# Introduction

## Kannan Govindan

Department of Business and Economics, University of Southern Denmark, Odense, 5230, Denmark E-mail: gov@sam.sdu.dk

### M. Mathirajan\*

Department of Management Studies, Faculty of Engineering, Indian Institute of Science, Bangalore, 560 012, India E-mail: msdmathi@yahoo.com \*Corresponding author

# P. Nachiappan Subramanian

Nottingham University Business School China, The University of Nottingham, 199 Taikang East Road, Ningbo, 315 100, China E-mail: sp\_nachi@yahoo.com E-mail: spnmech@tce.edu

**Biographical notes:** Kannan Govindan is an Associate Professor of Operations and Supply Chain Management at the Department of Business and Economics, University of Southern Denmark, Denmark. His research interests include supply chain management and reverse logistics. He received a gold medal for Best PhD Thesis Award. He is the Editor-In-Chief for *International Journal of Advanced Operations Management, International Journal of Business Performance and Supply Chain Modelling, International Journal of Logistics and Supply Chain Management* and *International Journal of Industrial Engineering Practices.* He has published 45 papers in refereed international journals and more than 50 papers in conferences.

M. Mathirajan is currently a Principal Research Scientist at the Department of Management Studies, Faculty of Engineering, Indian Institute of Science (IISC), Bangalore, India. He holds an MSc in Mathematics of Madurai Kamaraj University and a Post Graduate Diploma in Operations Research of Anna University, Chennai. He received his MS (Engineering) degree by research and PhD from Faculty of Engineering, IISc, Bangalore. He was a Post-doctoral Fellow at Singapore MIT Alliance of NTU, Singapore. He was also a Visiting Consultant at SQU, Oman. He has published over 32 research articles in both national and internal journals and also presented over 35 research papers both in national and international conferences. He is also co-authored three books.

### 218 K. Govindan et al.

P. Nachiappan (Nachi) Subramanian is an Associate Professor of Operations Management at the University of Nottingham Ningbo, China. He has published over 75 refereed papers which include journal articles and international conference papers. He also serves as a reviewer for many leading operations management journals and guest edited few special issues. Previously, he worked as an Associate Professor at Thiagarajar College of Engineering, Madurai, India and supervised four PhD theses. He conducted his post-doctoral research at the University of Nottingham, UK under the BOYSCAST fellowship programme and received the Australian Endeavour Research Fellowship Award. He obtained a career award and young scientist fellowship award from Indian government agencies to augment his research on supply chain modelling.

This special issue publishes the full papers of selected research works presented in the International Conference on Operations Research Applications in Engineering Management (ICOREM), which took place at the premises of the Anna University Tiruchirapalli, India during 27th–29th May 2009. The theme of the conference is to disseminate and share the potential applications of operations research in all engineering disciplines and functional areas of management. True representations were there from practitioners, engineers, scientists, academicians and policy makers.

The ICOREM International and National Advisory Committee made an enormous effort to attract good amount of research papers and adhered strict norms to raise the standards of this international conference. It also made an attempt to publish the extended version of the best work presented in the conference in an internationally refereed journal. The *International Journal of Advance Operations Management* perfectly fulfils the requirements of the conference advisory committee. Authors of 17 papers were keen to publish and submitted their extended version for possible consideration in the special issue of *International Journal of Advanced Operations Management*. After rigorous double blind review process the review committee accepted five papers. It is our pleasure to write an editorial for the accepted papers. The five papers attempt to bring out the potential application of operations research in investigation, transportation, manufacturing, project implementation, insurance and retail sectors.

The first paper by S. Babu Renga Rajan, K.G. Srinivasagan, K. Ramar and S. Meenachi Sundaresan deals with a crime identification and categorisation using K-means clustering algorithm. The second paper by Sunil Adhau and M.L. Mittal proposes an interesting framework for solving dynamic multi-project scheduling problems using multi-agent-based system. The third paper by A. Ramakrishnan and S. Sudalaimuthu applies artificial neural network in non-life insurance industry and analyses the performance measurement of various data mining techniques. The fourth paper by P.C. Jha, Remica Aggarwal, Anshu Gupta and P.K. Kapur attempts to formulate and solve allocation problems for dynamic market size of potential adopters and repeat purchasing for firm selling multi-products in segment market. The final paper by M. Ramasubramaniam and M. Mathirajan proposes intuitive greedy heuristic algorithms for solving the problem of scheduling jobs on heat-treatment furnace in the post casting stage of steel-casting foundry manufacturing.

#### Introduction

Overall the contributions by the authors were excellent and we are very thankful to the participants who submitted their manuscripts for this special issue, the referees, and the scientific committee for their kind cooperation. Our special thanks to the respective heads of schools and publishers of the *International Journal of Advanced Operations Management*, for their involvement and cooperation.