# **About the University**

Aiming to bring about change and process through education, the Tmt. Kannammal Educational trust was constituted in 1985 and started Thai MoogambigaiPolytechnic College. Within three years of its inception, Dr. M.G.R. Engineering College was founded in 1988, and the Thai Moogambigai Dental College was started in the year 1991. Both the colleges acquired Deemed University status in 2003 as Dr. M.G.R. Educational and Research Institute as per the order of the University Grants commission, New Delhi and the ministry of and Human Resources Development, Government of India, New Delhi. The Institution is accredited by NAAC with 'A' Grade.

# **About the Department**

### **Electronics and Communication Engineering**

The Department was established in 1988. The department has made rapid strides in academic progress since inception with overwhelming participation of students and well qualified faculty members. The UG program B. Tech ECE was accredited by the NBA. The department actively works in diverse emerging areas of Electronics & Communication Engineering and are equipped with the state-of-the-art technology labs. The department was sanctioned a sponsored fund from government bodies towards the conduction of seminars, STTPs and the like.

The department has a good number of publications in international journals and conferences with appreciable H-index. A funded project sanctioned by DRDO is in progress.

#### **About the CoE on Smart Agriculture**

The "Center of Excellence" in smart agriculture is a specialized facility devoted to developing and using cutting-edge methods and technology in the field of agriculture. In order to enhance farming practices and increase output, this center usually conducts research, provides training, and transfer technology. The centre focuses on cutting-edge methods and technology for smart farming, including AI-driven solutions, IoT applications, and precision agriculture, offering farmers, agricultural professionals, and students instruction and skill-building programs on the newest smart farming methods, assisting farmers and other stakeholders in a cooperative ecosystem.

New smart agriculture technologies, such as AI-powered instruments for precision farming, drone technology for crop monitoring, and Internet of Things devices for real-time data collection, are frequently the subject of research and development at our center. Research activities at centers are frequently centered on particular facets of smart agriculture, like increasing agricultural yields, enhancing water management, and creating sustainable resource management techniques.

## **About the Symposium**

Smart farming, also known as smart agriculture, is the adoption of advanced technologies and data-driven farm operations to optimize and improve sustainability in agricultural production. Technologies used for smart farming include Artificial Intelligence (AI), automation and the Internet of Things (IoT). While new technologies and tools have long been integral to farm management and food production, urgent concerns drive the

development and adoption of smart farming technologies today. Chief among them is food security: food production must increase by 70% by 2050 to keep pace with global population growth. Climate change is making it harder to secure enough food. It reduces crop yields and endangers the availability of natural resources such as water for irrigation.

In addition to climate issues, the agricultural sector also faces profitability challenges amid the rising costs of inputs like fertilizer, volatile commodity prices and increasing regulatory requirements."Through smart farming, betterment in adaptation to the uncertainties brought by climate change, mitigate environmental impacts and promote resilience in agricultural production". Collaboration with the concerned specialists will facilitate the combination of IoT and AI to cater to the needs of the patients with better imperativeness. In addition, IoT has a number of merits in reformation and widening the health care services to including prediction, diagnosis, treatment and monitoring of the patients affected by various infectious diseases efficiently by having direct contact or by maintaining social distancing with the patients inside and outside the hospital. This seminar on AI and IoT applications in health care will provide knowledge with skill based comprehensive and innovative solutions in this domain.

This program on smart agriculture, makes use of technology to enhance sustainability and optimize agricultural operations. It improves farming production, resource management, and decision-making by utilizing data, sensors, automation, and artificial intelligence.

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# Dr. M.G.R. EDUCATIONAL AND RESEARCH INSTITUTE



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University with Special Autonomy Status



DST - SERB sponsored

National Level Symposium on Smart Agriculture (NSSA)

Center for Excellence in Smart
Agriculture

**Electronics and Communication Engineering** 

10-09-2025 to 11-09-2025



#### **Important Dates**

<b>Paper Submission Deadline</b>	14.07.25
<b>Notification of Acceptance</b>	10.08.25
<b>Submission of Camera Ready</b>	20.08.25
Paper	
Last date for Payment of	25.08.25
Registration fee	

\*Registration Fee per paper: Rs. 500 for paper presentation

Certificates will be provided for all participants presenting the papers both online & face to face mode. Poster presentations are also available. Best paper award will also be announced.

