This special issue on Nonlinear Analysis and Optimization, Part II, is dedicated to Professor Alexander Rubinov to commemorate the 75th anniversary of his birth. Professor Rubinov (1940-2006) made significant contributions to many areas of mathematics including functional analysis, variational analysis, dynamical system theory, optimization, mathematical economics and data mining. He has co-authored 14 monographs and 3 textbooks, and over 250 papers, which greatly impacted on research in analysis and optimization and their wide range applications.

His main contributions to optimization and nonlinear analysis are Minkowski duality and its applications, Abstract convexity, Quasidifferential calculus, Cutting angle method, Non-linear Lagrange-type functions, and Monotonic analysis.

Alexander Rubinov worked at different universities and research institutions in Russia, Azerbaijan, Israel: Leningrad State University, Siberian Branch of Soviet Academy of Sciences, Kalinin State University, Leningrad Social-Economical Institute, the Mathematical Institute National Academy of Sciences of Azerbaijan Republic, Ben Gurion University, Beer Sheeva, Israel.

In 1996 he was invited to the University of Ballarat and worked for his final decade of his life as the Director of the Center for Informatics and Applied Optimization (CIAO) at the University of Ballarat’s School of Information Technology and Mathematical Sciences (ITMS). As Founding Director, Alexander Rubinov built CIAO into an internationally recognized research center in optimization. He supervised 20 research students at the University and was an outstanding leader and mentor to staff in CIAO and ITMS. His total number of graduated PhD students approaches 45.

In this special issue, which is our tribute to Professor Alexander Rubinov, we present papers authored by a selected group of experts in the area of nonlinear analysis and optimization. Most of the papers collected here have been contributed by collaborators, friends and colleagues of Alex, who benefitted and were influenced by his research. Part II of the special issue contains nine papers contributed by well-known experts in nonlinear analysis and optimization from Australia, France, Germany, India, Israel, Japan, Turkey, Ukraina and USA. These papers cover a wide spectrum of important problems and topics of current research interest of analysis and optimization such as exact penalty and Lagrange duality via the directed subdifferential, doubling coverings of algebraic hypersurfaces, split inverse problems, linear-quadratic optimal control problem for systems with state delays, stochastic
processing time modelling in manufacturing, second-order optimality conditions in set-valued optimization, existence of Walrasian equilibria in infinite dimensions, variational problems via theory of Young measures and an exterior distance function.
Therefore we feel that this special issue will be very valuable for many mathematicians and practitioners who are interested in recent developments in nonlinear analysis and optimization as well as their numerous applications.

Adil Baghirov, Regina Burachik and Alexander J. Zaslavski, Editors