Special Issue of Central European Journal of Operations Research on *"Advances of Operational Research and Data Analytics in Supply Chain Economy"*

At the occasion of *EURO 2024* Copenhagen, Denmark

This ***CEJOR Special Issue*** is prepared at the occasion of ***EURO 2024*** - the ***33rd EURO Conference*** - at the Technical University of Denmark (DTU), Copenhagen, Denmark (https://euro2024cph.dk).

Supply Chain Economy (SCE) stands for an economy that is directly regulated by the dynamics and efficiency of its supply chain processes. In such an economy, the flow of materials, information, funds, and services within the supply chain plays a key role in specifying overall economic performance. SCE addresses ten major aspects including *Efficiency and Productivity*, *Globalization*, *Technology and Innovation*, *Economic Resilience*, *E-commerce and Digitalization*, *Environmental Sustainability*, *Labor Market Impact*, *Government Policies and Trade Agreements*, *Consumer Behavior*, and *Data Analytics*.

The **efficiency and productivity** of an SCE are intimately linked to its ability to adapt to fluctuating conditions and leverage **technology and innovation**. As **globalization** continues to shape economic relationships and **environmental sustainability** grows in importance, the SCE will apparently continue to evolve in the matter of these factors. The rise of **e-commerce and digitalization** has transformed the SCE which has also contributed to the **economic resilience** to get prepared for handling potential disruptions and rapidly adapt their supply chains tend to be more resilient. On the other hand, an SCE is tied to **government policies and trade agreements, consumer behavior**, and **labor market impact** to creep into profitability through optimizing supply chain operations. To do so, *Operational Research (OR)* and **Data Analytics** are the main two tools to optimize the SCE. In particular, data-driven decision-making models help businesses find inefficiencies and enhance the performance of their supply chains.

This special issue addresses the advances and challenges of **OR** and **data analytics** for *SCE*. Recent advances in OR and data analytics tools are fast enablers for the **Industrial Revolution 4.0**. The emergence of *Industrial Revolution* 4.0, the *Internet of Things* (*IoT*), and *cyber-physical systems* has marked the onset of a novel era in which *intelligent*, *technology-driven smart environments and systems* are becoming a crucial element for providing real-time information to optimize supply chain activities. Accordingly, ***Demand Forecasting and Planning***, ***Inventory Management***, ***Risk Management***, ***Transportation and Logistics***, and ***Performance Analytics*** are the main areas to transform and optimize the way supply chains function.

We welcome manuscript submissions covering a diverse array of interconnected subjects. These can encompass a wide spectrum of themes, including, though not restricted to:

• OR-based analytics
• Multi-Criteria Decision-Making (MCDM) methods
• Heuristic and meta-heuristic approaches
• Game theoretic techniques
• Agent-based modeling
• Big Data Analytics and IoT
• Machine Learning and Deep Learning
• Neural network applications
• Uncertainty handling methods
• Simulation tools

All papers must be submitted online through the Journal editorial manager and the maximum number of pages allowed is 25. The format of manuscripts for CEJOR as well as guidelines and templates can be found on the following web page: https://www.springer.com/journal/10100/submission-guidelines. During the online submission, please make sure to select "**SI: Advances of Operational Research and Data Analytics in Supply Chain Economy**" in the first step of the submission process.

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Key Dates

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Submission deadline: August 31, 2024
Final acceptance notification to authors: September 30, 2024