VIT
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

SCHOOL OF BIO SCIENCES AND TECHNOLOGY

VIT BIO - EXPO

The School of Bio Sciences and Technology (SBST) is pleased to organize **Bio-Expo**, an event showcasing **Innovative Products** developed through cutting-edge research at VIT.

The details of the **VIT Bio-Expo** are as follows:

- **Date: 15 July 2026 (Wednesday)**
- **Time: 11:00 AM – 1:00 PM**
- **Venue: SMV Portico**

Participants:

1 Shreya Pattanayak, Reg no. 23BBT0111 from the Food Biotechnology class.

Product -1 **Multigrain Baked Khakhra Chaat- VIT innovative -Designed product**

2 Anushka Mukherjee, Reg no. 23BBT0079 from the Food Biotechnology class

Product -2 Innovative functional food-based research: Multivitamin-enriched snack with cucumber base

3 Archana Aloshious CSIR JRF

Product: 3 Chitosan Nanoencapsulated *Ulva* Seaweed Liquid Fertilizer

This liquid fertilizer utilizes *Ulva* seaweed as a natural source of plant nutrients and bioactive compounds to promote healthy crop growth. Incorporating chitosan nanoparticles enhances the formulation's stability and enables controlled nutrient release, improving nutrient use efficiency. The product is biodegradable, non-toxic, and reduces reliance on synthetic chemical fertilizers, thereby supporting environmentally sustainable farming practices. By harnessing renewable marine biomass, it contributes to resource conservation and the development of greener agricultural technologies.

4. Vinusam Integrated Doctoral research student

Product:4 Pectinase enzyme produced through microbial fermentation using orange peel waste as the substrate.

Pectinase is produced by utilizing discarded orange peels, converting agricultural waste into a value-added bioproduct. The enzyme has applications in fruit juice clarification, food processing, textile, and paper industries. Waste valorization reduces the environmental burden associated with citrus waste disposal. This

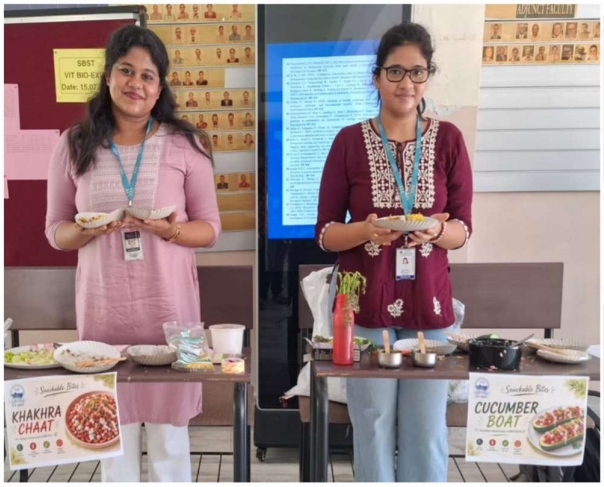
approach supports the principles of the circular economy by recovering useful biomolecules from agro-waste. The product highlights sustainable biotechnology through resource recovery and green production.

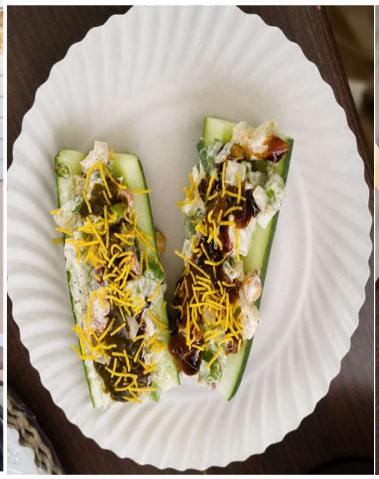
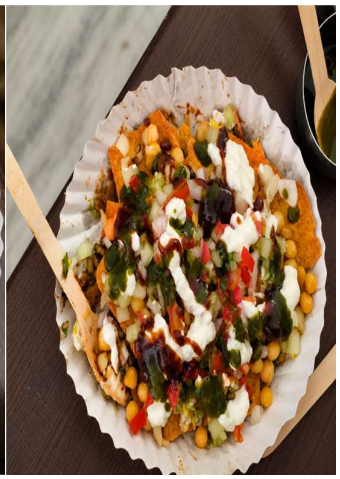
5 . Rithik Roshini, Jahnavi Padmavathi MSc Applied Microbiology
Product: 5 Antimicrobial Agarbattis from Flower Waste

