

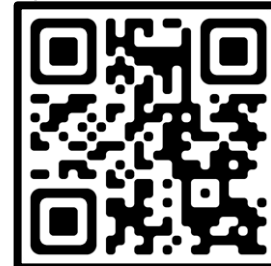


3rd International Conference on Industry 4.0 and Advanced Manufacturing

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

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)

Supply Chains

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

