

ICAM25

International Conference on Advanced Manufacturing

Research to Application through Standardization

October 6-10 | Las Vegas, NV

Industry 4.0: Security Aspects

As AM equipment becomes more interconnected with Industry 4.0, the risks of cyber and cyber-physical attacks grow, including threats such as intellectual property theft and the illicit production of 3D-printed weapons. These threats pose significant challenges to safety, economic stability, and supply chain security. Traditional cybersecurity measures might not always be adequate, requiring a comprehensive approach that addresses digital rights management, design protection, and the potential misuse of AM technology. Strengthening AM security will enhance trust in AM-produced parts and support wider adoption. This symposium examines these security concerns within the evolving Industry 4.0 landscape.

TOPICS OF INTEREST INCLUDE BUT ARE NOT LIMITED TO:

- Connectivity and security of AM networks
- Mitigation methods and solutions to enhance security for AM
- The extent to which general Operational Technology cyber-security guidance applies to AM
- Cyber Security of AM equipment
- Security across the AM supply chain from design to manufacturing
- Novel attacks
- AM and threats to Intellectual Property
- Standards and needs for AM security
- The legality of 3D Printed weapon components and fully printed devices
- Security of AM supply chain, design IP and 3rd party risk protection
- Insider threats to AM security



Symposium Organizers

- Chris Adkins, Materialise, USA
- Narasimha Reddy, Texas A&M University, USA
- Thomas Chittum, SoundThinking, USA
- Darrick Kristich, Sedara, USA
- William Ryan, ATF, USA
- Mark Yampolskiy, Auburn University, USA

Submit an abstract

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