Good Quality papers with high research standards and Plagiarism less than 10% using Turnitin with AI text detection enabled will be considered for publication in Springer or IEEEXplore conference proceeding (Scopus Indexed) with additional charges.

All presented papers will be published in the Proceedings of National Level Symposium on Smart Agriculture (NSSA) with ISBN

Send your papers (4–6pages) in standard IEEE, two column format from the link below

https://www.scribbr.com/ieee/ieee-paper-

format/

Submit your papers to

Email: nssa@drmgrdu.ac.in

WhatsApp Link:

https://chat.whatsapp.com/JfsdYGqeYdoJXS UpkXX4nv

**Registration Link:** 

https://forms.gle/1JbppWPmMExKXFxL9

### **Registration fee Payment Details**

## Payment Link is given below

## https://rzp.io/rzp/zjM58HF

# **Program Highlights**

**Plenary** Lectures, Panel Discussions, Keynote address. paper presentation and Industry expo by eminent resource persons from CSIR, IITM Pravartak, Albonair India Pvt Ltd. Teams Tech. Dhaksha Unmanned Systems, Qualcomm, Svasti **Technologies** and renowned Educational institutions like IIT, NIT, Anna University and VIT

# Paper Presentation Tracks in Smart Agriculture

Track 1: AI and Deep Learning

**Track 2: Robotics** 

**Track 3: Communication systems** 

**Track 4: Smart Sensors** 

**Track 5: Internet of Things** 

#### **Thrust Areas**

- Precision Farming
- Climate Smart Agriculture
- Live stock Monitoring
- Post harvest Technology
- Natural Farming
- Sustainable development
- Waste Management
- Applications of Robotics
- AI in Smart Agriculture
- IoT in Smart Agriculture
- Agrobots
- Soil & Water conservation
- Irrigation & Drainage
- Greenhouse and Farm building Design
- Smart Infrastructure
- Renewable Energy Irrigation
- Infrastructure for Precision Farming
- Machine Learning
- Cloud computing
- Smart Sensors
- Block chain
- Automation
- Floriculture & Landscaping
- Plant Pathology
- Soil Science
- Rapid prototyping
- Food Processing and Nutrition
- Pest Control and Natural Pest Management
- Aerial Imagery in Agriculture
- E-vehicle for Agriculture
- Energy Storage systems for Farms But not limited too

#### **Resource Persons**

Dr. J. Prawin,
Senior Scientist,
CSIR-Structural Engineering Research
Centre, Chennai.

Dr. T. Senthilkumar Principal Scientist, ICAR-Central Institute of Agricultural Engineering, Regional Station, Coimbatore.

Dr. BalaKumar K, Technical Consultant, Industry Consultant @ IITM Pravartak Chennai.

Dr. Arun Prasath R, Project Consultant – RASA, IITM Pravartak, Chennai.

Er. Ramaswamy Gnaniar, GM- SSC & IT, Albonair India Pvt Ltd, Chennai.

Er. Ananth Kumar YS GM- Development, Albonair India Pvt Ltd, Chennai.

Dr. K. Srividhya Technical Consultant, Industry Consultant @ IITM Pravartak Chennai.

Dr. N. Pappa,
Professor, Department of
Instrumentation Engineering,
M.I.T., Anna University, Chennai.

Dr. T. Thygarajan, Pro-Vice Chancellor, Vellore Institute of Technology, Chennai.

Dr. P. Karuppanan Prof., ECE, Motilal Nehru National Institute of Technology, Allahabad.

Dr. S. Chitrakala, Professor, CSE Department CEG, Anna University

Dr. Manikandan, Manager -Development Albonair India Pvt Ltd, Chennai.

Dr. Sabareeswaran, Sr.Manager - Development Albonair India Pvt Ltd. Chennai.

Er. Sundar Narayanan C, Whole Time Director, TFT Engineering and Manufacturing Services Pvt Ltd., Chennai.

Er. Balakumar CEO, TFT Engineering and Manufacturing Services Pvt Ltd., Chennai.

Er. Dhamodharan, Senior Engineer, CDC OualComm India Pvt Ltd. Chennai. Dr. A. Kesavan, CEO, Svasti Technologies, EDII-Anna Business Incubation Research Foundation, University College of Engineering, BIT Campus, Anna University, Tiruchirappalli.

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