

## Session title: Energy and GHG emissions optimization in Manufacturing and Supply Chains

## Organisers:

- Abdelghani Bekrar, LAMIH, France (abdelghani.bekrar@univ-valenciennes.fr)
- Damien Trentesaux, LAMIH, France (Damien.Trentesaux@univ-valenciennes.fr)
- Adriana Giret, DSIC, Spain (agiret@dsic.upv.es)
- Hamid Allaoui, LG2A, France (hamid.allaoui@univ-artois.fr)

## Short presentation:

In the last decade, the energy consumption and environmental considerations have become a major challenge for manufacturing and supply chain management. Based on this statement, many papers are presented treating constraints and/or objectives related to one or more aspects for the energy consumption and GHG emissions. The Physical Internet paradigm is among these innovative concepts that propose new sustainable logistics services.

The aim of this special session is to present new approaches and models that integrate constraints/objectives related to the energy and environment aspects. These methods and approaches could be global and centralized (metaheuristics, mathematical programming, ...) or decentralized and local (holonic approaches, multi-agent systems, ...etc).

Authors are invited to submit original contributions on energy and GHG emissions optimization in manufacturing and supply chain, including but not limited to:

- Modeling and solving energy consumption and GHG emissions optimization problems in scheduling and planning of manufacturing, distribution, logistics operations,
- Green manufacturing and supply chain,
- Robust and reactive methods to solve these problems,
- Physical internet based approaches,
- Artificial Intelligence approaches.
- Simulation and optimization based methods and case studies,

**Keywords**: Energy consumption, GHG emissions, green supply chain, Physical Internet, decentralized approaches, meta-heuristics,

## Important dates:

- Proposals of special sessions: March 31<sup>st</sup>
- Full paper submission: June 17
- Notification of acceptance: July 15
- Final, camera-ready paper submission: September 10
- Early registration and fee payment: September 15