



IEEE International Conference on Industrial Technology (ICIT 2026)

Monterrey, Mexico, 4-6 March 2026

<http://icit2026.ieee-ies.org>

Call for Papers - Special Session on

Industrial Electronics and Intelligent Systems for Smart Agro-Food Production

Organized and co-chaired by:

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Technical Outline of the Session and Topics:

Precision agriculture technology has emerged as a critical driver for quality, efficiency, and sustainability in the food industry. By integrating advanced technologies such as machine vision, automated control, and intelligent robotics, the standardization and refinement of crop management and food processing have been significantly improved. Currently, autonomous robotic systems equipped with multi-modal sensing and intelligent decision-making capabilities are being progressively deployed in key applications, including crop growth cycle monitoring, food quality inspection, sorting and grading, aseptic packaging, contaminant detection, and full-chain traceability. These advancements are consistently promoting the transformation of food production models toward high-precision, flexible, and intelligent operations.

Within this scope, topics of interest include, but are not limited to:

- Intelligent Perception and Robust Control for Agricultural Robotics
- Mechatronic System Integration and Actuation for Field Robots
- Edge-Computing and Embedded Intelligence for Precision Agriculture
- Agricultural IoT and Cyber-Physical Systems for Smart Farming
- Intelligent Robots for Sustainable Greenhouse Food Production in Smart Agricultural Ecosystems
- Autonomous Agricultural Robots for Precision Weed Management
- AI-empowered Agricultural Robots for Predictive Crop Yield Optimization in Food Supply Chains
- Power Electronics and Energy Management for Autonomous Agricultural Systems
- Agricultural big data and pest and disease detection are crucial for intelligent agriculture
- Agricultural Pest and Disease Monitoring and Early Warning Based on UAV Remote Sensing

Author's schedule: [Same as the ICIT Conference](#)

All the instructions for paper submission are included on the conference website: <https://icit2026.ieee-ies.org>