



2nd International Conference on Industry 4.0 and Advanced Manufacturing

10-11 January 2022

Indian Institute of Science, Bangalore

Industry 4.0 uses connected intelligence to improve productivity, quality, flexibility, safety & sustainability across manufacturing enterprises, in which advanced manufacturing such as additive manufacturing or robotics plays a critical role. I-4AM 2022 (pronounced i-forum 2022) 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 2022 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 2022 is organised by the 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.

Topics of the conference include but are not limited to:

Digital Manufacturing

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

Policy & Entrepreneurship

- Start-ups, eco-systems, incubators
- Distributed/inclusive manufacturing

Sustainable Manufacturing

- Assessment/traceability
- Lifecycle costing
- Developing new sustainable materials & manufacturing processes

Manufacturing During Pandemic and Post Pandemic

- Maintaining productivity at reduced workforce
- Impact of supply chain disruption
- Cyberspace: Security, Fraud, Privacy issues
- Productivity at a distance
- Boosting employee safety and operational continuity



Industry 4.0

- Wireless sensor networks
- Cyber-security protocols
- Fog/ edge computing
- Artificial Intelligence
- Certification

Controls, Autonomous Systems, Robotics

- AGVs/ walking robots/drones for factory traffic management
- Micro/nano manufacturing
- Cobotics

Supply Chains

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

Materials Processing & Joining

- Additive manufacturing
- Powder generation
- Friction stir welding
- Deformation processing/modelling
- Composites

Conference Chairs: Prof Amaresh Chakrabarti and Prof Satyam Suwas,
Indian Institute of Science, Bangalore
Vice-Chair: Dr Manish Arora, Indian Institute of Science, Bangalore



Important Dates

Call for Papers: **May 2021**

Full Paper Submission: **20 July 2021**

Paper Acceptance: **30 September 2021**

Final Paper Submission: **20 October 2021**

Early Bird Registration: **30 October 2021**

Conference: **10-11 January 2022**

For further details: <https://cpdm.iisc.ac.in/i4am22/> i4am.conf@iisc.ac.in