3rd International Conference on Variable Neighborhood Search (VNS'14)

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Abstract

We are presenting in this volume selected, peer-reviewed, short papers that were presented at the 3rd International Conference on Variable Neighborhood Search (VNS'14) which took place in Djerba, Tunisia, during October 8-11, 2014.

Keywords: Variable Neighborhood Search, Metaheuristics, Combinatorial Optimization, Global optimization.

1 VNS'14

Variable Neighborhood Search (VNS) is a metaheuristic, which exploits the idea of systematic neighborhood changes within a search, in order to escape

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from valleys which contain local optimal solutions. VNS has been successfully used for solving various combinatorial and global optimization problems [1]. VNS'14 focuses on theoretical, methodological, or applied aspects of variable neighborhood search to computationally difficult problems.

Topics of interest for VNS'14 are: Theoretical or empirical analysis of VNS, New variants of deterministic and stochastic VNS, Continuous global VNS, Convergent VNS methods, Matheuristics and VNS, Formulation space VNS, Multi-objective VNS, Parallel VNS, and VNS hybrids. The conference program included 83 talks across 14 contributed sessions during the four days of the conference, and it was attended by 70 participants.

The general chair was Nenad Mladenović, (France and Serbia), while Pierre Hansen, (Canada) was the Honorary Chair of the conference. The conference was chaired by Bassem Jarboui, (Tunisia) and Abdelwaheb Rebai, (Tunisia). Moreover, the Program Committee of VNS'14 was chaired by Saïd Hanafi (France), Abraham Duarte (Spain), and Dragan Urošević (Serbia). Also, the following plenary talks were given by invited speakers at the conference:

- Pierre Hansen, GERAD and HEC Montreal, Canada: "Variable neighborhood search and discovery in graph theory".

- Saïd Salhi, Kent Business School (UK): "Large scale discrete location problems: Exact and VNS-based approaches".

- Günther Raidl, Vienna University of Technology, Austria: "Variable Neighborhood Search Hybrids".

- Christian Maquaire, Railenium, France: "Presentation of Railénium: European Institute for Technological Research (IRT) dedicated to Railway Infrastructure".

This was the 3rd International Conference on Variable Neighborhood Search. The previous EURO Mini Conference (MEC XXVIII) on Variable Neighborhood Search, was held during October 4-7, 2012, in Herceg Novi, Montenegro [2]. Furthermore, the first EURO Mini Conference (MEC XVIII) on VNS, was held during November 23-25, 2005, in the city of Puerto de La Cruz, in the island of Tenerife, Spain.

2   Organizers and Sponsors

The conference was organized by the Modeling and Optimization for Decisional, Industrial and Logistic Systems Laboratory (MODILS Lab) in Tunisia, the Faculty of Economic Sciences and Management of Sfax, and the OPTI-

mization in MAnagement and Logistics Association (OPTIMAL). Sponsors of VNS'14 were the Mathematical Institute of the Serbian Academy of Sciences and Arts (SANU) in Belgrade, the University of Valenciennes, the Group for Research in Decision Analysis (GERAD) in Montreal, the EURO working group on Metaheuristics (EU/ME), the Association of European Operational Research Societies (EURO), and the Data Mining Chair in HEC Montreal.

3   Program Committee

The Program Committee consisted of the following members:

Daniel Aloise (Canada)	Vera Kovačević-Vujčić (Serbia)
Ada Alvarez (Mexico)	Martine Labbé (Belgium)
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Saïd Hanafi (France)	Kenneth Sörensen (Belgium)
Pierre Hansen (Canada)	Thomas Stützle (Germany)

Richard Hartl (Austria)   Dragan Urošević (Serbia)

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4 Organizing Committee

The Organizing Committee members are as follows:

Ghassen Chahtour (Tunisia)   Anis Mjirda (Tunisia)

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Mansour Eddaly (Tunisia)   Saïd Toumi (Tunisia)

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5 Acknowledgments

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