





#startupindia

विज्ञान एवं प्रौद्योगिकी विभाग DEPARTMENT OF SCIENCE & TECHNOLOGY





Office of the Principal Scientific Adviser to the Government of India







OVERVIEW OF THE CHALLENGE

ent for Promotion of Industry and Internal Trade Ministry of Commerce and Industry Government of India

- A challenge, 'Submit Solutions to combat COVID-19' was launched on the Startup India Portal. The challenge aims at scouting innovative technologies and solutions for precautionary as well as treatment-related interventions.
- The solutions were invited under 10 broad categories namely Personnel protective equipment, Testing Equipment, Critical- care equipment, Large area sanitization and sterilization, AI-based technology for contactless entry, Movement tracking, Geofencing, Crowd management, Fake news detection, and Logistics.
- The solutions received were evaluated by COVID-19 comprising of Biotechnology Industry Research Assistance Council, Department of Science & Technology, Department of Biotechnology, AGNIi, Office of the Principal Scientific Adviser, and AIM- NITI.
- This listicle contains details of all the shortlisted solutions by startups for COVID-19 by the Taskforce.







Note: The landscape does not represent the exhaustive supportive ecosystem for COVID-19 and have been prepared based on the research.







TABLE OF CONTENTS

RGE AREA SANITIZATION AND STERILIZATION
ADDVERB TECHNOLOGIES PVT LTD
WEINNOVATE BIOSOLUTIONS PVT. LTD
MAYURA ANALYTICAL LLP
NEO INVENTRONIX
JIVANAM INNOVATIVES PVT LTD
MARUT DRONETECH PRIVATE LIMITED
OMG INNOVTIONS LLP
MYLO SOLUTION PVT LTD
MYU VENTURES PVT LTD
SCITECH AIRON
BASED TECHNOLOGY FOR CONTACTLESS ENTRY
ARCTURUS BUSINESS SOLUTIONS PVT LTD
VISITY INFIUS EMBEDDED TECH LLP
DVEMENT TRACKING
HW DESIGN LABS OPC PRIVATE LIMITED

















ADDVERB TECHNOLOGIES PVT LTD

Details Of the Founders	Details Of the Product	Market Status	Support Needed
Name: Pavani Katuboyina Website: https://addverb.com/ Location: Uttar Pradesh	Product : UV Disinfectant Robot Target Audience : Hospitals, Quarantine Centers, Railway stations, Metro stations, Malls, and Schools	Startup Stage: Early Traction Price: INR 15 Lakhs Production: 4-5 robot per day	Logistical Support : Permission to open factories and custom clearance

- The Startup has developed a disinfectant Robot. The product is a combination of UV light technology on a mobile robot with intensity meter to disinfect large areas so that humans are not near the light or virus.
- The residence time can be controlled based on the nature of the surface, it can be much more effective in disinfecting the large area.
- The startup has used the best battery technology which enables the cleaning/ disinfection of several rooms before it needs to be recharged.
- Moreover, they have used fast charge technology so that robots can be in the business of cleaning again after 30 minutes of break. The Robot has been deployed in a quarantine facility in Noida.









WEINNOVATE BIOSOLUTIONS PVT. LTD.

Details Of the Founders	Details Of the Product	Market Status	Support Needed
Name: Milind Choudhari Website: www.weinnovatebiosolutions.com Location: Pune	Product : NanoAgCide Target Audience : Hospitals and Homes	Startup Stage: Validation Price: INR 100 for 100 ml Production: 500 Litres per day	License : They need assistance in getting CDSCO's Manufacturing License
 The startup has come up with a non-alcoholic, aqueous-based Colloidal Silver solution for disinfecting hands and environmental surfaces. Colloidal silver is a potent antiviral and has shown its efficacy against coronavirus. 			Nano Age Cid@

- In the current scenario where the virus spreads through surfaces (fomites), their solution, free from hazardous chemicals and having no risk of flammability compared to alcohol-based disinfectants, is need of the hour.
- They are ready for manufacturing.









