



CALL FOR PAPERS

IEEE Transactions on Industry Applications

Special Issue on

Industrial Automation and Intelligent Process Control (IAPC)

As industries shift towards smarter, more interconnected systems driven by AI, Industrial IoT (IIoT), and intelligent control techniques, there is an increasing need for solutions that enhance precision, adaptability, and efficiency. The integration of automation technologies across operation and control processes is critical for optimizing production, reducing downtime, and achieving real-time responsiveness. However, industries also face significant hurdles such as securing control systems, managing the complexity of automation technologies, and ensuring sustainability in operations. This special issue aims to gather cutting-edge research that responds to these challenges, with a focus on advancing intelligent process control, developing robust automation solutions, and addressing the industrial demand for secure, resilient, and sustainable automation systems. The goal is to drive innovation and provide best practices that meet the evolving needs of industrial automation.

The guest editorial board solicits original research papers with novel contributions in industrial automation, smart manufacturing, intelligent process control, best practices, and more. Topics of interest include, but are not limited to:

- Smart Manufacturing and Factory Automation
- Industrial IoT (IIoT) and Cyber-Physical Systems
- Industrial Control System
- Intelligent Process Control
- Digital Twins in Manufacturing and Control Systems
- Edge and Fog Computing for Industrial Automation
- Applications of electrical and electronic control devices, systems, and methods
- Applications of transducers, sensors, programmable logic controllers, distributed control systems, and control systems software
- AI-Driven Automation in Industry 4.0
- Cybersecurity in Industrial Control Systems
- Sustainable and Green Automation Technologies
- Best practices in industrial automation and control

Submission Guidelines

Authors must submit an extended digest (single column, up to 2 pages, free format of A4 or US letter, font size of 10 pts, PDF version) to Prof. Akshay Kumar Rathore akshay.k.rathore@ieee.org copy to mssmith1@charlotte.edu. Authors with accepted digests will receive a formal invitation with detailed instructions for submission of the complete manuscript to the IAS ScholarOne Manuscripts site. Refer to <http://www.ias.org> for general information about electronic submission through ScholarOne Manuscripts. Manuscripts submitted for this Special Issue will be reviewed separately and will be handled by the guest editorial board identified below.

Important Dates

- March 15, 2025: Call for papers announcement
- May 1, 2025: Deadline for extended digest submission
- June 1, 2025: Notification to invite full paper submissions
- Aug 1, 2025: Deadline for full paper submission for review in ScholarOne
- March 2026: Notification of final decision
- July 2026: Deadline for submission of Final Files in ScholarOne
- Jan/Feb, 2027: Publication on the IAS Transactions.

Guest Editorial Board

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