

# SOR '13 Proceedings

*The 12th International Symposium on Operational Research in  
Slovenia*

*Dolenjske Toplice, SLOVENIA, September 25 - 27, 2013*

Edited by:

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# Preface

*This volume, Proceedings of The 12<sup>th</sup> International Symposium on Operations Research, called SOR'13, contains papers presented at SOR'13 (<http://sor13.fis.unm.si/>) that was organized by Slovenian Society INFORMATIKA (SDI), Section for Operations Research (SOR) and Faculty of Information Studies (FIS), Novo mesto, Slovenia, held in Dolenjske Toplice, Slovenia, from September 25 to September 27, 2013. The volume contains blindly reviewed papers or abstracts of talks presented at the symposium. The opening address at SOR'13 was given by Prof. Dr. L. Zadnik Stirn, the President of the Slovenian Section of Operations Research, Mr. Niko Schlamberger, the President of Slovenian Society INFORMATIKA, Prof. Dr. Janez Povh, the Dean of Faculty of Information Studies, Novo mesto, and presidents/representatives of a number of Operations Research Societies from abroad.*

*SOR'13 is the scientific event in the area of operations research, another one in the traditional series of the biannual international OR conferences, organized in Slovenia by SDI-SOR. It is a continuity of eleven previous symposia. The main objective of SOR'13 is to advance knowledge, interest and education in OR in Slovenia, in Europe and worldwide in order to build the intellectual and social capital that are essential in maintaining the identity of OR, especially at a time when interdisciplinary collaboration is proclaimed as significantly important in resolving problems facing the current challenging times. Further, by joining IFORS and EURO, the SDI-SOR agreed to work together with diverse disciplines, i.e. to balance the depth of theoretical knowledge in OR and the understanding of theory, methods and problems in other areas within and beyond OR. We believe that SOR'13 creates the advantage of these objectives, contributes to the quality and reputation of OR by presenting and exchanging new developments, opinions, experiences in the OR theory and practice.*

*SOR'13 was highlighted by a distinguished set of four keynote speakers. The first part of the Proceedings SOR'13 comprises invited papers/abstracts, presented by four outstanding scientists: Professor Dr. Dragan Jukić, University of Josip Juraj Strossmayer in Osijek, Department of Mathematics, Osijek, Croatia, Professor Dr. Sandi Klavžar, University of Ljubljana, Faculty of Mathematics and Physics, Ljubljana, Slovenia, Assoc. Prof. Dr. Renata Sotirov, Tilburg University, Department of Econometrics and Operational Research, Tilburg, The Netherlands, Dr. Michel Petitjean, MTi, INSERM UMR-S, University Paris, Paris, France. The second part of the Proceedings includes 56 papers written by 102 authors. Most of the authors of the contributed papers came from Slovenia (47), then from Croatia (24), Poland (6), Austria (4), France (4), Serbia (4), Slovakia (4), Switzerland (3), Bosnia and Herzegovina (2), Italy (2), Spain (2), Hungary (1), The Netherlands (1), Singapore (1) and United Arab Emirates (1). The papers published in the Proceedings are divided into sections: Plenary Lectures (4 contributions), Mathematical Programming and Optimization (14), Graphs and their Applications (10), Multiple Criteria Decision Making (8), Econometric Models and Statistics (5), Production and Inventory (3), Finance and Investments (6), Location and Transport (6), Creative core FIS - Simulations (5).*

*The Proceedings of the previous eleven International Symposia on Operations Research organized by the Slovenian Section of Operations Research are indexed in the following secondary and tertiary publications: Current Mathematical Publications, Mathematical Review, Zentralblatt fuer Mathematik/Mathematics Abstracts, MATH on STN International and CompactMath, INSPEC. The Proceedings SOR'13 are expected to be covered by the same bibliographic databases.*

*The success of the scientific events at SOR'13 and the present proceedings should be seen as a result of joint effort. On behalf of the organizers we would like to express our sincere thanks to all who have supported us in preparing the event. We would not have succeeded in attracting so many distinguished speakers from all over the world without the engagement and the advice of active members of the Slovenian Section of Operations Research. Many thanks to them. Further, we would like to express our deepest gratitude to prominent keynote speakers, to the members of the Program and Organizing Committees, to the referees who raised the quality of the SOR'13 by their useful suggestions, section's chairs, and to all the numerous people - far too many to be listed here individually - who helped in carrying out The 12<sup>th</sup> International Symposium on Operations Research SOR'13 and in putting together these Proceedings. Last but not least, we appreciate the authors' efforts in preparing and presenting the papers, which made The 12<sup>th</sup> Symposium on Operations Research SOR'13 successful*

*We would like to express a special gratitude to donators of the 12<sup>th</sup> International Symposium on Operational Research in Slovenia (SOR'13): Krka, tovarna zdravil, d.d., Novo mesto, Slovenia, and Terme Krka, d.o.o., Novo mesto, PE Dolenjske Toplice, Dolenjske Toplice, Slovenia.*

*Dolenjske Toplice, September 25, 2013*

*Lidija Zadnik Stirn  
Janez Žerovnik  
Janez Povh  
Samo Drobne  
Anka Lisec  
(Editors)*

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