

# Annotated Bibliographies in Combinatorial Optimization

Edited by

**Mauro Dell'Amico**

*Università di Modena, Italy*

**Francesco Maffioli**

*Politecnico di Milano, Italy*

and

**Silvano Martello**

*Università di Bologna, Italy*



*A Wiley-Interscience Publication*

**JOHN WILEY & SONS**

*Chichester • New York • Weinheim • Brisbane • Singapore • Toronto*

# Contents

Preface	vii
List of Contributors	ix
1. Selected Books in and around Combinatorial Optimization <i>F. Maffioli, S. Martello</i>	1
2. Hardness of Approximation <i>V. Kann, A. Panconesi</i>	13
3. Polyhedral Combinatorics <i>K. Aardal, R. Weismantel</i>	31
4. Branch-and-Cut Algorithms <i>A. Caprara, M. Fischetti</i>	45
5. Matroids and Submodular Functions <i>A. Frank</i>	65
6. Perfect, Ideal and Balanced Matrices <i>M. Conforti, G. Cornuéjols, A. Kapoor, K. Vušković</i>	81
7. Advances in Linear Optimization <i>C. Roos, T. Terlaky</i>	95
8. Decomposition and Column Generation <i>F. Soumis</i>	115
9. Stochastic Integer Programming <i>L. Stougie, M. H. van der Vlerk</i>	127
10. Randomized Algorithms <i>M. Goemans, D. Karger, J. Kleinberg</i>	143
11. Local Search <i>E. Aarts, M. Verhoeven</i>	163
12. Sequencing and Scheduling <i>J.A. Hoogeveen, J.K. Lenstra, S.L. Van de Velde</i>	181

13.	The Traveling Salesman Problem <i>M. Jünger, G. Reinelt, G. Rinaldi</i>	199
14.	Vehicle Routing <i>G. Laporte</i>	223
15.	Max-Cut Problem <i>M. Laurent</i>	241
16.	Location Problems <i>M. Labbé, F.V. Louveaux</i>	261
17.	Flows and Paths <i>R.K. Ahuja</i>	283
18.	Network Design <i>A. Balakrishnan, T.L. Magnanti, P. Mirchandani</i>	311
19.	Network Connectivity <i>S. Raghavan, T.L. Magnanti</i>	335
20.	Linear Assignment <i>M. Dell'Amico, S. Martello</i>	355
21.	Quadratic and Three-Dimensional Assignments <i>R.E. Burkard, E. Çela</i>	373
22.	Cutting and Packing <i>H. Dyckhoff, G. Scheithauer, J. Terno</i>	393
23.	Set Covering Problem <i>S. Ceria, P. Nobile, A. Sassano</i>	415
24.	Combinatorial Topics in VLSI Design <i>R.H. Möhring, D. Wagner</i>	429
25.	Computational Molecular Biology <i>M. Vingron, H.-P. Lenhof, P. Mutzel</i>	445
	Author Index	