

Invited Session on “Green, Agile and Resilient Supply Chains and Manufacturing Systems”

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Session Chairs:

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Abstract

In the last decades, an increasing number of natural disasters and catastrophes has affected the entire world. The real challenge that the industrial systems face today is achieving sustainable performance while responding to the competitive market with rapid and unexpected changes. This also implies that the systems need to consider contrasting factors and satisfy multiple constraints simultaneously. In this context, Smart systems including Green, Agile and Resilient (GAR) principles could emerge as an effective solution. Today, the design of green solutions has become a business obligation. Agility, instead, focuses on flexibility and receptiveness, and on the ability to quickly respond to changes. Finally, resilience refers to the capacity of adaptation, ability to manage uncertainty and recover from disruptions. The current literature usually addresses the three topics separately; however, the recent coronavirus (COVID-19) epidemic demonstrates the necessity to extend and integrate these principles for designing efficient systems, able to prevent and face unexpected events. Thus, in modern era, Green, Agile, and Resilience paradigms needs to be adopted and used together for increasing the competitiveness of industrial systems and guaranteeing their sustainability.

Session topics

This Invited Session aims to collect the recent research, which study and combine Green, Agile, and Resilience paradigms in operations and supply chain management, and consider the impact of the effect of their combination on system performance. Quantitative, theoretical, empirical studies and applied research papers are welcome. The session aims at attracting papers including but not limited to the following topics: present and new trends in the association of GAR paradigms; combined effects, benefits, conflicts or trade-off treating one or more paradigms at a time; integration of green, resilience and agile practices with the technologies of I4.0; key performance indicators for green, resilience and agile evaluation; drivers, barriers, factors for GAR integrated models.

Submission

For author guidelines, please refer to www.ifac-control.org. All papers must be submitted electronically using <https://ifac.papercept.net/>. All papers must be prepared in a two-column format in accordance with the IFAC manuscript style. Please use the official IFAC instructions and template to prepare your contribution as full-length draft paper and submit it online by December 25, 2021. Submission details are available on the symposium website. All submissions must be written in English. All papers that conform to submission guidelines will be peer-reviewed by IPC members. The corresponding author submits the paper online (pdf format) as an invited session paper. Submission as an invited paper requires the invited session code: XXXX. Several international journals (IJPR, ANOR, FSM Journal, IJISM) are associated with the MIM 2022 for publication of special issues.

Important dates:

December 25, 2021	Deadline for the submission
February 15, 2022	Notification of acceptance/rejection
March 15, 2022	Deadline for the final submission