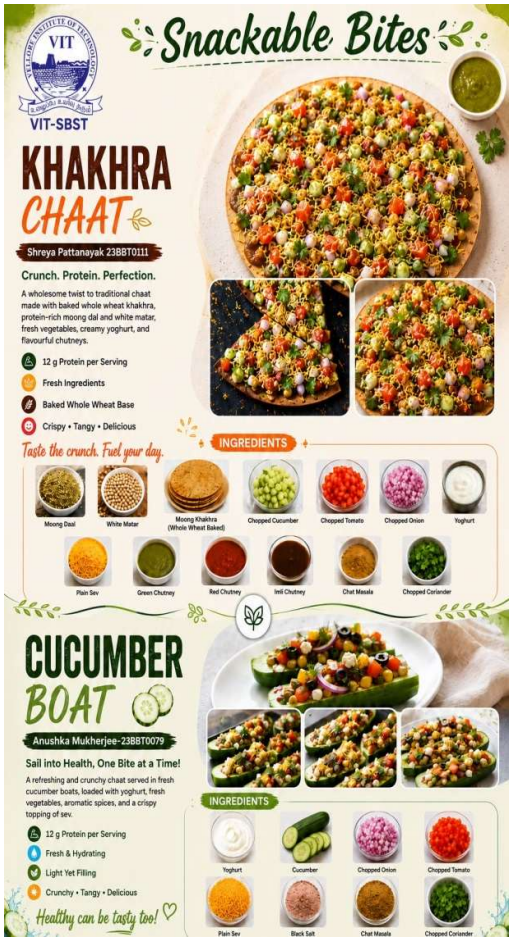
These eco-friendly agarbattis are prepared from recycled flower waste, transforming biodegradable waste into a useful household product. Natural antimicrobial ingredients help improve indoor hygiene while reducing dependence on synthetic chemicals. Recycling floral waste minimizes landfill accumulation and environmental pollution associated with conventional disposal methods. The product promotes a circular economy through waste valorization and sustainable resource utilization.

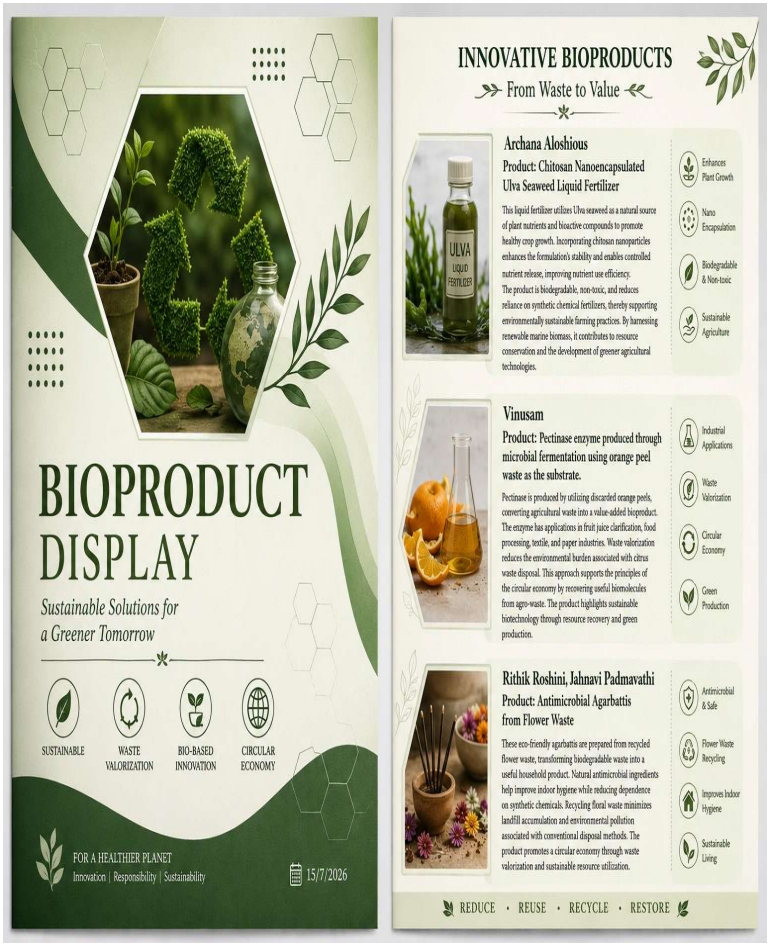
The event provided us with an excellent platform to showcase innovative functional food products that combine nutrition, taste, and scientific knowledge.

