
**GENERALIZED CONVEXITY,
GENERALIZED MONOTONICITY
AND APPLICATIONS**

Nonconvex Optimization and Its Applications

Volume 77

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GENERALIZED CONVEXITY, GENERALIZED MONOTONICITY AND APPLICATIONS

Proceedings of the 7th International
Symposium on Generalized Convexity
and Generalized Monotonicity

Edited by

ANDREW EBERHARD
RMIT University, Australia

NICOLAS HADJISAVVAS
University of the Aegean, Greece

DINH THE LUC
University of Avignon, France

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Preface

In recent years there is a growing interest in generalized convex functions and generalized monotone mappings among the researchers of applied mathematics and other sciences. This is due to the fact that mathematical models with these functions are more suitable to describe problems of the real world than models using conventional convex and monotone functions. Generalized convexity and monotonicity are now considered as an independent branch of applied mathematics with a wide range of applications in mechanics, economics, engineering, finance and many others.

The present volume contains 20 full length papers which reflect current theoretical studies of generalized convexity and monotonicity, and numerous applications in optimization, variational inequalities, equilibrium problems etc. All these papers were refereed and carefully selected from invited talks and contributed talks that were presented at the 7th International Symposium on Generalized Convexity/Monotonicity held in Hanoi, Vietnam, August 27-31, 2002. This series of Symposia is organized by the Working Group on Generalized Convexity (WGGC) every 3 years and aims to promote and disseminate research on the field. The WGGC (<http://www.genconv.org>) consists of more than 300 researchers coming from 36 countries.

Taking this opportunity, we want to thank all speakers whose contributions make up this volume, all referees whose cooperation helped in ensuring the scientific quality of the papers, and all people from the Hanoi Institute of Mathematics whose assistance was indispensable in running the symposium. Our special thanks go to the Vietnam Academy of Sciences and Technology, the Vietnam National Basic Research Project "Selected problems of optimization and scientific computing" and the Abdus Salam International Center for Theoretical Physics at Trieste, Italy, for their generous support which made the meeting possible. Finally, we express our appreciation to Kluwer Academic Publishers for including this volume into their series. We hope that the volume will

be useful for students, researchers and those who are interested in this emerging field of applied mathematics.

ANDREW EBERHARD

NICOLAS HADJISAVVAS

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