

DST supported ventilation system to bring relief to health workers sweating in PPE suits for long hours

Health workers may soon be relieved of sweating out long hours in heavy suffocating PPE kits to meet their busy duty schedules. A compact, economical ventilation system for PPE kits developed by a Pune based startup can prevent excessive sweating while wearing such kits.

The ventilation system when attached with the conventional PPE kits with one simple modification, keeps the health workers' well ventilated preventing not only bodily discomforts but also possible fungal diseases in the body.

Nihaal Singh Adarsh, an engineering Student from Mumbai along with his startup called Watt Technovations, developed the technology called 'Cov-Tech Ventilation System', at RIIDL (Research Innovation Incubation Design Laboratory) supported by the National Science & Technology Entrepreneurship Development Board (NSTEDB), Department of Science & Technology, Government of India, in Somaiya Vidyavihar University.

The student of K J Somaiya College of Engineering and the founder of Watt Technovations, received the NIDHI's PRomoting and Accelerating Young and ASpiring technology entrepreneurs (PRAYAS) grant of Rs 10,00,000 from Department of Science and Technology, Government of India for prototype development and product innovation. The startup also received Rs 5,00,000 as support from new venture investment programme jointly conducted by RIIDL & K J Somaiya Institute of Management.

The 'Cov-Tech Ventilation System' can be fastened over the waist just like a simple belt over which the traditional PPE is worn and can provide comfort to the doctors and medical practitioners working in the hospitals to treat Covid infected patients. The design of the ventilation system ensures a complete air seal from the PPE kit. It provides a breeze of fresh air to the user in a gap of just 100 seconds.

The product developed at a state-of-the-art prototyping facility at Dassault Systemes in Pune was finalised as per the medical experts' advice.

"A team of mentors and experts from RIIDL supported the startup and helped them at every stage providing a conducive environment to help the innovator give the best output," said Gaurang Shetty, chief innovation catalyst at RIIDL.

The result was a compact, portable, and user-friendly device to provide a ventilation system for PPE suits. The Covtech Ventilation system is being used in Sai Sneh hospital, Pune and Lotus Multi- Specialty hospital, Pune and the company plans to scale up the uses by May/June.



Cov-Tech Ventilation system being used at Sai Sneh Hospital



Cov-Tech Ventilation System being used at Lotus hospital

For further details, <https://www.watttechnovations.com/> (covtech.contact@gmail.com, 7774099697) can be contacted.