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11th IFAC Conference on Manufacturing Modelling, Management and Control Trondheim, Norway, 30 June - 3 July 2025 <u>Resear</u>ch and Innovation on Manufacturing and Logistics for a better world

Invitation to Special Session on:

FutureLOG project – Sustainable Logistics of the Future

International Partnership Project funded by NFR - #309528 (2020-2025)

Project leader: NTNU Logistics 4.0 Lab (Fabio Sgarbossa <u>fabio.sgarbossa@ntnu.no</u>)

NTNU

Production Management

Research Group

 Partners: Auburn University; Berlin School of Economics and Law; Clemson University; Georgia Institute of Technology; Fairfield University; Fraunhofer Institute for Material Flow and Logistics; IIM Ahmedabad; IMT Atlantique; Karlsruhe Institut für Technologie (KIT); MINES ParisTech; IIM Mumbai; North Carolina State University; Oklahoma State University; Oregon State University; Rensselaer Polytechnic Institute; Texas State University; UC Berkeley

Digital technologies resulting of the fourth industrial revolution, also called Industry 4.0, are most likely the strongest driver to improve and optimize performance of the supply chain and logistics and simultaneously taking into account the sustainable dimensions. To educate and prepare the next generation of engineers and managers, the production management group of NTNU opened the first logistics laboratory in Norway that merges digital technologies with traditional production and logistics systems. This project wants to extend the purpose and quality of the Logistics 4.0 lab to become a world leading lab connected to key experts around the globe. Collaborating with partners from US, France, Germany, and India, will enable to provide education at a top level and to conduct high-quality research in sustainable logistics of the future. To achieve this, the project is divided in work pages focusing on traditional and emerging logistics fields including circular economy, closed-loop supply chain, collaborative logistics, etc. on network level and the integration of digital technologies and smart material handling systems for human-centered logistics systems on factory level. These efforts will facilitate to educate the future generations of engineers to deal with complex logistics systems in a very dynamic environment with a sustainable perspective where technologies can make the world a better place. Moreover, the project will support the development of new approaches for the integration of environmental issue and human factors and new technologies in the design and management of the logistics systems of the future.

THIS SPECIAL SESSION WILL PRESENT AN OVERVIEW OF THE MOST RELEVANT RESULTS ACHIEVED. PARTNERS OF THE PROJECT ARE INVITED TO SUBMIT THEIR RESEARCH USING THE CODE 9n7m3

Topics may include, but are not limited to:	INVITATION CODE: 9n7m3
• Future Logistics Applications, in traditional	Draft papers reporting original research (limited to
and emerging logistics fields: Industry, city,	6 pages in IFAC format) and extended abstracts are
healthcare, airport, hotels & restaurant, etc.	welcome.
 Sustainable Supply Chain of the Future, 	When you submit your paper to the IFAC system,
including Circular economy, Closed-Loop	you will be required the invitation code 9n7m3 in
Supply Chain, Collaborative Logistics,	order to associate your paper to the special
Physical Internet	session: https://ifac.papercept.net
 Human-Centered Logistics Systems, 	
integrating Digital Technologies, Human	IMPORTANT DATES:
Factors, Smart Material Handling Equipment	Draft papers/ extended abstract submission
	deadline: 30.11.2024
	Final papers submission deadline: 28.02.2025
Ευτυ τε <u>Γ</u>	Early registration opens: 28.02.2025
	Conference website:
	https://conferences.ifac-control.org/mim2025/

Accepted papers will be published open access in Elsevier's IFAC-PapersOnLine. Post-conference special issues for extended versions of accepted papers are planned in IFAC and other high-ranked journals.

> IFAC TC 5.2. - Management and Control in Manufacturing and Logistics Proposal 86 submitted to 11th IFAC Conference on Manufacturing Modelling, Management and Control. Uploaded October 5, 2024.