Beginning Four Decades of the Greening of Industry Network (GIN)

Logistics | New Tech

&

An Effective Circular Economy

Jointly organised by LAMIH (Laboratory of industrial and human automation, mechanics and computer science), UPHF (Université Polytechnique Hauts-de-France) & GIN (the Greening of Industry Network)

TEC-LOG^{d} :: GIN Conference

- Technology and Logistics for an Efficacious Circular Economy
- Integrative Social, Environmental, and Technical Systems for the Circular Economy

Call for Participation

The GIN Conference on Logistics | New Technologies & Effective Circular Economy will be co-organized by LAMIH (Laboratory of industrial and human automation, mechanics and computer science), UPHF (Université Polytechnique Hauts-de-France) & GIN (the Greening of Industry Network). This GIN conference will build and broaden previous GIN circular economy themes that go back decades. The main goal of the conference is to provide a stimulating transdisciplinary deliberation in which actors from multiple scientific fields and practical experiences can exchange and build knowledge, expertise, and thought related to logistics, emergent technologies and an effective circular economy.

The conference will be held from **July 6 to July 8, 2022 @ Valenciennes & Cambrai - FRANCE**

I. Scope

Logistics systems and supply chains are facing scrutiny due to depleting resources, rising population, and various socio-environmental crises. Sustainable systems have become more pronounced in response to this scrutiny—requiring joint evaluation of economic, social, and ecological dimensions and performance. In this respect various resources and assets, products, equipment, materials, facilities each need to be managed more intelligently. Circular economy (CE) principles are a promising avenue for more effective and efficient management of sustainably-focused systems. Recently, at COP-26 over 70 countries mentioned circularity and CE principles as a way to address climate concerns.

CE models offer a potent alternative—but CE advancement and transition is not easy. It can be hindered by social, technical, economic, and political barriers.

One CE barrier at the core of this conference is the mismatch between logistics requirements and the current logistics, transportation, and supply chain network infrastructure and tools—we need solutions to support closed-loop activities and linkages as well as CE principle integration across the many 'R's' of circularity. CE is a critical alternative to the classical linear economic model; but it needs relevant and adapted logistics for offering better services and achieving its main objectives. These issues not only require transdisciplinary solutions but also analyses at multiple levels from the broadest macro-economic policies to specific algorithmic developments for optimization of networks and designs.

CE infrastructural development also needs to harness new technological developments—the internet-of-things (IoT), artificial intelligence, blockchains, and big data—offer policy makers, industrial practitioners, civil society, and research institutes a variety of opportunities to actively shape the future of CE transportation and logistics. There are systemic linkages, trade-offs, and critical evaluations that should be part of the conversation and why a transdisciplinary discourse is necessary.

Key topics include, but are not limited to:

Theory and Methodology

- Circular Economy Strategies
- Circular Economy via relevant Logistics with the help of new technologies
- Logistics 4.0 through Circular Economy principles in the era of IoT
- Identifying and Overcoming Circular Economy Challenges
- New technologies (IoT, blockchain, drones, autonomous vehicles etc.) in service of Circular Economy
- Analytical possibilities and solutions for the Circular Economy
- New Circular Economy Business Models
- Industrial Symbiosis, Industrial Ecology, and Sustainable Supply Chain linkages
- Theoretical and Conceptual Innovations for Remanufacturing, Reuse, Refurbish, and Repair, and Reclamation
- Sociotechnical Linkages and the roles of various Societal Stakeholders
- Evolution of a Circular Economy to a Circular Society
- Urban design (circular regions)

Applications

- Production and Consumption
- Waste management
- Renewable Energy
- Secondary raw materials Innovation and investments
- Transport
- Recycling
- Remanufacturing, reusing, refurbishing
- Building system resilience through CE

Objectives

The conference will include discourse and progress on academic, institutional, and societal challenges. It will bring together stakeholders who have already integrated CE principles and have identified CE impacts across social and industrial systems. We encourage case studies, research notes and best practices of businesses embracing the use of new technologies, new trends in modern logistics services and other sustainable innovations inspired by the Circular Economy.

II. PARTICIPANTS

Scholars, scientists, government, business, civil society, communities, media & students

