



## Preface

This special issue is dedicated to Professor Naum Shor on the occasion of his 65th birthday. Professor Shor is one of the world-leading experts in the area of numerical methods in optimization. It is impossible to overestimate his contributions to the development of numerical methods for convex non-smooth optimization, multi-extremal global optimization, including minimization of polynomials, stochastic optimization, network planning. A dual approach to global polynomial and discrete optimization also should be mentioned. Naum Shor published nine books on these and other topics, including plane graph colouring. His approach to the examination of global optimization of polynomials through decomposition of them into the sum of squares sheds light on one of the classical Hilbert's problem, which were formulated by D. Hilbert more than hundred years ago (namely, on the 17th problem regarding representation of some functions as the sum of squares). Naum Shor is the founder and the leader of a big scientific school; he supervised 35 PhD students. This special issue contains papers in some areas mentioned above, in particular in global and non-smooth optimization, in both theoretical and numerical aspects. A short description of Shor's main achievements and the list of his main publications can be found in the paper by T. Bardadym, who has been a collaborator of Shor for a long time.

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