We express our heartfelt gratitude to **Dr. Suneetha V., Dean, SBST,** the Head of the Department of Biotechnology, and the entire organizing committee for providing us with this wonderful opportunity to participate in Bio-Expo 2026. We also sincerely appreciate their constant encouragement, guidance, and support in organizing such an inspiring platform that promotes innovation, scientific thinking, entrepreneurship, and healthy lifestyle awareness among students. The appreciation and encouragement received from the Dean, HODs, faculty members, and visitors made this experience truly memorable and will continue to motivate us in our future academic and professional journey.




Snackable Bites
VIT-SBST
KHAKHRA CHAAT
Shreya Pattanayak 23BBT0111
Crunch. Protein. Perfection.
A wholesome twist to traditional chaat made with baked whole wheat khakhra, protein-rich moong dal and white matar, fresh vegetables, creamy yoghurt, and flavourful chutneys.
12 g Protein per Serving
Fresh Ingredients
Baked Whole Wheat Base
Crispy • Tangy • Delicious
Taste the crunch. Fuel your day.
INGREDIENTS
Moong Dasi
White Matar
Moong Khakhra (Whole Wheat Baked)
Chopped Cucumber
Chopped Tomato
Chopped Onion
Yoghurt
Plain Sev
Green Chutney
Red Chutney
Imli Chutney
Chat Masala
Chopped Coriander
CUCUMBER BOAT
Anushka Mukherjee-23BBT0079
Sail into Health, One Bite at a Time!
A refreshing and crunchy chaat served in fresh cucumber boats, loaded with yoghurt, fresh vegetables, aromatic spices, and a crispy topping of sev.
12 g Protein per Serving
Fresh & Hydrating
Light Yet Filling
Crunchy • Tangy • Delicious
Healthy can be tasty too!
INGREDIENTS
Yoghurt
Cucumber
Chopped Onion
Chopped Tomato
Plain Sev
Black Salt
Chat Masala
Chopped Coriander


