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Guest editorial

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We are glad to see the final version of this special issue of Decision Making in Manufacturing and Services (DMMS) on Optimization in Supply Chain Management take shape. It does not come as a surprise that we received a rather heterogeneous batch of submissions concerning different aspects of optimization focusing on applications in supply chain management (SCM). There seems to be no need to introduce the field of SCM here since it has been the focus of researchers and practitioners, for decades. This does not imply that there is no potential or no need for further improvement. With advances in hardware or algorithms, models have become more integrated over the years and there is no end to this development in sight. The mission of this special issue is to present new approaches on advancing optimization techniques with applications in SCM. It presents three papers in order to do so.

In their paper "An Incremental Approach for Storage and Delivery Planning Problems", Kazutoshi Sakakibara, Yajie Tian and Ikuko Nishikawa consider vehicle routing as a part of a larger optimization problem. Goods have to be transported from production facilities via a mid-point storage to assembly plants. This leads to a combined inventory, vehicle assignment, and vehicle routing problem. In "An Attribute Based Similarity Function for VRP Decision Support" by Arne Løkketangen, Johan Oppen, Jorge Oyola, and David L. Woodruff a similarity measure to be employed in the context of vehicle routing is developed. The similarity measure provides a device for human decision makers to formalize similarity of different solutions. Competitive location problems in graphs have fascinated researcher for decades, and its practical relevance is also of no doubt. Dominik Kress and Erwin Pesch answer a long time open question whether 1-suboptimal points are always vertices. They deliver a counterexample in a tree network in their paper "Competitive location under proportional choice: 1-suboptimal points on networks".

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We are very happy that this special issue underlines that DMMS is a very international journal. Researchers from Europe, Asia, America and Africa submitted their papers to this special issue. Yet multiple submissions did not meet the high requirements for being accepted. We hope that this issue will serve as a fruitful source to the readers of DMMS for new approaches and means with applications in SCM. We certainly enjoyed editing this special issue and would like to thank the Editor-in-Chief, Professor Tadeusz Sawik, for his encouraging support throughout this undertaking. We are also deeply thankful to the many anonymous reviewers who helped to improve presentations and to guarantee the high quality standard of DMMS.

The editors

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