the past few years by successfully conducting Swachhata Hi Seva campaign, Sramdan, campaign against single use plastic, Save Water campaign, Waste Management and Swachhata Pakhwadas. A beautiful wooden statue of Dr. Homi J. Bhabha by using the trunks of a 50 years old Mehgani tree, which was uprooted during the devastating cyclone, Umphan, in the eastern part of our country. The statue along with its foundation and the pathway have been installed / constructed in the MCF Chalkgaria campus and inaugurated by the Director, VECC on 16th June, 2022.



Before

MCF, Chakgaria Campus

On June 16,2022



Beautification and public awareness by painting of the external walls of VECC with the DAE / VECC achievements:

With the initiative of Director VECC, 10 number of outer brick wall panels of VECC have been painted with the scientific achievements of DAE / VECC to aware common people and students in simple way. Also, the look and aesthetics of the surroundings of VECC main gate have been improved by these wall paintings.



Wall paintings depicting DAE /VECC scientific achievements

Regular sanitization of different areas of VECC Bidhannagar campus mainly security, reception, canteen, tea pantry for maintaining personal hygiene:

VECC successfully conducted the safe work place drives as the employees of VECC were attending their offices at different campuses. In these drives, all the departmental vehicles, individual sections of COVID affected patients, all the common areas, dispensaries, security counters, library, canteen, tea pantries were sanitized on regular basis by in-house trained personnel. Regularly, different indoor and outdoor areas were sanitized using aqueous solution of activated hydrogen peroxide (49.9-51.1%) and silver nitrate (0.01-0.02%) for the surface and air space disinfection. Personal hygiene was strictly maintained by providing hand sanitizer, liquid soap, mask, gloves and PPE kits to the house keeping staffs, security personnel and sweepers on regular basis.

Response action of VECC Kolkata during COVID -19 pandemic

The pandemic COVID-19 had created an unprecedented global catastrophe during last two years. Along with other countries India also faced disruption of lives and economy during the pandemic period. The profound economic impact had affected thousands of families affecting trade and agriculture.

VECC had taken the active role in execution of a series of activities during the last two years to contain the spread of COVID-19 pandemic in our community in around VECC Salt Lake campus, VECC-DAE Rajarhat campus, MCF Chakgaria campus and Anusahakti Abasan Salt Lake. Following activities were undertaken to contain the spread of this virus.

1. Thorough sanitization drives of the entire common covered spaces inside the office

As per directives received from Government of India, officers and staff members were attending the office from



April 13, 2020, Monday. Directives were also been given to maintain all kinds of safety protocols in the work place to restrict the spread of the COVID-19 pandemic. COVID -19 transmitted in most instances through respiratory droplets, direct contact with cases and also through contaminated surfaces/objects as the virus survives on environmental surfaces for varied period of time. To contain the spread of COVID 19 pandemic and to enter into the new normal life, thorough sanitization drives of the entire covered common spaces of all the buildings within VECC Bidhannagar campus which includes security counters, stair cases, lobby, lifts, corridors, cyclotron high bay areas and exterior areas including all the departmental vehicles were done using aqueous solution of activated hydrogen peroxide (49.9-51.1%) and silver nitrate (0.01-0.02%) for the surface and air space disinfection by spray and misting through ULV (Ultra Low Volume).

