



Intelligent control for a Sustainable and Efficient supply chain of the future

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Short presentation:

In the recent decades, sustainability became a very challenging problem for many domains, especially for logistic and transportation systems. Meanwhile, the industry and supply chain 4.0 are enhanced by new technologies (AGV, drones, IoT, ...) that are becoming energy-consuming and hardly designed to be environment-friendly. These technologies make also this new supply chain more complex. In addition, such a complexity can be increased by considering perturbations or unexcepted events (urgent order from customers, ...). Moreover, sustainability imposes that an intelligent control continues to be efficient over the time (perturbations, etc.) and over the changing context (constraints and objectives).

The objective of this session is to present recent intelligent control approaches leading to efficient, robust and sustainable solutions for the supply chain of the future, whatever the addressed level (-operational, tactical and strategic level) and the addressed stage of the supply chain (procurement, production, customer delivery...). Such an intelligent control can be local and reactive (Multi-agent system, holonic approach, ...) or global and static (Math model, metaheuristic, ...).

Authors are invited to submit original contributions on methods, models and control architectures dealing with the intelligent control of future supply chain, including but not limited to:

- The energy optimization in the Supply Chain 4.0,
- Scheduling problems considering energy consumption and emission,
- Optimizing gas emission in transport and logistics problems (routing problems, pickup and delivery, ...)
- Using physical internet as paradigm for reaching high level of sustainability
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Keywords: Intelligent control, sustainability, energy emission and consumption, Supply Chain Management, green supply chain, Physical Internet, Logistics.

Important dates:

- Proposals of Special Sessions: 30 April 2021
- Full paper submission: 15 July 2021



- Notification of acceptance: 15 September 2021
- Final, camera-ready paper submission: 15 October 2021
- Early registration and fee payment: 1 November 2021
- Workshop: 18-19 November 2021