MAYURA ANALYTICAL LLP

Details Of the Founders	Details Of the Product	Market Status	Support Needed
Name: Mayura Website: www.mayuraanalytical.com/ Location: Bangalore	Product : Ozone sanitization - works on surfaces, water, and air Target Audience : Offices, homes, hospitals and public spaces	Startup Stage: Scaling Price: INR 20,000 Production: 20 units per day	NA

- Ozone is known to kill 99.7% of all microbes including viruses.
- Ozone gas has been proven to kill the SARS coronavirus and since the structure of the new 2019-nCoV coronavirus is almost identical to that of the SARS coronavirus, it is relatively safe to say that it will also work on the new coronavirus.
- This could be a cost-effective large scale sanitizing process for industries, homes, public spaces with multiple applications for surfaces, indoor-air, and even water.
- This is also a Green technology as it doesn't need anything except electricity to run with no residue generated in the process.









NEO INVENTRONIX

Details Of the Founders	Details Of the Product	Market Status	Support Needed
Name: G S Sirisha Location: Hyderabad	Product : Germiban Target Audience : Hospitals, Quarantine Centres, Railways, Hotel, Airlines, Metro, Food Processing industries, etc.	Startup Stage: Validation Price: INR 60,000 Production: 50 units per day	Logistics : They need assistance in procuring raw material.

- GermiBan uses established & proven technology for hospital disinfection & sterilization of non-living devices with a triad of UV-C Lights, Ionizer and Ozoniser.
- Another added advantage is the provision of PM 10 & 2.5 free air through the HEPA filters attached. The Power Consumption is about 500 watts; and in operation, for an hour it consumes 1 unit of power but an average of 10 – 15 mins of operation of the device is recommended.
- Room area Coverage is about 25ft*30ft = 800sqft. The machine is 5ft* 2ft and weighs about 50 kgs. In the current scenario, mass disinfection tools that are chemical-free and easy to use are required.
- The device is chemical-free and partly automated, the devices help achieve almost 99.99% disinfection in hospitals and other mass utilized areas. The technology is being developed at the AIC-ALEAP WE-Hub (Supported by AIM, NITI Aayog, GoI).







JIVANAM INNOVATIVES PVT LTD

Details Of the Founders	Details Of the Product	Market Status	Support Needed
Name: Shravan Mutha Website: jivanam.net/ Location: Pune	Product : Sodium Hypochlorite disinfectant water generator Target Audience : Hospitals, Homes and Office spaces	Startup Stage: Early Traction Price: INR 3,000 Production: 1,000 units per day	Logistics : They need assistance in importing raw material

- Due to the current COVID situation across the country, there is a high demand for personal care products. Due to a shortage of its supply with no availability, there are current market rates are also higher.
- With this product, everyone can generate many disinfector liquids at their homes, offices as well as hospitals. Ingredients required for making these are also rapidly available.
- Currently, with this kind of product, it can generate Sodium Hypochlorite which can be sprayed to any place at larger surfaces and various spaces.
- This product will just generate a disinfector kind of liquid with a period of 10-20 min. As the product is made using MMO anode it can last for 3-5 years.









MARUT DRONETECH PRIVATE LIMITED

Details Of the Founders	Details Of the Product	Market Status	Support Needed
Name: Prem Kumar Vislawath Website: marutdrones.com Location: Hyderabad	Product : Marut Disinfection Spraying Target Audience : State Governments	Startup Stage: Scaling Price: INR 8 Lakhs Production: 6 units per day	Logistics: They need assistance in procuring raw material and custom clearance. Funding: They need funding support of 1.5 crores.

