विज्ञान एवं प्रौद्योगिकी मंत्रालय
MINISTRY OF SCIENCE AND TECHNOLOGY

DST NIDHI

ICAR

Center for Agri-Innovation a-IDEA

R.V.R. & J.C. College of Engineering (A)
Chowdavaram, Guntur, A.P.

INSTITUTION'S INNOVATION COUNCIL
(Ministry of Education Initiative)

# National AgriTech Hackathon 2.0

## 23rd December 2026



Organized by
**RVR & JCCE STP Foundation (RJ E-NEST)**

In collaboration with

ICAR

Center for Agri-Innovation a-IDEA

**a-IDEA, ICAR-NAARM**
**Rajendranagar, Hyderabad, Telangana-500030, India**

Supported by

ANDHRA PRADESH Innovation Society

RTIH Ratan Tata Innovation Hub

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RICH Research and Innovation Circle of Hyderabad

bala vikasa

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## RVR & JCCE STP Foundation (RJ E-NEST)

RJ E-Nest is a registered section-8 company and funded by the Department of Science and Technology (DST) under the National Initiative for Developing and Harnessing Innovations (NIDHI) scheme inclusive Technology Business Incubator (iTBI). The host institution, R.V.R. & J.C. College of Engineering, was established in the year 1985 and sponsored by the Nagarjuna Education Society (Estd.1967) that maintains 7 educational institutions offering education from KG to PG. It is put up on a 60-acre plot, adjoining National Highway, between Guntur and Chilakaluripet, with 9.00 lakh sq. ft. of built-up area. It offers 11 B.Tech and 6 M.Tech courses, besides MBA, MCA, and BBA, with total student strength of 7026. It is approved by AICTE and permanently affiliated to Acharya Nagarjuna University. It has been accredited by the NBA in 1998, 2002, 2007, 2012, 2017, 2021, 2022, 2024, and 2025. NAAC accredited the college with an 'A+' grade and is consistently ranked in the NIRF 201-250 band at the national level. It has been ISO 9001:2015 certified since 2019 and ISO 21001:2018 valid from 2025 to 2028.

R.V.R. & J.C. College of Engineering is also recognized as a host institute by the Ministry of Micro, Small, and Medium Enterprises (MSME) under the MSME Innovate Scheme and also hosted the MSME Idea Hackathon 5.0. In addition to 10,000 sq. ft. of iTBI, an additional 10,000 sq. ft was provided by the host institution to start the Technology Innovation and Incubation Centre (TIIC), which was inaugurated on 27th June 2025 by Sri Nara Chandra Babu Naidu, Hon'ble Chief Minister of Andhra Pradesh, in the presence of Dr. Chandra Sekhar Pemmasani, Hon'ble Union Minister of State for Communications, and Smt. Vangalapudi Anitha, Hon'ble Home Minister.

**A Glimpse of National AgriTech Hackathon 2025**


Inaguration of the Hackathon




Exchange of MoU: RVR&JCCE & aIDEA, ICAR NAARM


Prototype Display by Participants




Prototype Display by Participants




Panel Discussion


National Kisan Diwas Celebrations




Prize Distribution for the Winners




Agri Expo-2025




Prize distribution for best Expo

## GOVERNING BODY

**Dr. R. Srinivas**, President
**Sri J. Murali Mohan**, Vice President
**Dr. M. Jagadish Kumar**, Vice President
**Sri R. Gopala Krishna**, Secretary & Correspondent
**Dr. K. Krishna Prasad**, Treasurer

**Dr. Kolla Srinivas**, Principal
**Dr. K. Ravindra**, Director - Academics / R&D
**Dr. N. V. Srinivasa Rao**, Director - Admin / Finance

