

CSMCRI's masks distributed to frontline warriors of COVID-19

Umashankar Mishra

Twitter handle : @usm_1984

New Delhi, 27 April (India Science Wire): COVID-19 needs to be fought at many levels; not just with technology but also by catering to various needs of society and frontline workers who are fighting against this pandemic. Doctors, health workers, police and municipal employees, who are at the frontline, are taking a greater risk of getting infected by coronavirus. Central Salt and Marine Chemicals Research Institute (CSMCRI), Bhavnagar, has been distributing its specially developed masks to all these frontline workers.



Recently, CSMCRI has given 1200 membrane-based facemasks to the Solid Waste Management Department of Bhavnagar Municipal Corporation (BMC). These masks will be distributed by BMC to its road sweepers and personnel deployed for operating the door-to-door household waste collection carts. Apart from this, 300 membrane-based facemasks have been given to the Palitana Town Police Station on this Monday for their use, evaluation and feedback. CSMCRI has also provided membrane-based facemasks to Mantra Neurology and Epilepsy Hospital, Bhavnagar. In addition, 1000 additional facemasks have been provided to Bhavnagar Police. Institute is providing these membrane-based facemasks to Homeopathic Doctors working with EG University Health Centre and Rotary Health Centre in Bhavnagar.

The Institute has been working on different verticals related to COVID-19 pandemic and has come up with two personal protection equipment (PPEs) – membrane-based facemask and a light-weight face

shield. This special mask made using membrane technology can give enhanced protection from pathogens, including virus and bacteria. The mask can kill the virus and bacteria that get attached on the outer surface that is made from a special material called modified polysulfone.

“The outer layer of this mask, made of polysulfone material having a thickness of 150 micro metre, has anti-virus, anti-bacterial and anti-fungal properties. The material can kill any virus having a size of 60 nano metre and above. It is worth noting that the coronavirus has a diameter of 80-120 nano metre”, said Dr. V K Shahi, Head, Membrane Science and Separation Technology Division at CSMCRI. CSMCRI is a constituent lab of the Council of Scientific and Industrial Research (CSIR). (India Science Wire)

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