



The Cockrell School of  
Engineering, The  
University of Texas,  
Austin, USA  
<https://www.cockrell.utexas.edu/>

# 1<sup>st</sup> CALL FOR PAPERS

## 59<sup>th</sup> CIRP Conference on Manufacturing Systems (CIRP CMS'26)

*Year 2026 theme:*

## **Towards Cognitive Manufacturing**

**May 19<sup>th</sup> to 21<sup>st</sup> 2026, The Cockrell School of  
Engineering, The University of Texas, Austin, USA.**

[www.cirpcms2026.org](http://www.cirpcms2026.org)

### **Scope:**

The scope of the *59<sup>th</sup> CIRP Conference on Manufacturing Systems (CIRP CMS'26)*, to be held from May 19<sup>th</sup> – 21<sup>st</sup>, 2026, will be to review and discuss the advances, research results and industrial improvements in the field of engineering of Manufacturing Systems (MS), which is facing significant and radical societal and technical changes in the context of Industry 4.0/5.0. To disseminate the results and to generate a significant impact on the future of Manufacturing Systems (MS), towards Cognitive Manufacturing.

**Topics:** **Fundamentals of Cognitive Manufacturing (CM)** (Definition and Evolution of CM, Differences between Traditional and CM), **Key Technologies Driving CM**; Technologies Enabling CM (Artificial Intelligence (AI) & Machine Learning (ML) in Manufacturing, Industrial Internet of Things (IIoT), Edge & Cloud Computing in Smart Factories, Digital Twins & Virtual Simulation, Augmented Reality (AR) and Virtual Reality (VR)); **Applications and Use Cases** (Predictive Maintenance and Condition Monitoring, Autonomous Quality Control & Defect Detection, Real-time Supply Chain Optimization, Smart Energy Management & Sustainability, Human-Robot Collaboration (Cobots), Dynamic Production Scheduling & Optimization); **Data-Driven Decision Making** (Big Data Analytics in CM, Real-time Monitoring & Anomaly Detection, Process Automation and Optimization Using AI, Computer Vision in CM); **Challenges and Considerations** (Cyber-security Risks in CM, Data Privacy & Compliance Regulations, Skill Gaps & Workforce Training for AI-driven Manufacturing, Cost vs. ROI Analysis of CM); **Future Trends in CM** (Role of Generative AI in CM, 5G & Edge AI for Real-time Processing, Sustainability and Green Manufacturing with AI, Hyper-automation and Self-Optimizing Systems)

### Venue



### **Special Sessions and Workshops:**

Proposals for Special Sessions and Workshops are welcome.

### **Papers and publications:**

All accepted papers will be published in *Procedia CIRP*, by Elsevier, since October 2026.

### **Venue:**

The 59<sup>th</sup> CIRP Conference on Manufacturing Systems will be held in The Cockrell School of Engineering, The University of Texas, Austin, USA <https://www.cockrell.utexas.edu/>.

**Web page:** [www.cirpcms2026.org](http://www.cirpcms2026.org)

Web site to be open in September 2025. or, follow the link from the CIRP official site [www.cirp.net](http://www.cirp.net)

**Prof. Dragan Djurdjanovic, USA, *Chairman*,**

**Prof. Tullio Tolio, Italy, *Co-chairman***

**Prof. Vidosav Majstorovic, Serbia, *Co-chairman***

**Prof. Yasuhiro Takaya, Japan, *Co-chairman***