

Advances in Intelligent Systems and Computing

Volume 1190

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Jiuping Xu · Gheorghe Duca ·
Syed Ejaz Ahmed · Fausto Pedro García Márquez ·
Asaf Hajiyeu
Editors

Proceedings of the Fourteenth International Conference on Management Science and Engineering Management

Volume 1

 Springer

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Ciudad Real, Spain

ISSN 2194-5357

ISSN 2194-5365 (electronic)

Advances in Intelligent Systems and Computing

ISBN 978-3-030-49828-3

ISBN 978-3-030-49829-0 (eBook)

<https://doi.org/10.1007/978-3-030-49829-0>

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This Springer imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Preface

Welcome to the proceedings of the Fourteenth International Conference on Management Science and Engineering Management (ICMSEM 2020), held from 30 July to 2 August, 2020, at the Academy of Studies of Moldova. This annual conference, organized by the International Society of Management Science and Engineering Management (ISMSEM), aims to foster international research collaborations in Management Science (MS) and Engineering Management (EM) and provides a forum for presenting current research work through technical sessions and round table discussions in a relaxing convivial atmosphere.

The ICMSEM has been held thirteen times since 2007 over the world: Asia, Europe, the Americas and Oceania, and has had a great influence on MS and EM research. In the past thirteen years, the ICMSEM has been successfully held in Chengdu, Chongqing, Bangkok, Chungli, Macau, Islamabad, Philadelphia, Lisbon, Karlsruhe, Baku, Kanazawa, Melbourne and Ontario. The accepted papers have been published in the proceedings of each International Conference on Management Science and Engineering Management by high-level publishing houses, being retrieved by EI or ISTP Compendex.

This year, 122 papers from 18 countries, including Pakistan, Uzbekistan, Japan, Istanbul, Moldova, Canada, Turkey, Azerbaijan, USA, Spain, UK, Thailand, Russia, Iran, Romania, Malaysia, China and Morocco, have been accepted for presentation or poster display at the conference. Each accepted paper had three reviewers, each one of them providing the constructive comments and insightful suggestions to the authors, contributing to the utmost quality of the conference proceedings. The papers have been classified into six sections: Statistical Analysis, Machine Learning, Decision Analysis, Supply Chain, Strategic Planning and Industry Innovation. The key issues at the fourteenth ICMSEM covered many popular topics in MS and EM. To further encourage state-of-the-art research in these field, the ISMSEM Advancement Prize is awarded for the excellent papers which have focused on innovative practical applications for MS and EM at this conference.

We would like to take this opportunity to thank our participants, all of whom worked exceptionally hard to ensure the success of this conference. We want to express our sincere gratitude to the following prestigious academies and institutions for their high-quality papers and great support for the ICMSEM: The Azerbaijan Academy of Sciences, Academy of Sciences of the Republic of Uzbekistan, Fuzzy Logic Systems Institute, Tokyo University of Science, Brock University, Academy of Economic Studies of Moldova and Sichuan University. We would also like to acknowledge the assistance received from the ISMSEM, Academy of Economic Studies of Moldova and Sichuan University in organizing this conference. We also appreciate the Advances in Intelligent Systems and Computing (AISC) of Springer for the publication of the proceedings. We are grateful to Professor Gheorghe Duca as the General Chair, Professor Grigore Belostecinic, Dr. Lidia Romanciuc, Dr. Nina Roscovan, Dr. Igor Serotila as the Organizing Committee Chairs. We appreciate the great support received from all the members of the Organizing Committee, the Local Arrangement Committee, and the Program Committee as well as all the participants. Finally, we would like to thank all the authors for their excellent conference papers, which have great value for both educational and research purposes. The conference papers and recommendations can also serve as guiding materials for the administration/managing of institutes, enterprises, as well as the drafting or amending the relevant laws by politicians and managing authorities.

As MS and EM research is in continuous development and many new trends have emerged, our work needs to continue to focus on the latest MS and EM development, so that we can encourage greater and more innovative activity. Next year, we plan to continue the innovative and successful ICMSEM and intend to increase our efforts in improving the quality of the proceedings and recommending more excellent papers for the ISMSEM Advancement Prize. The Fifteenth International Conference on Management Science and Engineering Management will be hosted by the University of Castilla-La Mancha (UCLM), Spain, in July 2021. Professor Fausto Pedro Garca Márquez has been nominated as the Organizing Committee Chair for the 2021 ICMSEM. We sincerely hope you can submit your new MSEM findings and share your wisdom in Moldova in 2020 and Spain in 2021.

March 2020

Jiuping Xu
Gheorghe Duca
Syed Ejaz Ahmed
Fausto Pedro García Márquez
Asaf Hajiyev

Organization

ICMSEM 2020 was organized by the International Society of Management Science and Engineering Management (ISMSEM), Sichuan University, Moldova Research and Development Association and Academy of Economic Studies of Moldova. It was held in cooperation with Lecture Notes on Advances in Intelligent Systems and Computing (AISC) of Springer.

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