



Dr. M.G.R. EDUCATIONAL AND RESEARCH INSTITUTE (Deemed to be University)

Maduravoyal, Chennai - 600 095. Tamilnadu, India.

(An ISO 9001-2015 Certified Institution)



MGR ASSOCIATION FOR GREAT INNOVATIVE CREATORS

Department of Electronics and Communication Engineering

Event Title	DST-SERB SPONSORED National level Technical Symposium on "Smart Agriculture (NSSA)"		
Objective of Event	To provide a platform for researchers, industry experts, and students to explore the role of AI, IoT, and automation in transforming agriculture towards sustainability and efficiency.		
Chief Guest /Speaker Details	, ,		
Date	10/09/2025 to 11/09/2025	Time	02.00 PM to 04.00 PM
Venue	University Auditorium	No. of Participants	200

REPORT

TITLE

DST-SERB SPONSORED National level Technical Symposium on "Smart Agriculture (NSSA)"

CONTENT

The DST-SERB Sponsored National Level Symposium on Smart Agriculture (NSSA), organized by the Center for Excellence in Smart Agriculture and the Department of Electronics and Communication Engineering, Dr. M.G.R. Educational and Research Institute, Maduravoyal, Chennai, was held on September 10th and 11th, 2025. The two-day symposium aimed to bring together experts, academicians, researchers, industry professionals, and students to explore the immense potential of emerging technologies in addressing the critical challenges of modern agriculture. The inauguration on the first day began with the solemn Tamizh Thai Vazhthu followed by the traditional lighting of the kuthu vilakku by distinguished dignitaries. The gathering was warmly welcomed by Dr. U. Jayalathsumi, while Dr. K. Sujatha elaborated on the significance of the symposium and Dr. Ethiraj, Dean of E&T, gave an overview of the event. A keynote address by Dr. Cyril Raj set the academic tone, emphasizing the urgent need to bridge the gap between technology and farming practices. This was followed by the introduction and felicitation of the Chief Guest, Dr. J. Prawin, Senior Scientist from CSIR, who inaugurated the symposium and shared his insights on the scope of smart agriculture. The inaugural session highlighted the collaborative spirit of the event and the pressing need for adopting interdisciplinary approaches to solve agricultural problems, especially in the face of climate change, resource scarcity, and the growing demand for sustainable farming practices.



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Across the two days, the symposium witnessed a series of expert lectures and discussions that provided both theoretical frameworks and practical perspectives on technology-driven agriculture. The sessions covered a wide spectrum of themes such as Artificial Intelligence, Machine Learning, Computer Vision, Internet of Things, Autonomous Navigation Vehicles, Robotics, Generative AI, and data-driven agricultural models. Experts highlighted how the agricultural sector is increasingly being shaped by data-centric decision-making, precision farming techniques, and automation, with applications ranging from crop disease detection and irrigation optimization to the deployment of smart tractors and autonomous machinery. Speakers emphasized the transformative role of convolutional neural networks, transformer architectures, federated learning, and reinforcement learning in enabling adaptive and efficient farming systems. While showcasing success stories and futuristic models like climate-smart agriculture, the discussions also acknowledged the challenges of implementation such as high initial costs, infrastructure limitations, connectivity issues in rural areas, and the need for capacity building among farmers. Through insightful case studies, demonstrations, and visionary talks, the symposium presented a balanced perspective—celebrating the opportunities while also underlining the hurdles that must be overcome to ensure technology truly benefits farming communities. The interaction between participants and speakers enriched the sessions, with students and delegates gaining deeper insights into how interdisciplinary research and industrial collaboration can translate into practical agricultural solutions.

The event concluded with a valedictory session that encapsulated the enthusiasm and success of the symposium. Dr. K. Sujatha expressed heartfelt gratitude to the speakers, delegates, faculty members, and student organizers for their valuable contributions, acknowledging that the diverse sessions and discussions had created an intellectually stimulating environment. She emphasized that the two-day event had provided not only technical knowledge but also a vision for the future of agriculture where AI, IoT, robotics, and generative models would converge to create sustainable farming ecosystems. The vote of thanks was delivered by Dr. K. Sudhaman, Deputy HoD of ECE, who extended appreciation to the DST-SERB sponsors, invited dignitaries, and the organizing team for making the symposium a resounding success. The NSSA symposium ultimately stood out as a platform for exchanging ideas, fostering collaboration, and inspiring innovation in the domain of smart agriculture. It reinforced the role of Dr. M.G.R. Educational and Research Institute as a hub for advancing knowledge and promoting sustainable solutions to global challenges. By bridging traditional farming practices with futuristic technologies, the symposium left the audience with a sense of optimism and responsibility to contribute to the agricultural revolution that lies ahead.



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EVENT OUTCOME

The symposium fostered knowledge exchange, highlighted emerging technologies, and inspired collaborative efforts to develop innovative smart farming solutions.

PHOTOS





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Dr.K.Sujatha/ Dr.B.Swapna