

Editorial Safety Role and Contribution to Industrial Sustainability

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This Special Issue "Safety Role and Contribution to Industrial Sustainability" aims to stress the relevance of sustainable development by promoting research on the role of Occupational Safety and Health (OSH) in enhancing industrial sustainability, with respect to three integrated dimensions (i.e., economic, environmental, and social). Although many leading companies have started considering sustainability as a key part of their business strategy, the social dimension of sustainability, and particularly OSH, has been disregarded. More attention should be given to this to assess the impact of the implementation of Industry 4.0-enabling technologies and the emerging trends (e.g., ageing workforce) on OSH.

This Special Issue publishes three papers, which offer different points of view on OSH in terms of the industry, safety issues, and research methodology.

A method based on discrete event simulation used to integrate production economics and OSH is the focus of the first contribution [1]. In particular, it uses a quality-of-life metric to determine the OSH risks, embedding as a routine in manufacturing plant simulation software to achieve an optimised facility layout, production capacity, and machine utilisation, giving attention to the OSH issues. The proposed integration method can support the sustainable growth of manufacturing companies, considering both the financial and OSH aspects of their production systems.

The second contribution focuses on the OSH problems of golf caddies through a survey and oral interviews using an independent sample *t*-test, one-way analysis of variance, and Pearson correlation, frequency, and multiple regression analyses [2]. The authors identified the most frequent injuries caused to body parts, the workplace risk factors, the treatment expenses, the protective measures, and the physical burden and emotional labour. This study shows that caddies workplaces are relatively vulnerable to OSH issues, since they expose them to several harmful risk factors.

Finally, a systematic literature review of the safety climate measurement methods applied in the construction industry is the target of the third contribution [3]. The authors use the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) method to collect relevant papers and analyse them. The most used methods for measuring safety climate are questionnaires, literature surveys, and data analyses, whereas factor analysis, the development of measuring models and questionnaires, statistical analyses, and machine learning are employed as sub-methods.

In conclusion, this Special Issue provides readers with the recent research results on the aforementioned subjects, but additional studies are desirable to further investigate how safety can positively impact industrial sustainability. In particular, studies on topics like: OSH in sustainability reporting or in sustainability standards; OSH as a business sustainability strategy; safety and sustainability goals alignment; and safety performance measurement, reporting, and benchmarking.



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