CALL FOR CHAPTERS OF EDITED VOLUME

Book Series on ‘Greening of Industry Networks Studies’

Series Editors: Vazquez-Brust, Diego A., Sarkis, Joseph

Edited Volume Title:

Greening of Industry 4.0: Sustainable Supply Chain Value Creation through Transformation

Editors: Sudhanshu Joshi, Doon University, INDIA
Joseph Sarkis, Worcester Polytechnic Institute (WPI), USA

About this Call for Chapters:

Green operations management is a key driver for sustainable supply chain activities. Aligning green manufacturing strategies is critical when disruptive technologies result in consternation among industrial managers and policymakers. Industry 4.0 is one such potentially disruptive technological philosophy. Industry 4.0 may include rapid transformations in the design, operations and supply chain organizational activities utilizing cyber-physical systems architectures. In an Industry 4.0 environment, operational goals include lean, agile, digitized and automated activities. Sustainability business models in this environment add complexity to Industry 4.0 issues. The dynamic emergence of these concepts and technologies has motivated significant new research initiatives in production and sustainability. The interactions between green, sustainable, manufacturing management and Industry 4.0 imposes new challenges for both researchers and practitioners. It is at this nexus, which this edited book seeks to address. Some of the questions, issues, and debates related to effective transition to and integration of these fields include:

- What are evolving roles of green innovation, production, logistics, and service processes?
- What are the key management support technologies empowering the green production economy?
- What are effective green manufacturing management strategies, routines, and methodologies to integrate physical, information, and financial flows?
- How do firms develop innovative approaches for managing their operational processes?
- How do firms exploit the Internet of Things (IoT) and digitization to yield sustainable competitiveness?
- How do firms utilize Big Data to improve the efficiency of green production and services?
- What are the roles and implications for new supply chain distributed technologies such as blockchain technology for sustainability?
- How does Industry 4.0 influence the design of green manufacturing and service systems, and the workplace?

The central focus of this book is to explore the relationship between environmental sustainability management, green operational practices and Industry 4.0 adoption across the supply chain. This book aims to provide tentative and emergent answers to many of the above listed concerns. Contributions can be conceptual, empirical, qualitative, or quantitative.

Proposal Submission

A one (1)-page chapter abstract proposal that explains how the proposal fits into the book’s goals and scope may be submitted directly to editors at:

sudhanshu@doonuniversity.ac.in (Sudhanshu Joshi)
sarkis@wpi.edu (Joseph Sarkis)

Important Dates:

March 15, 2018: Proposal Abstract Submission Deadline
April 15, 2018: Notification of Proposal Acceptance
October 15, 2018: Full Chapter Submission
January 15, 2019: Double Blind Review Results Returned
March 15, 2019: Final Chapter Submission

Topics may include (but not limited to):

- Conceptual frameworks on Green Industry 4.0 Processes
- Research Models on green production economics in Industry 4.0.
- Impact of Industry 4.0 on green operations and supply chain strategies
- Green Innovations and technology management
- New and sustainable business models (including platforms)
- Value of information and decentralized decision-making in supply chain management
- Coordination in manufacturing networks
- Man-machine interaction and workplace design
- Procurement management
- Logistics management and Greening the industry 4.0 approach
- Services management and Greening the industry 4.0 approach
- Blockchain technology for Sustainability
- Sustainable Development Goals for Green Technology and Industry 4.0
- Challenges towards Green Production Economy
- New business models