Special Issue

Occupational Safety Challenges in the Context of Industry 4.0

Message from the Guest Editor

In the context of Industry 4.0, occupational safety faces new challenges with the integration of advanced technologies such as automation, artificial intelligence, robotics, the Internet of Things (IoT), and cyber-physical systems. While these technologies offer significant benefits, they also introduce complex safety risks that must be managed effectively. Some of the key challenges are as follows:

- Human–Machine Interaction
- Cybersecurity Risks
- Data Overload
- Workforce Skills and Adaptation
- Changing Workplace Layouts and Risk Assessment
- Lack of Standardization
- Remote and Autonomous Operations
- Physical and Mental Stress

In short, while Industry 4.0 offers numerous opportunities for increased productivity and innovation, it also introduces unique occupational safety challenges. Addressing these challenges requires a combination of robust safety protocols, continuous training, technology integration, and proactive risk management strategies.
For further reading, please follow the link to the Special Issue Website at:

https://www.mdpi.com/journal/safety/special_issues/MOT23PZ3J7

Guest Editor

Prof. Dr. Lucian-Ionel Cioca

Industrial Engineering and Management Department, Faculty of Engineering, Lucian Blaga University of Sibiu, 10 Victoriei Blv., 550024 Sibiu, Romania

Deadline for manuscript submissions

20 November 2025

Safety

Safety

mdpi.com/journal/safety

About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Raphael Grzebieta
Transport and Road Safety (TARS), University of New South Wales, Old Main Building (K15), Sydney, NSW 2052, Australia

Author Benefits

High Visibility:
indexed within Scopus, ESCI (Web of Science), SafetyLit, and other databases.

Journal Rank:
CiteScore - Q2 (Safety Research)

Rapid Publication:
manuscripts are peer-reviewed and a first decision is provided to authors approximately 37.2 days after submission; acceptance to publication is undertaken in 5.7 days (median values for papers published in this journal in the first half of 2025).