



PRESS RELEASE

IIT Hyderabad & CfHE start-up USafe Healthcare launches the world's most affordable respirator mask 'US9 TM'.

India's local innovation brings N95 equivalent protection at Rs. 13 a day only.

Hyderabad, 25th August 2020: The Centre for Healthcare Entrepreneurship at the Indian Institute of Technology IIT Hyderabad, announces its latest entrepreneurial entity, USafe Healthcare, on the 25th of August 2020. An innovation-driven enterprise currently focused on protective equipment against COVID-19, USafe has developed and commercialised the world's most affordable respirator mask that is highly durable and adheres to the highest safety standards for operating in hazardous environments. ***With a vision to provide high-quality protection, especially in the healthcare industry and its frontline workers, USafe's US9™ Respirator Mask has 98.03% PM0.3 filtration rate and 99.7% bacterial filtration rate (better than N95 standards).***

“This is yet another significant contribution from IIT Hyderabad and the state of Telangana towards fighting the COVID-19 pandemic. The Innovation of reusability in US9™ Respirator Mask not only reduces the recurring cost but also drastically decreases the biowaste generated due to protective masks. I congratulate the entrepreneurs backing this product and proving that the state of Telangana offers a conducive ecosystem for healthcare innovation” said Shri. Jayesh Ranjan, IAS, Principal Secretary to Govt. of Telangana while launching the product.

The home-grown innovation in tune with the 'Make in India' and 'Atmanirbhar Bharat' aspirations, US9™ Respirator Mask, has been designed, developed and produced in collaboration with Indian Institute of Technology Hyderabad under the able mentorship of Prof Surya Kumar and Prof Renu John. The filtration for the filter cartridges in the Respirator has been certified by the South India Textile Research Association (SITRA), a NABL designated agency for particulate and bacterial filtration testing in India. The mask has been designed for a snug fit with complete silicone seal; this has been reinforced by the fit tests carried out at IIT Hyderabad using an infrared camera. Arguably, US9™ is technically the most advanced & affordable respiratory safety device in India and substantially more effective in protection against the COVID-19 virus than the present masks in the market.

Director of IIT Hyderabad, Prof. BS Murty, says “It makes us extremely proud that a CfHE incubated start-up, USafe Healthcare, along with IIT Hyderabad researchers have been able to develop an affordable, yet safe, respirator mask for tackling the current needs of the frontline workers in our country. US9™ Respirator mask, in line with the 'Make in India' and 'Atmanirbhar Bharat' objectives, serve the society to fight this pandemic in a very effective manner.”



Salient features of the US9™ Respirator Mask:

- **Safe:** Filtration Rate: 98%; Bacterial Filtration Rate: 99.7%; Breathability – pass; Splash Resistance – pass; Flammability – pass. (SITRA tested filter)
- **Dual model:** Reusable Respirator mask + disposable replaceable filter.
- **Leak Prevention:** Soft and comfortable silicone cushioned mask for a secure fit. Tested with thermal image analysis for leaks at IITH.
- **Sustainability:** Eco-friendly reusable design that generates only 1/100th the biowaste per person per day to address the current national crisis.
- **Easy Cleaning:** Sterilisation compliant reusable components – autoclave, alcohol wipe, bleach, soap wash or dipping in boiling water.
- **Affordable:** 1/10 the cost of any other respirator.
- **Made in India:** 100% conceptualised, designed and manufactured in Telangana, India.

Mr. Saumil Sharma, an ISB alum, the company's Co-founder & Head of Strategy said "US9™ Respirator Mask creates value for the consumer by offering a fresh N95 standard equivalent mask every day at as low as Rs. 13, making it a path-breaking affordable innovation. Reusability of US9™ Respirator Mask reduces biowaste by 1/100th of the current waste generated per person per day due to disposable masks, upholding the sustainability goals of the country."

Speaking about the product, "We are extremely proud to have engineered the world's most affordable respirator mask while ensuring highest standards of safety and comfort during long hours use. We are supplying the product to top hospitals in Hyderabad and the response is tremendous. Now the company plans to make US9™ Respirator Mask available pan-India", said Dr. Sai Laxman Bharadwaj, the company's Co-founder & Technical Director.

