Editorial

Ksenija Dumičić*, Lidija Zadnik Stirn**, Janez Žerovnik***

Operations research or Operational Research (OR) is the subject which investigates advanced applications of analytical methods (e.g. mathematical modeling, statistical analysis, and mathematical optimization). Goal of OR is developing optimal or near-optimal solutions as a support in the complex decision-making situations.

The 11th International Symposium on Operational Research (SOR'11) was organized by Slovenian Society INFORMATIKA – Section for Operational Research (SDI-SOR) in Dolenjske Toplice, Slovenia, during the week of 28 – 30 September 2011. The aim of this event was to bring together the researchers and professionals from the field of OR to advance knowledge, interest and education in OR in Slovenia and worldwide in order to build the intellectual and social capital which 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. The symposium was attended by approximately 150 scientists who came from all around the world; 47 papers were presented, written by more than 100 authors. The papers to be presented at SOR'11 were accepted after a review process carried out by the members of the Program Committee of the conference assisted by additional reviewers appointed by SDI-SOR.

At SOR'11 it was decided to publish a Special Issue of Business Systems Research Journal (SI of BSRJ) on innovative approaches to OR methodology and its applications in business, micro and macro-economics, management, finance, social sciences, energy, environment, transport and other areas. The call for papers for SI of BSRJ was open, and it was directed to the participants of SOR'11 as well as to other researchers and practitioners from the field of OR. We have received 9 submissions for this special issue, some of them being extended journal versions of short conference papers from proceedings (Zadnik Stirn et al., 2011). Each submission was first reviewed by the Guest Editors, and the papers were then blind reviewed by two experts.

The papers accepted for this SI of BSRJ present methodological and application operational research approaches. The paper (Domić, 2012) presents a new perspective towards the inflation dynamics and marginal cost proxies of Croatia for the hybrid New Keynesian Phillips Curve. The novel approach to the determination of parameters in the gravity model of inter-municipal labor commuters in Slovenia for the period 2000 – 2009 is investigated by Drobne et al. (2012), while the contribution to the theory of multiple criteria group decision making problems is discussed in the paper of Čančer (2012). The quality management analysis based on an innovative statistical approach is in the center of interest of the paper written by Dumičić and Žmuk (2012). The idea of joining the principal components analysis with neural networks for authorship attribution that is particularly interesting from the modeling point of view is studied by Jamak et al. (2012). This paper also provides some real world examples as the application of the offered model. The paper Remic et al. (2012) proposes and compares some novel heuristics for solving the bin packing problem, a well-known NP-hard optimization problem.

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*Ksenija Dumičić
Associate Editor of BSRJ
Member of Croatian Operational Research Society
Member of International Statistical Institute
University of Zagreb, Faculty of Economics & Business, Zagreb, Croatia
e-mail: **kdumicic@efzg.hr**

**Lidija Zadnik Stirn
President of Slovenian Society Informatika-Section for Operational Research
University of Ljubljana, Biotechnical Faculty, Ljubljana, Slovenia
e-mail: **lidija.zadnik@bf.uni-lj.si**

***Janez Žerovnik
Vice-president of Slovenian Society Informatika-Section for Operational Research
University of Ljubljana, Faculty of Mechanical Engineering, Ljubljana, Slovenia
e-mail: **janez.zerovnik@fs.uni-lj.si**