I-4AM 2024

# 3rd International Conference on Industry 4.0 and Advanced Manufacturing

11-12 January 2024
Indian Institute of Science, Bengaluru

cpdm.iisc.ac.in/i4am24

## CALL FOR PAPERS

Industry 4.0 uses connected intelligence to improve productivity, quality, flexibility, safety and sustainability across manufacturing enterprises, in which advanced manufacturing, such as Robotics or Additive Manufacturing, plays a critical role. I-4AM 2024 (pronounced i-forum 2024) provides a platform to bring together all stakeholders in manufacturing and Industry 4.0 in India and abroad to deliberate on the nature, needs, challenges, opportunities, problems and solutions in this transformational area. A specific focus of I-4AM 2024 is to provide a platform for evolving a vision of and enablers for sustainable, affordable, and human-centric Industry 4.0 and showcase cutting-edge practice, research and educational innovation in this area.

I-4AM 2024 is organised by Centre for Product Design and Manufacturing, Indian Institute of Science, under its CEFC on I4.0India@IISc (Smart Factory) within the SAMARTH Udyog Bharat 4.0 programme of the Department of Heavy Industries, Government of India.

**Conference and Programme Chairs:**
Prof Amaresh Chakrabarti and Prof Satyam Suwas,
Indian Institute of Science, Bengaluru

**Vice-Chair:**
Prof Manish Arora,
Indian Institute of Science, Bengaluru

## Important Dates

Call for Papers: **15 April 2023**
Full Paper Submission: **30 June 2023**
Paper Acceptance Decision: **30 September 2023**
Early Bird Registration Starts: **30 September 2023**
Final Paper Submission: **31 October 2023**
Early Bird Registration Ends: **31 October 2023**
Conference: **11 - 12 January 2024**

## Topics of the conference

**Materials Processing & Joining**
- Additive manufacturing
- Hybrid manufacturing
- Feed stock generation
- Friction stir welding
- Deformation processing / modelling
- Composites

**Controls, Autonomous Systems, Robotics**
- AGVs/ walking robots/ drones for factory traffic management
- Micro/ nano manufacturing
- Cobotics

**Policy & Entrepreneurship**
- Start-ups, eco-systems, incubators
- Distributed manufacturing
- Fuzzy front/back end of manufacturing innovation and entrepreneurship

**Industry X.0**
- Industry 4.0 & 5.0
- Wireless sensor networks
- Cyber-security protocols
- Fog/ edge computing
- Artificial Intelligence
- Certification and standards

**Supply Chains**
- Blockchain
- Market platforms
- Smart contracts
- Network games
- Dynamic routing/ control
- Large scale logistics
- Supply chain simulation
- Optimisation

**Digital Manufacturing**
- CAD/CAM/CAE
- DFX
- Simulation/visualisation
- AR/VR/MR/XR/Haptics for manufacturing
- Digital twins
- Model-based manufacturing, informatics, quality control
- Computational metrology
- Digital Human modelling

**Sustainable Manufacturing**
- Assessment/ traceability
- Lifecycle costing
- Developing new sustainable materials & manufacturing processes
- Environmental, social, and governance (ESG)
- Inclusive manufacturing

**Training and Education**
- Training and education in Industry 4.0
- Training and education in advanced manufacturing
- Alternative modes of learning (including online & blended learning)

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