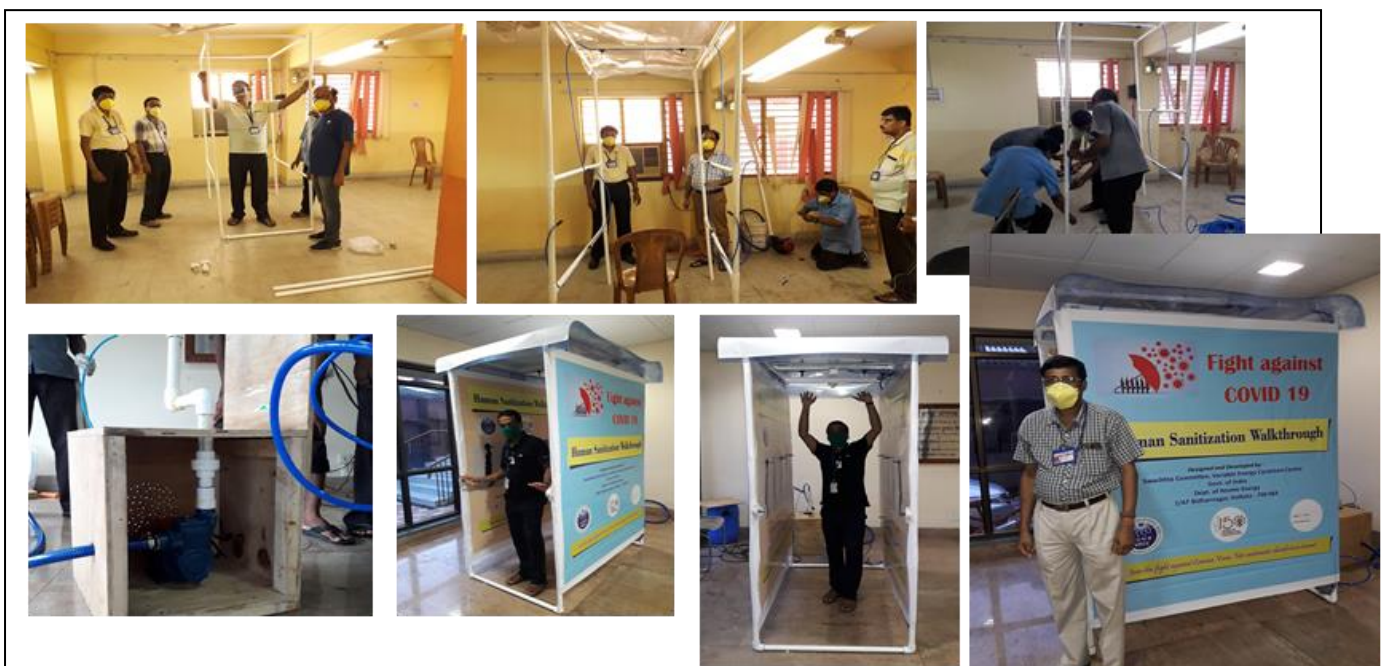
2. Ethyl Alcohol based hand sanitizers were distributed among all the officers, staff members and contractual personnel

As a part of the war against COVID 19 pandemic and to proceed towards a safe work environment, VECC Swachhta committee developed 80% V/V Ethyl Alcohol based hand sanitizer for distributing among all the officers, staff members and contractual personnel working in VECC Bidhannagar, MCFChakgaria, DAE Rajarhat and AnushaktiAbasan on daily basis during April 2020 to January 2022 as per the requirement.



3. Design and development of Atmega 2560 MCU based automatic sanitization walkthrough

A microcontroller based human body sanitization tunnel had been developed to generate Isopropyl Alcohol



(or equivalent) based sanitizing mist from 10 nos. of mist generating nozzles using a booster pump. Proximity sensors were used to detect the presence of the person inside the channel and spraying of the mist for 20

seconds (or preset values) for each person. System gave the mist inside a volume of 5ft walk way/ 7ft height / 3ft wide tunnel having total volume of 105 CFT. The cost of entire system had been around Rs.15,000.00 plus the running cost for consumables as required. The system had two hand sanitizing nozzles also at its exit.

4. Thorough sanitization of Anushakti Abasan in association with Municipal body

To contain the spread of COVID -19 pandemic in Bidhannagar, VECC supported to strengthen the hand of Local Municipal body to fight against the heart breaking realities resulting from ill-health and loss of life



affecting the residents of Anushakti Abasan and nearby areas by conducting regular thorough sanitization of during the lockdown period.

5. Regular sanitization of Departmental vehicles and different sections of VECC Bidhannagar campus along with other campuses and personal hygiene

