

| agri-tech innovation |

IIT-Indore wins IIT-Bombay's ATMAN 2.0 challenge

Our Staff Reporter

INDORE

IIT-Indore won the Grand Finale Challenge of ATMAN 2.0, organised at Technology Innovation Hub for IoT & IoE, IIT-Bombay.

■ **ATMAN 2.0 brings forward innovative technologies in agri-tech domain that are being developed in the premier institutes across India and providing them with a platform for showcasing their R&D prowess to the agri-tech community and supporting them in their lab-to-market journey**

■ **IIT-Indore will be working on the project titled 'development of portable kit- an alternative to traditional post-harvest management'**

ATMAN 2.0 is a one-day event aimed at bringing forward the innovative technologies in agri-tech domain, that are being developed in the premier institutes across India and



IIT-Indore team during the competition at IIT-Bombay

providing them with a platform for showcasing their R&D prowess to the agri-tech community and supporting them in their lab-to-market journey.

Proposals are invited from researchers from academia for the execution of projects on pre-harvest management, agricultural produce storage facilities and distribution networks, post-harvest management and market intelligence.

Out of 84 proposals received, 7 best proposals have been selected through the pitch fest for support through a grant along with technical development support and lab-to-market guidance for the development and implementation of agri-tech. Each proposal will be

funded up to Rs 2 crore grant. These proposals were selected after multiple rounds of presentation.

IIT-Indore will be working on the project titled 'development of portable kit- an alternative to traditional post-harvest management'.

Dr Debayan Sarkar, faculty at IIT-Indore, said, post-harvest of agricultural products has been a big challenge owing to inadequate storage facilities. Cold storage costs have risen dramatically leading to innovation of alternate technology. The primary goal of the project is to develop a portable kit that incorporates a small, vitamin B2 spray solution, which functions as a photosensitiser when combined with a

flash visible light source."

Dr Sarkar said that the kit allows for photodynamic inactivation of microbes in open food items and packed food components. This technique would quickly destroy the germs, ensuring their complete removal from food and surfaces while also stopping their reproduction.

The development of an automated system kit that uses environmentally friendly photosensitisers and visible light at wavelengths of 455 and 525 nm for efficient visual disinfection and sterilisation will increase effectiveness, prioritise human health, and include the IoT's capabilities for enhancing performance, he added.