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# Advanced Methods and Applications in Routing and Distributions Problems

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Message from the Guest Editors

The Vehicle Routing Problem (VRP) and its variants play a vital role in the logistics and supply chain management sectors. This Special Issue aims to bring together cutting-edge research and innovative methodologies addressing complex issues related to these problems, emphasizing both theoretical advancements and practical applications.

Key topics explored in this issue encompass heuristic and metaheuristic approaches, exact algorithms, hybridization methods, and machine learning approaches. Furthermore, the issue delves into advanced distribution challenges, including uncertainty, robustness, real-time routing problems, and integrating new energy sources or sustainable practices.

Encouraging contributions from both academia and industry, this Special Issue aims to advance the state of the art in routing and distribution. We invite original research papers addressing new methodologies and real cases in collaboration with industry, providing new insights and significant contributions to the field.

**Decial**sue

## Keywords:

- routing
- distribution
- advanced logistics
- multi-echelon networks
- computational logistics

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# **Editor-in-Chief**

## Message from the Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo** Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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