Special Issue

Stochastic Processes and Queuing Models in Operations Research, Logistics, and Inventory

Message from the Guest Editor

Research on queueing systems with inventory control has captured much attention of researchers over the last decades. Nowadays, inventory models and logistic environment are characterized by an inconsistency and volatility in the flow of items in and out of the supply network. Although these issues have been studied for decades, volatile market conditions have increased the complexity of modeling and analyzing supply chains. Using tools from stochastic processes and queueing theory to derive the optimal policy and decision variables becomes necessary in order to increase the economical profit and to keep competitive. This Special Issue aims to provide the decision makers with tools in modelling and analyzing different problems of operation research, including (but not limited) logistics and inventory processes, reliability models, and health-care systems. We welcome advanced but simple and easy-to-implement techniques with the focus of linking between research and practice. Particular attention is devoted to applications of fluid processes, Lévy processes and Markov processes in logistics and inventory.

Guest Editor

Dr. Yonit Barron

Industrial and Management Engineering Department, Ariel University, Ariel 40700, Israel

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About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

Editor-in-Chief

Prof. Dr. Francisco Chiclana
School of Computer Science and Informatics, De Montfort University,
The Gateway, Leicester LE1 9BH, UK

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