- Marut Drones has designed and deployed customized drones to undertake anti-mosquito operations. It has been working with Greater Hyderabad Municipal Corporation (GHMC) for antilarval spraying in lakes around Hyderabad for cleaner lakes and positive health outcomes.
- Further, these drones can be effectively used for spraying disinfectants in public spaces like airports, SEZS, warehouses, parks, railway stations, etc to disinfect them and stop the spread of the virus.
- These drones can carry up to 10 litres of disinfectant. Operated manually, they can cover about 20 kilometres and spray 200 litres a day.
- The startup has been deployed in the districts of Sangareddy, Kamareddy, Warangal, Karimnagar, Naraynpet, and several border districts of the state of Telangana.









OMG INNOVTIONS LLP

Details Of the Founders	Details Of the Product	Market Status	Support Needed
Name: Amul S Bahl Website: www.godsownstore.com Location: Delhi	Product : Whiff Bio Spray Target Audience : Corporate & Government offices, malls, hotels, residential complexes, schools, etc.	Startup Stage: Early Traction Price: INR 3,900 Production: 5,000 units per day	NA

- WHIFF Bio Spray a unique patented technology that has potent anti-microbial and anti-viral properties. This property could be used to eliminate and neutralize disease-causing bio-agents in the air quickly, safely, and effectively.
- Whiff Bio Spray can prevent this spread through the air- both outdoor as well as indoor. It uses the QLEN model (Quick- Localization- Elimination and Neutralization model) to combat bio-agents
- Outdoors: Sprayed out-doors through low flying drones to neutralize the spread of the pathogens. This is done in small circumference concentric circles to cover all areas under consideration and create an overlap, so no area is left out.
- Indoors: The same spray in small bottles can be provided to the different households to clean up any infection and break the chakra of infection. This will impact small social units like colonies and families.









MYLO SOLUTION PVT LTD

Details Of the Founders	Details Of the Product	Market Status	Support Needed
Name: Arjun Kumar Website: www.atterolabs.com Location: Maharashtra	Product : UV Disinfection Target Audience : Hospitals, Isolation Units, Primary Health Care centres, Nursing homes, Offices	Startup Stage: Validation Price: INR 60,000 Production: 30 units per day	Logistics: It needs permission for movement in the supply chain. Funding: It needs funding of 35 - 45 lakhs
 The company has developed a solution inactivate pathogens on any surface. Current manual cleaning only reduces The solution provides a 99% Disinfect Additionally - they have created a solution the cost. 			







MYU VENTURES PVT LTD

Details Of the Founders	Details Of the Product	Market Status	Support Needed
Name: Mohit Sethi Location: Delhi	 Product: DecoBot – IoT connected compact disinfectant Target Audience: Vehicles, Hospitals, Retail malls and Shops, Schools & Offices, Hotels etc. 	Startup Stage: Prototype Price: INR 4000-6000 Production: 5000 units per week	Legal: Support to apply for patents & trademark Logistics: Need assistance with movement of components
 DecoBot is a compact & intelligent of viruses and bacteria through use of The device is based on IT/IOT Te requires minimum direct human in DecoBot has a cost-effective desig easy to install (plug and play) and c 			
 DecoBot is a versatile device which can be installed on ceiling or walls and can be powered by either a battery or can be electric powered. Product also has a failsafe providing option of a single button disinfection. 			







SCITECH AIRON

Details Of the Founders	Details Of the Product	Market Status	Support Needed
Name: SciTech Airon Location: Pune, Maharashtra	Product : Negative Ion Generator Target Audience : Trains, Airports, Hospitals, Malls	Startup Stage: Early Traction Price: Rs. 45000 + GST Production: 50 units/day	Customers and funding

- Scitech Airon is a negative ion generator which helps control virus, bacteria, and fungal infections in COVID19 positive cases and suspects. It has been scientifically tested to reduce the viral load by 99.7% in the room.
- The Scitech Airon ionizer machine generates negatively charged ions at approx Hundred million per 8 seconds (10 ions per sec). The negative ions generated by the ionizer form clusters around microparticles such as airborne mold, corona or influenza viruses, mite allergens, bacteria, pollens, dust and so on and render them inactive through a chemical reaction by creating highly reactive OH groups called hydroxyl radicals and H O which are highly reactive and known as atmospheric detergents. The detergent property generated by the ion generator helps in the breakdown of the outer protein of the allergens, viruses, and bacteria, which helps in controlling airborne diseases.
- The efficacy of the Ion generator has also been observed on different types of pathogens like the Influenza virus, Coxsackie virus, Polio virus, Human Corona virus, a range of bacteria, and fungi.









