



Advances in the operationalization of Sustainable Development Goal 12 with Industry 4.0 enablers

Sustainable development goals are the common agenda for the nations to save our planet. The UN SDG outline includes 17 goals with several targets for the operationalization of sustainable development by 2030. One of the essential goals in the UN agenda is goal 12 that seeks sustainable production and consumption. This goal includes different stakeholders and covers the life cycle approach of several sectors including mobility, food, agriculture, housing, and appliances. The industry 4.0 paradigm plays an essential role in sustainable manufacturing. This paradigm affects the green supply chain includes green design, green manufacturing and remanufacturing, reverse logistics, and waste management. Several recent studies focused on the application of collaborative robots, digital twins, and virtual reality/augmented reality in disassembly, remanufacturing, and recycling. The objective is to optimize the operations and integrate the new technologies for a sustainable life cycle management of the products. This session aims to gather the researchers to exchange future research and recent innovations in the field of industry 4.0 driven sustainable production and consumption.

Original research papers, methodological papers, case studies, and short communications on the theme of this special session are welcomed. Topics may include but are not limited to:

- Circular economy and Industry 4.0 (opportunities and challenges)
- Industry 4.0 implications in recycling/ remanufacturing and End of Life treatment
- Industry 4.0 applications in the product life cycle management
- IoT enabled optimizations in product recovery management
- Industry 4.0 and Eco-design
- Industry 4.0 applications in Waste management
- The applications of cobot/ VR/AR in disassembly/assembly operations

Guidelines for the preparation of manuscripts are on the conference website at: <https://hub.imt-atlantique.fr/mim2022/>

Paper submission: <https://ifac.papercept.net/conferences/scripts/start.pl> Find MIM 2022, proceed as an invited paper and indicate the invited session identification code 43a5d. If you experience any difficulties, please contact session's organizer.

- Submission Deadline: January 25, 2022
- Authors Notification: February 15, 2022
- Final paper submission deadline: March 15, 2022

Invited session chair and contact information:

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