EURO Young Scientists

Preface to the the Feature Issue on the First ORP^3 Conference

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1 The ORP^3 Conference

1.1 What is ORP^3?

ORP^3 is the "EURO Peripatetic Post-graduate Programme" i.e. a new instrument of EURO (the Association of European OR Societies) designed for young OR researchers and practitioners. ORP^3 aims at being a forum promoting scientific and social exchanges between the members of the future generation of Operational Researchers in academia and industry.

Among the unique features of ORP^3 are:

- very specific participants: only PhD students, young (no more than two years after the completion of the PhD) doctoral researchers or young OR analysts (no more than two years of professional experience), may attend the meeting as regular participants,
- low registration fees and access to inexpensive accommodation,
- a limited number of participants,
- the selection of participants on the basis of full paper submissions with full proceedings available on the Web at the time of the Conference,
- the active involvement of each participant who are asked to act as chairpersons and discussants,
- the absence of parallel sessions,
- the organisation of tutorial sessions and sessions oriented towards the methodology of research and/or the history of OR.

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The first edition of the ORP³ Conference was held at LAMSADE, Université Paris Dauphine, 26-29 September 2001.

1.2 Preparing the first edition of ORP³

The EURO Council in Budapest approved the principle of the ORP3 in July 2000. An *International Scientific Committee* was responsible for the selection of papers and the organisation of the tutorial sessions. It was composed as follows: Valerie Belton (UK), Denis Bouyssou (France, Chair), Rainer Burkard (Austria), Federico Della Croce (Italy), Roman Słowiński (Poland), Sophie Toulouse (France, Chair of the Organising Committee) and Marino Widmer (Switzerland).

The Call for Papers for the Conference was issued shortly after July 2000. The deadline for submission of the papers was 1 March 2001. 41 papers were submitted coming from nearly 20 different countries. Thanks to the hard work of the members of the International Scientific Committee, each paper was evaluated by two referees. The final decisions of acceptance were taken by the Scientific Committee and communicated at the beginning of June 2001. The Scientific Committee aimed at selecting papers of publishable quality in an international OR journal. In total 24 papers coming from 14 different countries were selected (rejection rate around 40%). Two papers selected did not show at the Conference. The fully refereed proceedings of this Conference are available at `http://www.orp3.com`

The papers selected cover most fields of OR and are coming from many different European countries. We give the list of the selected papers below:

(1) R. Aggoune (Luxembourg), "Minimizing the makespan for the flow shop scheduling problem with availability constraints",
(2) C. Archetti (Italy), "The vehicle routing problem with capacity 2 and 3, General distances and multiple customer visit",
(3) P. Belotti (Italy), "Obnoxious p-median problems: Polyhedral structure and a branch and cut approach",
(4) S. Bertel (France), "A genetic algorithm for an industrial multiprocessor flowshop scheduling problem with recirculation"
(5) E. Camponogara (Brazil), "Matching network agents to tasks: Problem formulation, experiments and polyhedral results",
(6) X. Delorme (France), "GRASP for set packing problems",
(7) D. Feillet (France), Traveling salesman with profits, An overview",
(8) J.A. Fernandez del Pozo (Spain), "Knowledge synthesis optimizing combinatorial storage of multidimensional matrix",
(9) J.P. Garcia-Sabater (Spain) "The Problem of JIT dynamic sequencing.

A model and a parametric procedure",

(10) B. Kotnyek (UK), "Generalisations of total unimodularity",

(11) J. Leyva Lopez (Mexico), "A new method for group decision support based on ELECTRE III methodology",

(12) S. Mannor (Israel), "Generalized approachability results for stochastic games with a single reachable state",

(13) Y. Mati (France), "The Complexity of the two-job shop problem with resource flexibility"

(14) G. Montibeller (Brazil), "Reasoning maps for decision aid",

(15) E. Muciek (Poland), "Optimal control of portfolio risk. A network model for financial planning",

(16) C. Petic (Moldova), "Optimal path in dynamic network games with p players",

(17) O. Peton (Switzerland), "A brief tutorial on ACCPM",

(18) M. Pranzo (Italy), "Batch scheduling in a two machine flow shop with limited buffer and sequence independent setup times",

(19) R. Ruiz Garcia (Spain), "A decision support system for a real logistic problem",

(20) M.P. Scaparra (Italy), "A multi-exchange heuristic for the single source capacitated facility location problem",

(21) V. T'kindt (France), "A Branch-and-Bound algorithm to solve a two-Machine bicriteria flowshop scheduling problem",

(22) I. Vaz (Portugal), "Robot trajectory planning with semi-infinite programming"

Besides regular communications, three prominent OR scientists accepted to give tutorials during the Conference:

- Ken Bowen (Royal Holloway, University of London ,UK): History and Methodology of OR,
- Michel Minoux (Université Pierre-et-Marie-Curie, France): Linear and Integer Programming,
- Dominique de Werra (École Polythechnique Féférale de Lausanne, Switzerland): Combinatorial Optimisation.

I would like to thank them very warmly for having accepted to spend some time with us in Paris and to actively participate to the Conference.

1.3 The first edition of ORP[3]

The organisation of the conference was entirely in the hands of a local Organising Committee composed of young OR researchers belonging to LAMSADE and chaired by Sophie Toulouse and Sébastien Damart. The energy of the

Organising Committee as well as the generous support from EURO and the Université Paris Dauphine allowed keeping the registration fees at a very low level (60 euros for 4 days). Thanks to IFORS (the International Federation of OR Societies), three participants coming from countries outside EURO were supported in order to attend the Conference.

Apart from the numerous social activities prepared by the organising committee, much time was spent in sessions. All sessions were chaired by participants. They were all very well attended in spite of the variety of the themes of the papers. Each participant was asked to be the discussant of another paper and to be ready for a 10-minute discussion. Each paper received detailed and constructive comments. The ensuing general discussion was, in general, very lively.

We believe that the Conference with its strong scientific sessions and its many social events will create strong scientific and friendly links between the participants who will soon be responsible for the development of our discipline.

2   The feature issue on the first ORP³ Conference

A Call for Papers was issued shortly after the Conference. The deadline for submission was 10 December 2001, in order to allow authors to revise their papers following the discussions during the Conference. In total, 13 papers were submitted. Each of these papers was evaluated according to the guidelines of EJOR. All papers went through two rounds of revision and the final selection consists of the 6 papers that follows.

These 6 papers are followed by a contribution by Professor Ken Bowen who has a unique experience of 60 years in OR.

This feature issue has greatly benefited from the contribution of many individuals. The preparation of the ORP³ Conference would not have been possible without the active support of the Executive Committee of EURO and the active involvement of the members of the International Scientific Committee. I would like to thank them all warmly. I am also very grateful to the editors of EJOR for their encouragement duting the preparation of this feature issue and to all those referees who provided thorough reports in a timely fashion. Last but certainly not least, I would like to thank all participants to the Conference whose active participation turned the first edition of ORP³ into a success.