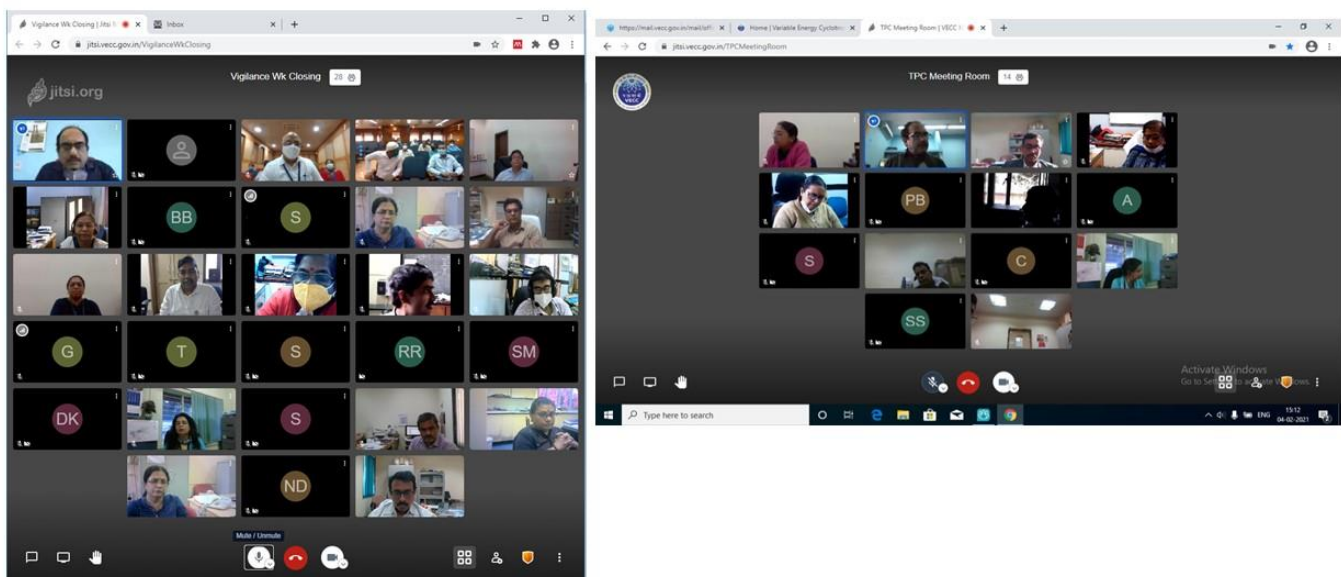
VECC successfully conducted the safe work place drives since the employees of VECC were attending



their offices at VECC Bidhannagar campus, MCF Chakgaria and Rajarhat campuses. In this drives all the departmental vehicles, individual sections of COVID affected patients, all the common areas, dispensaries, security counters, library, canteen, tea pantries were sanitized on regular basis by in-house trained personnel. More than 150000 CFT volume were sanitized regularly using aqueous solution of activated hydrogen peroxide (49.9-51.1%) and silver nitrate (0.01-0.02%) for the surface and air space disinfection. Personal hygiene was maintained by providing hand sanitizer, liquid soap, mask, gloves and PPE kit to the house keeping staffs, security personnel and sweepers on regular basis and the waste as generated to contain the spread of COVID - 19 were disposed off maintaining proper guidelines as defined by local municipal authority and MHA, Govt of India. Efforts were made to enforce social distancing, mask wearing, hand washing, individual temperature monitoring etc. among the employees, contractual workers and the visitors, if any, throughout the COVID period aiming towards a safe work place.



