

An effort to promote a culture of innovation and entrepreneurship

New Delhi, April 02: The Office of Principal Scientific Advisor (PSA) to the Government of India in partnership with Salaam Bombay Foundation and Pune Knowledge Cluster organized an outreach session showcasing innovative solutions developed by school children to ensure the safety of teachers and students when schools reopen across the country.

The programme was a part of the Office of PSA's Innovation and Science @Bharat's Industry-Academia knowledge sessions. It was meant to inspire school children for finding technology-based solutions for India's wide-ranging challenges. It was conducted live on the YouTube channel of the Office of PSA for school children studying in 9th to 12th standard across the country.

The Salaam Bombay Foundation has trained students studying in government and government-aided schools who then have developed simple technologies to minimise the risk of transmission of the SARS-CoV2 virus within the school premises. These students were trained in trades like robotics, home appliance repair, and mobile repair through the Foundation's Vocational Skills Programme.

Some of the technology solutions that have been developed and installed by the students at the school premises include an automatic hand sanitiser dispenser and an automatic drinking water dispenser using infrared sensor technology.

Prof. K. VijayRaghavan, Principal Scientific Adviser to the Government of India, expressed the hope that the session with students trained by the Salaam Bombay Foundation will help inspire school children from across the country to have a goal of developing technology-based solutions that will leave an impact on many lives globally.

“Promoting a culture of innovation and entrepreneurship in the country, when started early in schools, will also help nurture a problem-solving mind-set among our children. The country will surely have more scientists, technologists, and innovators – something that India will need if it has to become a global knowledge superpower. The Government of India has, among its prerogatives under the New Education Policy, greater emphasis on breaking traditional pedagogical methods to ensure holistic learning”, he said.

During this session, the students interacted with Prof. Leena Vachhani, Prof. Rajbabu Velmurugan, and Dr. Ashwini Gajarushi of IIT, Bombay, who guided the students to refine the technologies and make them market-ready. The team works at the Innovation Hub (TIH) for IoT and IoE at IIT Bombay. The goal is to make these technologies deployable in schools across the country.

Gaurav Arora, Vice President, Projects, Salaam Bombay Foundation, thanked the Office of the Principal Scientific Adviser, Government of India for partnering with the programme and the IIT faculty for engaging with the students. “Through our vocational skill development programme, we encourage our students to innovate and create prototypes, allowing them to apply their learned skills to real-life problem statements. This very spirit has inspired them to develop these simple cost-effective technologies, applying concepts from Robotics and IOT with the help of their trainers - to minimise the risk of Covid-19 virus transmission once the

schools reopen. Given the right kind of support, we are optimistic that these solutions can be replicated across schools in India.”

The programme is available for viewing online on Office of PSA’s YouTube channel : [Innovations in Robotics by school children](#).

Keywords: PSA, partnership, Salaam Bombay Foundation, Pune Knowledge Cluster, outreach, innovation, school, children, teacher, student, technology, challenge, robotics, vocation, sensor, superpower, pedagogy, IoT, IoE

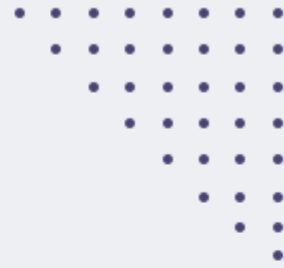
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A student explaining his innovation



Office of the Principal Scientific Adviser
to the Government of India



Innovations in Robotics by school children

*Innovation & Science @Bharat
Industry-Academia series*

Prof. Leena Vachhani, IIT Bombay is an expert on robotics and helped to develop an embedded control lab and Autonomous Robots and Multi-agent Systems (ARMS) lab. In this session, she will interact with children who have developed innovative solutions using robotics and IoT, to help keep teachers and children safe when schools reopen after the pandemic.



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