

Special session:  
“Ethics in Autonomous Manufacturing and Modern Supply Chain Management”

**Organized by:**

Ali Hessami  
Ulrich Seidenberg

*Vega Systems (UK)*  
Siegen University

A.G.Hessami@IEEE.org  
seidenberg@bwl.wiwi.uni-siegen.de

**This special session is supported by IFAC**

This special session will cover the latest advances on technology ethics and two IEEE initiatives namely IEEE 7000 standard and the Ethics Certification Programme for Autonomous and Intelligent Systems (ECPAIS). These provide a basis for raising awareness and providing a systematic framework for the innovators, researchers and technologists as well as small and large, public and private enterprises involved in AI and technology innovation, development and deployment in manufacturing. The main focus is on Autonomous Decision Making and Algorithmic Learning Systems, the emerging regulatory landscape and ethical assurance of these technologies deployed in the context of autonomous and smart manufacturing.

We propose this session aiming at investigating the links between deployment of AI technologies in smart manufacturing and societal impact in terms of rights and values of stakeholders, focusing on processes, methods and tools to design, assess and implement them leveraging on ethical assurance of digital technologies and responsible governance.

This special session calls high-quality contributions that investigate the main research challenges, reviews, case studies, and applications related to the following topics (but not limited to):

- Stakeholder identification and analysis
- Ethics Profiling of Smart Manufacturing
- Responsible Governance in Smart Manufacturing
- Safety, Security, Sustainability, Dependability
- Sector Specific Transparency and Accountability
- Sector Specific Risk Acceptance Criteria
- Ethical Principles of Designing Supply Chains
- Ethical Guidelines of Operating Supply Chains
- Maturity Models of Ethical Supply Chains
- Limits of Corporal Responsibility in Supply Chains
- Approaches to Solving Economic and Ethical Trade-offs in Manufacturing and Supply Chains
- Applications for Managing Ethical Supply Chains
- Detecting of and Dealing with Drifts between Ethical Standards and Real Practices
- 

**PAPER SUBMISSION:**

Authors are invited to submit draft papers reporting original research of theoretical or applied nature, on the topics of the session. Final manuscripts are limited to 6 pages

**SPECIAL SESSION CODE: 5gk1u**

When you submit your paper to the IFAC system, you will be required this ID number in order to associate your paper to the special session:  
<https://ifac.papercept.net/>

**IMPORTANT DATES:**

Full papers submission deadline: **31<sup>st</sup> January 2024**  
 Notification of acceptance: **15<sup>th</sup> March 2024**  
 Final papers submission deadline: **1<sup>st</sup> May 2024**  
 Early registration deadline: **30<sup>th</sup> April 2024**  
 Late registration deadline: **31<sup>st</sup> July 2024**  
 Conference date: **28<sup>th</sup>-30<sup>th</sup> August 2024**