## THEORY AND PRACTICE OF MULTIPLE CRITERIA DECISION MAKING

Collection of papers presented at a workshop on Multicriteria Decision Making held in Moscow, May 1981

edited by  $\sqrt{N^{5}}$  C. CARLSSON

Department of Business Administration Abo Academy, Abo, Finland

and

## Y. KOCHETKOV

International Research Institute on Management Science Moscow, USSR



ECHNISCHE HOCHSCHULE DARMSTADI	1
Facibereich 1	
<u>Gesamthibliothek</u>	
Betrieb: wiri3chattslehre	
nvenio:-U.: 36.872	
Abstell-Mr. : A14 / 1029	
Sacrigebiete: 1.6.2.8	
1.6.2.8	
***************************************	• _

NORTH-HOLLAND PUBLISHING COMPANY - AMSTERDAM • NEW YORK • OXFORD

## TABLE OF CONTENTS

Edi	tor's Preface	٧
1.	Some features of a methodology for dealing with multiple-criteria problems (C. Carlsson)	1
2.	Fuzzy catastrophes in non-trivial decision making (V.D. Dimitrov)	51
3.	Complex ill-structured problems in management systems and their solution by man (S.V. Khaynish, A.G. Vlasov)	61
4.	Some improvements to the Reference Point approach for dynamic MCLP (M. Kallio, M. Soismaa)	77
5.	Multiple-criteria optimization under uncertainty: concepts of optimality and sufficient conditions (V.S. Molostvov)	91
6.	SIMS, an interactive multi-criteria search system (0.A. Shestakov)	107
7.	A sampling-search-clustering approach for solving scalar (local, global) and vector optimizing problems (A. Törn)	119
8.	Interactive systems resulting from a descriptive approach to the solution of complex ill-structured problems (S.V. Khaynish, A.G. Vlasov)	143
9.	Multicriteria problems in pooling resources  (F.F. Dudnikov, V.S. Molostvov)	157