BioSpectrum
the business of Bio & Health Sciences

Amrita Vishwa Vidyapeetham launches three-ply N96 nano mask

26 March 2021 | News

It is cost effective and offers far superior filtration and breathability than the conventional N95 and surgical masks

Scientists of Centre for Nanosciences & Molecular Medicine at Amrita Vishwa Vidyapeetham have launched a unique three-ply N96 nano mask based on cutting-edge nanotechnology. It is cost effective and offers far superior filtration and breathability than the conventional N95 and surgical masks.

The Amrita N96 Nano Mask, costing less than Rs 200, can be washed up to 30 times for reuse. It is long-lasting, skin-friendly and odour-free, and provides very comfortable wear even for long durations. The fabric makes it effortless for the wearer to breathe in and out even while providing almost 100 per cent protection against harmful microbes. Amrita Vishwa Vidyapeetham is offering the technology for licensing to others for volume production and bring the cost of the mask further down.

The Amrita N96 Nano Mask with nano-layered filter is lab tested to provide 99.9 per cent bacterial and virus aerosol filtration as well as 96 per cent particle filtration of more than three microns. It has also been tested by the South India Textile Research Association (SITRA), the premier laboratory supported by the Ministry of Textiles, Government of India, to test masks and PPEs in the country.

Dr Shantikumar Nair, Dean (Research) with Centre for Nanosciences & Molecular Medicine, Amrita Vishwa Vidyapeetham, said, “It is an ideal safety gear for healthcare workers and anyone else against infections caused by inhaling harmful bacteria and viruses.”

Dr Deepthy Menon, Professor – Nanosciences, Centre for Nanosciences & Molecular Medicine, Amrita Vishwa Vidyapeetham added, “This washable, durable and reusable mask ensures 99.9 per cent bacterial and virus aerosol filtration.”

Dr CR Reshmi, Scientist, Centre for Nanosciences & Molecular Medicine, Amrita Vishwa Vidyapeetham, mentioned, “The nano-coating, though sophisticated, involves easy to use technology that is scalable and apt for industrial applications for a variety of filtration products that we are currently working on.”