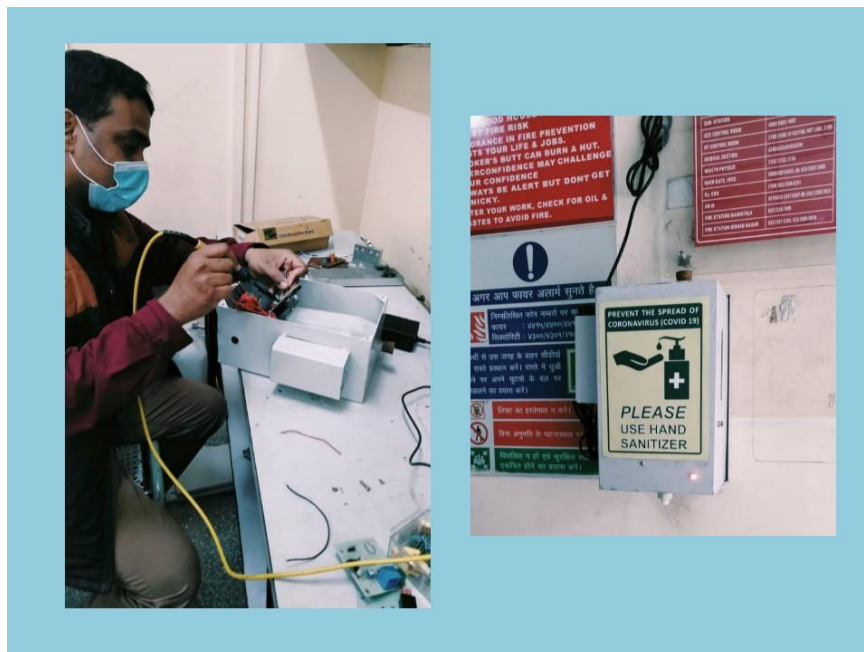
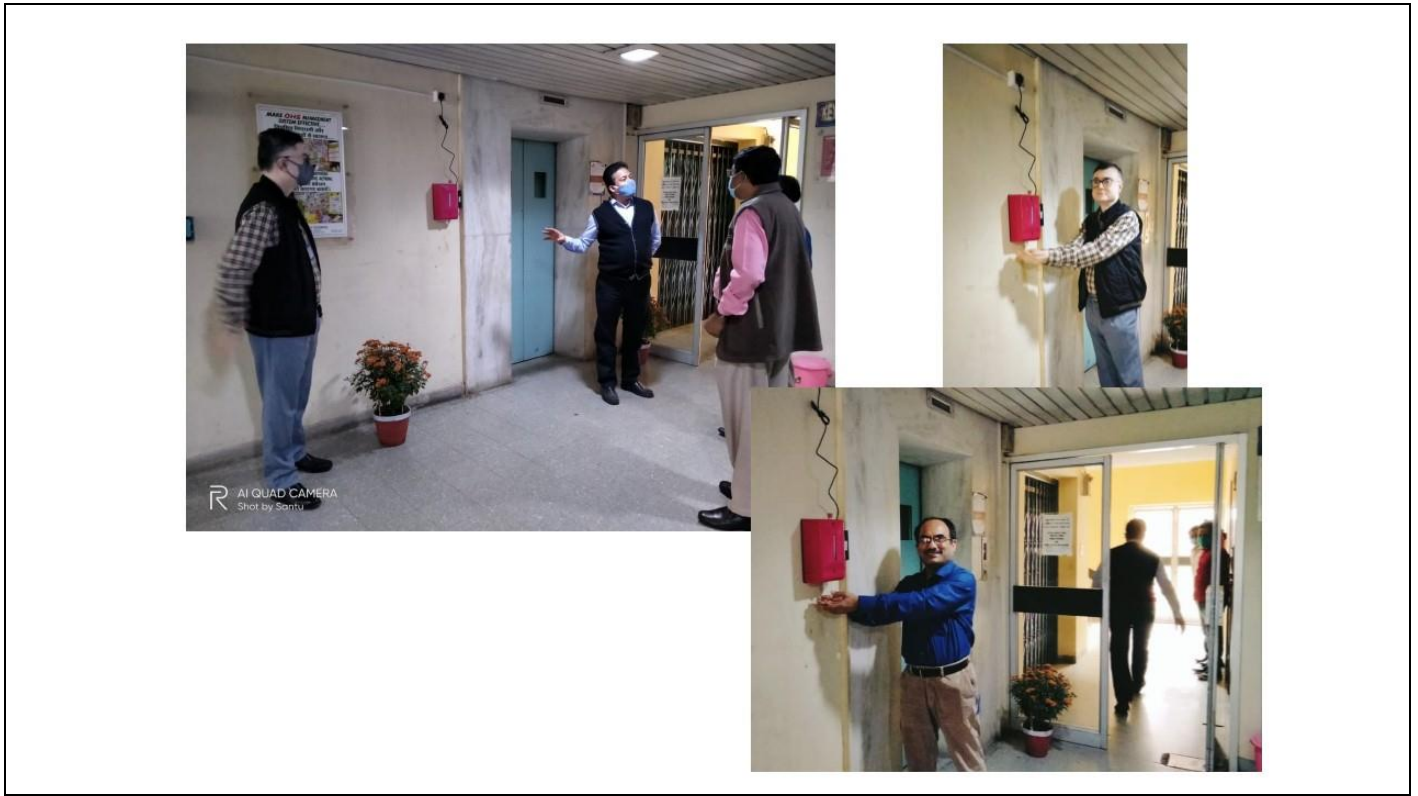
VECC was also conducting all the important meeting such as TPC, SPC, Works, Promotion interview, Peer Review meetings through video conferencing / web conferencing.



