

## **PREFACE**

This special issue on Optimization and Feasibility Problems is dedicated to Professor Yair Censor on the occasion of his 75th birthday.

Yair Censor is a Professor Emeritus of Mathematics at the University of Haifa. During his research career he has made significant contributions to computational mathematics, optimization, and the science of inverse problems, as well as applications of these fields, in particular to medical imaging and radiation therapy treatment planning. Together with Stavros Zenios, Yair Censor co-authored the book "Parallel Optimization: Theory, Algorithms, and Applications" (Oxford University Press, New York, NY, USA, 1997), for which he received the 1999 ICS (INFORMS Computing Society) Prize for Research Excellence in the Interface Between Operations Research and Computer Science.

His list of publications contains more than 150 research papers. His work has had great impact on research in optimization, as well as on a wide range of real-world applications. In this special issue we present papers authored by a selected group of experts in the areas of optimization theory and feasibility problems. Most of the papers collected here have been contributed by collaborators, friends and colleagues of Yair's, who were influenced by his scientific work. The special issue contains nine papers contributed by well-known experts in optimization and feasibility problems from Brasil, Canada, China, France, Israel, Spain, Sweden and USA. These papers cover a wide spectrum of important problems and topics of current research interest such as auxiliary-function minimization algorithms, row and column based iterations, the Cimmino-Kaczmarz equivalence, gradient methods for solving zero-sum linear-quadratic differential games, dynamical systems with a Lyapunov function on metric spaces, applications of the Hahn-Banach separation theorem, superiorization of preconditioned conjugate gradient algorithms for tomographic image reconstruction, a DC regularization of split minimization problems and swarm optimization as a consensus technique for electron microscopy initial volume.

Therefore we feel that this special issue will be very valuable for many mathematicians and practitioners who are interested in recent developments in optimization as well as their numerous applications.

Editor Alexander J. Zaslavski