III. ORGANIZERS

A. Organizing Committee

Abdelghani Bekrar, LAMIH & INSA Hauts-de-France, Valenciennes, France

Abdessamad Ait El Cadi, LAMIH & INSA Hauts-de-France, Valenciennes, France

Raca Todosijevic, LAMIH & INSA Hauts-de-France, Valenciennes, France

B. Program Committee

Abdelhakim Artiba, UPHF, FRANCE

Damien Trentesaux, UPHF, FRANCE

Diego Vasquez Brust, University of Portsmouth, UK

Joseph Sarkis, Worcester Polytechnic Institute, USA

María-Laura Franco García, University of Twente, Netherlands

Natalia Yakovleva, KEDGE Business School, UK

C. Scientific and Advisory committee

Abdessamad Ait El Cadi, LAMIH & INSA Hauts-de-France, FRANCE

Hamid Allaoui, Université d'Artois, FRANCE

Abdelhakim Artiba, LAMIH & INSA Hauts-de-France, FRANCE

Chunguang Bai, University of Electronic Science and Technology of China, CHINA
Abdelghani Bekrar, LAMIH & INSA Hauts-de-France, FRANCE
Fouad Ben Abdelaziz, NEOMA BS, FRANCE
Marcus Brandenburg, Hochschule Flensburg, GERMANY
Lucila Campos, Federal University of Santa Catarina, BRAZIL
Charbel Chiappetta Jabbour, Emlyon Business School, FRANCE
James Cordeiro, State University of New York, USA
Nicole Darnall, College of Global Futures & School of Sustainability - Arizona, UK
Steven DeMeester, University of Ghent, BELGIUM
Paul Dewick, Keele Business School, UK
Behnam Fahimnia, University of Sydney, AUSTRALIA
Mari-Laura Franco-Garcia, University of Twente, Netherlands
Regina Freim, University of Southampton, UK
Yong Geng, Shanghai Jiao Tong University, CHINA
Kannan Govindan, University of Southern Denmark, DENMARK
Angappa Gunasekaran, Penn State -Harrisburg, USA
Marilyn Helms, Wright School of Business - Dalton State College, GEORGIA
Joerg S. Hofstetter, KEDGE Business School, UK
Sherwat E. Ibrahim, American University in Cairo, EGYPT
Anicia Jaegler, Kedge Business Scho, UK
Lenny SC Koh, Sheffield University, UK
Mahtab Kouhizadeh, University of Rhode Island, USA
Simonov Kusi-Sarpong, University of Southampton, UK
Ana Beatriz Lopes de Sousa Jabbour, EM Normandie, FRANCE
Fabien Martinez, EM-Normandie, FRANCE
Santosh Nandi, Appalachian State, USA
Jose Plaza-Ubeda, University of Almeria, SPAIN
Stefano Pogutz, Bocconi University, ITALY
Mustapha Ratli, LAMIH & INSA Hauts-de-France, FRANCE
Jafar Rezaei, TU Delft, NETHERLANDS
Vasco Sanchez Rodrigues, Cardiff University, UK

Joseph Sarkis, Worcester Polytechnic Institute, USA

Patrick Schröder, Chatham House, UK

Stefan Seuring, University of Kassel, GERMANY

Yong Sik Ok, Korea University, KOREA

Roberta Souza Piao, University of Sao Paulo, BRAZIL

Nallan C. Suresh, State University of New York at Buffalo, USA

Xu Tian, Shanghai Jiao Tong University, CHINA

Raca Todosijevic, LAMIH & INSA Hauts-de-France, FRANCE

Damien Trentesaux, LAMIH & INSA Hauts-de-France, FRANCE

Diego Vazquez-Brust, University of Portsmouth, UK

Natalia Yakovleva, KEDGE Business School, UK

Qinghua Zhu, Shanghai Jiao Tong University, CHINA

Qingyun Zhu, University of Alabama in Huntsville, USA

IV. PRACTICAL INFORMATION

The Conference will be held on July 6-8, 2022 (2 days conference & 1 day for industrial visit), at Université Polytechnique Hauts-de-France, Valenciennes & Cambrai, FRANCE.

V. IMPORTANT DATES

A. Abstract paper deadline: April 20, 2022

B. Acceptance of abstracts: May 10, 2022

Abstracts should be no longer than 350 words (1 page). The scientific committee will select them and then communicate to the participants on the acceptance of their abstract. A timetable outlining further communication arrangements will also be indicated.

C. For submission contact:

Dr. Abdessamad Ait El Cadi : Abdessamad.AitElCadi@uphf.fr

Dr. Abdelghani Bekrar : Abdelghani.Bekrar@uphf.fr

Dr. María-Laura Franco-García : m.l.francogarcia@utwente.nl

Dr Raca Todosijevic : Raca.Todosijevic@uphf.fr

Dr. Natalia Yakovleva: natalia.yakovleva@kedgebs.com

VI. PUBLICATIONS

- Papers selected for the conference will be archived in the GIN publications webpage.
- Select papers will be included in the GIN book studies published by Springer Publishers.
- High quality papers will be encouraged for submission to the *Journal of Cleaner Production* and *Resources, Conservation and Recycling*. A special issue will be generated if there are enough high-quality works from this conference. The conference chairs are actively working on ensuring other special issues of high impact journals.
- Papers for special issues should not have been previously published nor be currently under consideration for publication elsewhere.

The definitive program will be announced after closing the papers reception.

VII. Conference registration

A. Early Bird Rate (paid before June 1)

1. Regular Attendee 300.00 €
2. Student 200.00 €
3. Non-Presenter 150.00 €

B. Normal/Regular Rate (if paid after June 1)

1. Regular Attendee 400.00 €
2. Student 300.00 €
3. Non-Presenter 250.00 €

C. Guests' Rate

1. Per person 150 €

The registration fee includes access to all the sessions of the conference program, digital access to the proceedings, coffee and lunch.

As part of the social-networking component, one reception-dinner and one excursion are considered, and these will be covered directly by the participant. Indicate at registration if you will attend the reception-dinner and/or the excursion.