**Dr. Ashuthosh Saxena**
Dean - CMR Tech Campus
**Mr. Narendra Nerla**
COO, Inspiredge IT Solutions
**Sri K. Rajaj**, Chartered Accountant Sri
**Eswarapu Ravi**, CEO - RTIH Visakhapatnam
**Dr. K. Praveen Kumar**, CEO RJ E-Nest
**Dr. S. Radhika**, Co-PI, iTBI
**Dr. MVP Chandra Sekhara Rao**
Member Secretary

## THEMES



**AGRICULTURE**



**AQUACULTURE**

## PROBLEM STATEMENTS

### THEME 1: AGRICULTURE

AG-01: Smart Irrigation & Water Optimization
Develop affordable sensor-based irrigation systems using soil moisture, crop requirements, and weather data to conserve water and energy.
AG-02: AI-Based Crop Disease & Pest Detection
Create AI-powered mobile or portable tools to identify crop diseases, pests, and nutrient deficiencies from images and provide local-language advice.
AG-03: Portable Soil Health & Nutrient Assessment
Develop low-cost field testing systems to assess soil health and recommend crop-specific nutrient applications, minimizing excessive fertilizer use.
AG-04: Affordable Mechanization for Small Farms
Design compact, economical machinery for sowing, weeding, harvesting, and crop processing, particularly suited to small and marginal farmers.
AG-05: Smart Storage & Post-Harvest Loss Reduction
Develop innovative solutions to monitor produce quality, improve storage, extend shelf life, and reduce post-harvest losses.

### THEME 2: AQUACULTURE

AQ-01: Real-Time Aquaculture Water Quality Monitoring
Develop affordable IoT-based systems to monitor dissolved oxygen, pH, temperature, salinity, and ammonia, with alerts for timely intervention.
AQ-02: Rapid Screening for Fish & Shrimp Diseases
Create portable, affordable diagnostic or AI-assisted tools for early detection of fish and shrimp diseases to minimize mortality.
AQ-03: Intelligent Feeding & Feed Optimization
Develop automated feeding systems using fish activity, biomass, and pond conditions to minimize feed wastage and improve feed efficiency.
AQ-04: Aquaculture Wastewater Treatment & Reuse
Design economical, modular treatment systems to reduce organic load, ammonia, and suspended solids, enabling safer wastewater reuse.
AQ-05: Energy-Efficient Aeration & Oxygen Safety
Develop smart aeration systems that respond to dissolved oxygen levels and provide backup alerts during power failures to prevent fish mortality.

## REWARDS

- Cash prizes worth Rs. 1 lakh
- Ignition Grant up to Rs. 10 Lakhs (if selected for Cohort-3 of RJ E-Nest through a separate application and evaluation procedure adopted as per DST norms; apply at @https://rvrjcce.ac.in).
- Mentoring, pre-incubation/incubation support by IDEA, ICAR-NAARM, close interaction with agr scientists, farmers, innovators, and startups.
- Certificate of Appreciation to all the Participants.

## Application Submission (Prototype & Expo)

- Students, Faculty and Innovators can submit their ideas at: https://forms.gle/13zrPyY1XdUzLxuu7
- For More Details Please visit our website: https://rvrjcce.ac.in/rjenest/agritechhackathon.html

## Registration Fee

- Hackathon Registration Fee: Rs. 600/- plus 18% GST (Rs. 708/-) per team.
- Expo Registration Fee: Rs. 1,000/- plus 18% GST (Rs. 1180/-) per team.
- Team Size: Maximum of 3 members per team, including the mentor.

## Accommodation

On-campus accommodation will be provided to outstation participants travelling from more than 100 km away from the venue, subject to availability and prior request.

## QR Code

## Important Dates

**Last Date to Submit Application**
4th December 2026
**Announcement of Finalists**
**05th December 2026**
**Date of Hackathon & Kisan Diwas Expo**
**23rd December 2026**

## Contact

**Email ID: agrihackathon24@gmail.com**
**+91-6301400870 / +91-9439557487**


Reception Area


Student Corner


Cafeteria


Cabins Pathway


Discussion Area


Cubicles


Maker Space


Board Room


CoWorking Space