AI-BASED TECHNOLOGY FOR CONTACTLESS ENTRY









AI-BASED TECHNOLOGY FOR CONTACTLESS ENTRY				
	SOLUTIONS PVT LTD			
Details Of the Founders	Details Of the Product	Market Status	Support Needed	
Name: Swati Tiwari Website: http://www.arcturusbusiness.com	 Product: Artificial Intelligence based Real time analytics using computer vision from CCTV images and videos Target Audience: Government, Police & Industries 	Startup Stage: Early Traction Price: INR 5,000 per camera per month	NA	
• Arcturus Business Solutions works on the computer vision based Artificial Intelligence. a) We analyse the CCTV images and videos for the Real time detection of the anomaly or violations. Our AI algorithms scans each frame of the CCTV image or video for the violations.			At Based Real line Monitoring for Crowd & detection of violation from CCTV campra Redo	
• The algorithms can at a time work on multiple IP camera feeds from different locations of the city and can alert if a crowd or more than requisite people are assembled together.				
 This technology can help in the prevention of crowd gathering during COVID 19 pandemic. Facial recognition using CCTV shall ensure contact less entry for the employees and labour of the industries. 			Sankayad Carlask Bredity Poder Lit over Sankay Rock bas Bitters: Poder San Poder San	

• Automated real time alerts on high human body temperature from the images captured by the thermal scanners at the factory/ manufacturing gates.









AI-BASED TECHNOLOGY FOR CONTACTLESS ENTRY

VISITY INFIUS EMBEDDED TECH LLP

Details Of the Founders	Details Of the Product	Market Status	Support Needed
Name: Vatsal Maniar, Amish Thaker Location: Ahmedabad	Product : Contactless Entry & Visitor Management	Startup Stage: Early Traction Price: INR 25,000 per year (50 users) + Hardware Cost, INR 500 per user per year Production: 1,000 units per month	Funding Deployment

- VISITY Enabling contacless employee attendance and smart visitor management via QR code and Bluetooth Technology.
- It provides attendance reports, automatic check-in, smart access control system, etc as a part of the software and hardware suite.
- This suite is provided in the cloud and gives a web-powered control panel.









MOVEMENT TRACKING









MOVEMENT TRACKING

HW DESIGN LABS OPC PRIVATE LIMITED

Details Of the Founders	Details Of the Product	Market Status	Support Needed
Name: Jayakrishnan A L Website: www.hwdesignlabs.com Location: Kerala	Product : accuTRAK Target Audience : Hospitals and Enterprises	Startup Stage: Validation Price: INR 1,50,000 Production: 500 to 1,000 units per day	NA

- The proposed solution against the problem statement 'Movement Tracking' is the most advanced technology currently used in developed countries. Compared to existing technologies using Bluetooth, GPS, WiFi, etc, the proposed solution is more effective and designed to track in mind. These are futuristic and to be highly valued from import substitution points of view.
- Ministry of Health strongly recommends for Social Distancing of at least 1 meter or more, hence the solution to track the movement needs to be with an accuracy of minimum 1 m or better.
- The proposed solution is an accurate indoor positioning system with centimeter-level accuracy. This is highly recommended considering the minimum social distancing need to be at least 1m from person to person.









THANK YOU

For further support please write to SUICovidInnovations@investindia.org.in



Department for Promotion of Industry and Internal Trade Ministry of Commerce and Industry Government of India













DEPARTMENT OF BIOTECHNOLOGY MINISTRY OF SCIENCE & TECHNOLOGY, GOVERNMENT OF INDIA