"The support for innovation in healthcare in the State of Telangana and partnerships with premier institutes such as IIT Hyderabad serves as a great Launchpad for the growth of the start-up ecosystem. Disruptive innovations, such as US9™ Respirator Mask, is imperative to not only contain the current pandemic situation but also to manage the post-pandemic aftermath in India." summarised Dr. Arshad Qureshi, Co-founder & Commercial Director.

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About IIT Hyderabad

Indian Institute of Technology Hyderabad (IITH) is one of the six new Indian Institutes of Technology established by the Government of India in 2008. In a short span of 12 years, the institute built on an imposing 570-acre campus and has been ranked among the top ten institutes for four consecutive years in the National Institute Ranking Framework (NIRF) released by the Ministry of Human Resource Development (MHRD), Government of India. The Institute was also ranked under Top #20 in the recent edition of Atal Ranking of Institutions on Innovation Achievements (ARIIA) introduced this year by



MHRD to systematically rank all major higher educational institutions and universities in India on indicators related to ‘Innovation and Entrepreneurship Development’ among students and faculties.

IIT Hyderabad has close to 221 full-time faculty, 2,855 students of whom 20 per cent are women, nearly 200 state-of-the-art laboratories and five research and entrepreneurship centres. The Institute has a strong research focus with more than Rs. 500 crore of sanctioned research funding while PhD scholars account for about 30 per cent of total student strength. IITH students and faculty are at the forefront of innovation with more than 1,500 research publications and patent disclosures, 300 sponsored/ consultancy projects and 50 industry collaborations. IITH has MoUs with 50 universities in the U.S., Japan, Australia, Taiwan and Europe. IITH has been a pioneering change in pedagogy with fractal academic programs that atomizes course modules, encourage interdisciplinary learning, spanning innovative technology, fundamental science, liberal arts and creative arts like photography, theatre and painting.

About CfHE

The Center for Healthcare Entrepreneurship (CfHE) has been established in December 2015 at Indian Institute of Technology Hyderabad with an objective is to catalyze healthcare innovation with a focus on affordable solutions to address healthcare needs of India. This program aims at bringing together engineers, clinicians, entrepreneurs and the business community on a single platform to design and innovate in the field of healthcare, biomedical devices, and services to create a social impact. The Center plays a pivotal role in identifying the clinical gaps where the Biomedical engineers can make a big difference. The program focuses on changes at grass root level in an Indian context to address the unmet needs both in the rural and urban health care sector.

The Center offers a prestigious fellowship program in Healthcare Entrepreneurship focused on Biodesign innovation through a structured and fast-paced curriculum that is completed in one year. The fellows enrolled in this program undergo a thorough immersion in the clinical environment to identify the unmet needs. This is followed by training in needs analysis, solutions, and business plan development. The Center for Healthcare Entrepreneurship houses a start-of art facility for the rapid prototyping of biomedical devices, which is one of its kind in the country where the fellows can test and validate their ideas at a rapid pace to speed up the Biodesign innovation cycle.

The Centre have graduated 3 cohorts of entrepreneurs and the fourth batch is currently running. Seven start-ups were incubated out of the program into CfHE at IIT-H: NemoCare, BeAble, Kvyat, Haemac, AeroBiosys, Jivika Solutions Pvt Ltd and ChemiOptic Pvt Ltd. All the start-ups have completed their product prototype and have won BIRAC start-up grants for their product development. NemoCare has received the Bill & Melinda Gates Foundation Grant and many other prestigious awards for their innovative product addressing sleep apnea and sudden infant death syndrome in neonates. BeAble, which addresses lack of engaging and science-based neurorehabilitation setup for stroke patients, has received the Indo-US Endowment grant in collaboration with Steven’s University, USA. The centre has graduated 21 fellows through the fellowship program and is currently incubating 7 startups at IIT Hyderabad.



About USafe

USafe Healthcare has a vision to consistently innovate on products that simplify complex healthcare systems & solutions.

With a strong belief in protection and progress, USafe provides;

- * Safe, credible and innovative products for its customers
- * A space/an option that the supply chain can place its trust in
- * A home-grown, self-sufficient and well-researched organisation to the Indian Healthcare Ecosystem

With its path-shifting ideas, USafe believes in protection. Protecting the people from a pandemic, protecting the healthcare ecosystem from unreliable stakeholders, and progressing towards a more self-sustaining community.

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