**E-Management for running the Centre smoothly during Covid period :
Vigilance Awareness Week closing ceremony & TPC meeting through web
conference at VECC were in progress**

6. Installation of automatic hand sanitizer units at various locations inside VECC campus

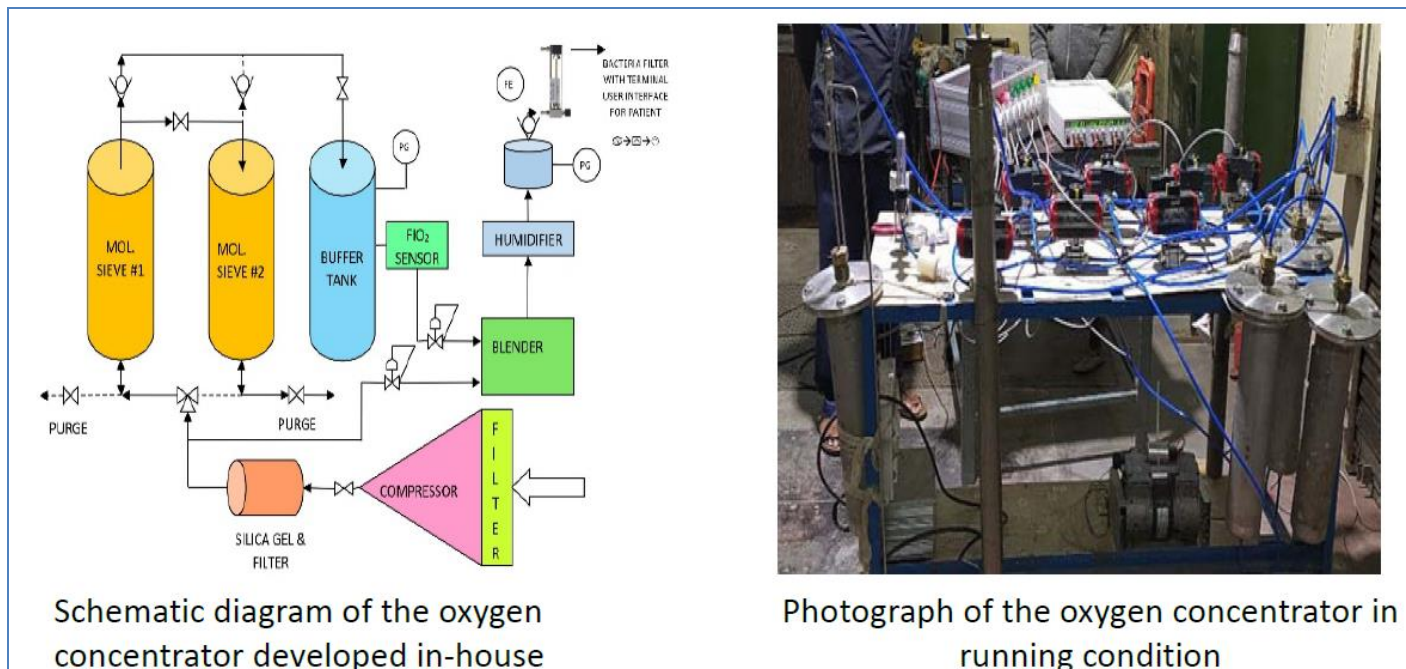
VECC had installed 22 nos. of sensor based automatic hand sanitizers at various public places within VECC campus. An effort had been made to develop these machines in-house and few had been installed at different locations.



Automatic Hand Sanitizer developed at VECC

7. Development of Cost effective Archetypal Noninvasive Ventilatory support system:

A cost effective archetypal noninvasive ventilator support system was developed based on oxygen concentrator pressure swing adsorption (PSA) principle with more than 90% oxygen at delivery pressure @2.0bar and flow rate @15lpm maximum.



8. Commendable work by Doctors and Health Workers:

Finally, all **medical doctors and associated health workers of VECC worked really hard** to take care of the employees and their dependant family members from the pandemic, even with consultation during the odd hours and helping them for hospitalization as well. The doctors and health workers are saluted for their commendable works.
