CALL FOR PAPERS
SPECIAL SESSION ON

EcoRevolution 5.0: Navigating Sustainable Industry and Supply Chain Transformation

for ICCAD 2026
July 7-9, 2026, Lisbon, Portugal

Session Co-Chairs:
- Dr. Sandeep Jagtap, Lund University, Sweden, Sandeep.Jagtap@tlog.lth.se
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Session description:

This special session deals with the problem of seamlessly transitioning from Industry 4.0 to Industry 5.0 while incorporating sustainability principles not only within industrial processes but also throughout the entire supply chain. This transition is essential to address the environmental and social issues of our time and meet the growing demand for eco-conscious practices in industry and supply chain management.

The goal is to explore and discuss strategies, technologies, and best practices that will guide industries and supply chains in the transition from Industry 4.0 to Industry 5.0, with a strong emphasis on sustainability. We aim to create a forum for experts, researchers, and industry leaders to share knowledge, innovations, and insights on how industries and supply chains can contribute to a greener, more sustainable future. Our ultimate objective is to catalyse a shift in the industry's approach, enabling the integration of sustainability as a central element in the development and operation of Industry 5.0 while optimizing supply chain processes for maximum sustainability.

The topics of interest include, but are not limited to:

- Sustainable Manufacturing Technologies: Emerging technologies and trends that enable sustainable manufacturing and their implications for the supply chain, including green materials, energy-efficient processes, and low-waste production methods.
- Circular Economy Integration: Exploration of circular economy principles within Industry 5.0 and their impact on sustainable supply chain management, emphasizing recycling, reuse, remanufacturing, and resource efficiency.
- Digital Twins and Sustainability: The use of digital twin technologies to optimize resource utilization and energy consumption in industrial processes and supply chain operations.
- Sustainable Supply Chain Management: Strategies for building eco-friendly and resilient supply chains, minimizing carbon footprints, and ensuring ethical sourcing in the context of Industry 5.0.

- Energy Efficiency and Renewable Energy: Innovations in energy-efficient practices, integration of renewable energy sources, and their role in supply chain sustainability within Industry 5.0.
- Smart Cities and Sustainable Urbanization: The role of Industry 5.0 in creating sustainable, interconnected smart cities that focus on reducing environmental impact and optimizing supply chain logistics.
- Regulatory Compliance and Sustainability: Discussion of the legal and regulatory aspects impacting sustainability in Industry 5.0 and sustainable supply chain management, and how to navigate compliance effectively.
- Environmental Impact Assessment: Approaches to assess and quantify the environmental impact of industrial and supply chain activities and how to reduce it effectively.
- Collaborative and Sustainable Business Models: Examination of collaborative business models that promote sustainability through shared resources and circular economic practices, while enhancing supply chain collaboration.
- Case Studies and Success Stories: Real-world examples of industries and supply chains successfully transitioning to Industry 5.0 with sustainability as a driving force, and the outcomes they have achieved.
- Sustainable Technology Adoption Challenges: Identifying and addressing challenges, barriers, and risks associated with the adoption of sustainable technologies and practices within Industry 5.0 and throughout supply chain operations.

SUBMISSION

Papers must be submitted electronically for peer review by**: January 31, 2026**
https://www.iccad-conf.com/submission/

All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format).