BIOPRODUCT DISPLAY
Sustainable Solutions for a Greener Tomorrow
SUSTAINABLE
WASTE VALORIZATION
BIO-BASED INNOVATION
CIRCULAR ECONOMY
FOR A HEALTHIER PLANET
Innovation | Responsibility | Sustainability
15/7/2026
INNOVATIVE BIOPRODUCTS
From Waste to Value
Archana Aloshious
Product: Chitosan Nanoencapsulated Ulva Seaweed Liquid Fertilizer
This liquid fertilizer utilizes Ulva seaweed as a natural source of plant nutrients and bioactive compounds to promote healthy crop growth. Incorporating chitosan nanoparticles enhances the formulation's stability and enables controlled nutrient release, improving nutrient use efficiency.
The product is biodegradable, non-toxic, and reduces reliance on synthetic chemical fertilizers, thereby supporting environmentally sustainable farming practices. By harnessing renewable marine biomass, it contributes to resource conservation and the development of greener agricultural technologies.
Enhances Plant Growth
Nano Encapsulation
Biodegradable & Non-toxic
Sustainable Agriculture
Vinusam
Product: Pectinase enzyme produced through microbial fermentation using orange peel waste as the substrate.
Pectinase is produced by utilizing discarded orange peels, converting agricultural waste into a value-added bioproduct. The enzyme has applications in fruit juice clarification, food processing, textile, and paper industries. Waste valorization reduces the environmental burden associated with citrus waste disposal. This approach supports the principles of the circular economy by recovering useful biomolecules from agro-waste. The product highlights sustainable biotechnology through resource recovery and green production.
Industrial Applications
Waste Valorization
Circular Economy
Green Production
Rithik Roshini, Jahnavi Padmavathi
Product: Antimicrobial Agarbattis from Flower Waste
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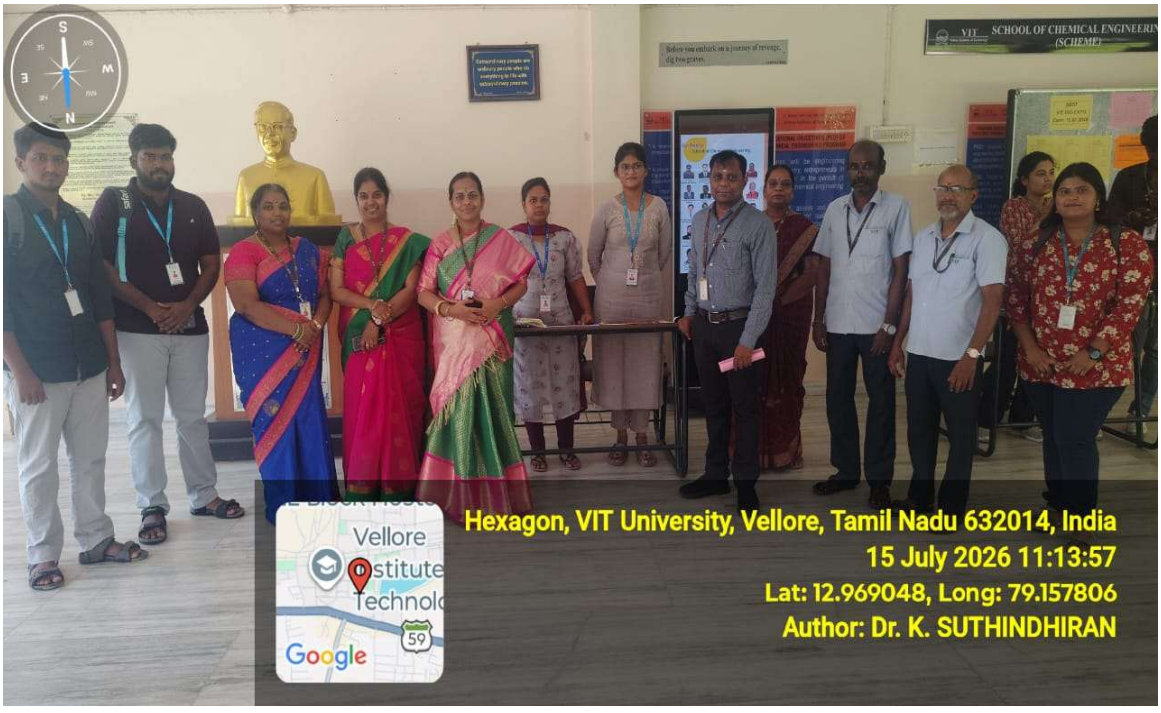
Antimicrobial & Safe
Flower Waste Recycling
Improves Indoor Hygiene
Sustainable Living
REDUCE • REUSE • RECYCLE • RESTORE


SCHOOL OF CHEMICAL ENGINEERING (SCHEME)
Vellore
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